

Water Line

Fall 2008

Water for Today and Tomorrow

Virgin River by Camp Lorenzo
Photo: Doug Wilson

Manager's Message

By Ron Thompson, General Manager

What does the Water District do?

A recent survey revealed that many of our local residents have never heard of the Washington County Water Conservancy District (District) or don't know what we do. I'd like to provide our readers with some basic knowledge about the District.

The District was created in 1962 in response to a petition signed by the people of the County. The judicial decree that formed the District defined its responsibilities to:

- conserve,
- develop, and
- stabilize

supplies of water for the following uses:

- domestic,
- irrigation,
- power,
- manufacturing,
- municipal, and
- other beneficial uses.

A seven-member board of trustees was established to govern the District. The Washington County Commission appoints those trustees.

Our District has one main purpose: to provide and manage water. Over the years, the District has managed and developed many water projects. These projects are listed on the right-hand side of this page. The list also includes the projects that are currently in the planning stages.

The District holds water rights that allow the water to be diverted from the rivers into reservoirs. From there, water can be treated for municipal use or it can be delivered for

use on residential landscapes and farms.

Water is delivered to customers through an extensive network of pipelines. We construct and maintain many other facilities with these projects to ensure that water delivery is conducted in a safe and reliable manner.

The District devotes itself to its main purpose recognizing that over 85 percent of the people in the county rely upon its work to ensure that water comes out of the tap when it is turned on. Most of these people live in our customer cities of Ivins, St. George, Washington, Hurricane, La Verkin, Toquerville and Virgin. We also work on county-wide efforts that include:

- watershed protection efforts to keep water supplies clean,
- endangered and native species protection efforts to ensure balance between human and environmental needs, and
- water conservation efforts to make sure that we do not waste this precious resource that we all rely upon.

If the Quail Creek Project had not been completed in the mid-1980s, we would have run out of water long ago. Many of the amenities that we now take for granted would not be here. These include:

- thriving businesses,
- jobs,
- housing,
- schools,
- hospitals and health care, and
- parks and water-based recreation.

Continued on page 2



The Fifth District Court decreed in 1962 that the District conserve, develop and stabilize water supplies in Washington County under the direction of a seven-member Board of Directors.

Current District Projects/Facilities

Quail Creek Reservoir
Quail Creek Diversion Dam
Wayne Wilson Power Plant at Quail Creek
Sand Hollow Reservoir and Recharge Facility
Kolob Reservoir
Gunlock Reservoir
Ivins Reservoir
Meadow Hollow Reservoir
Sand Hollow Well Field
Cottam Wells
Sullivan Wells
Kayenta Wells
Hurricane Power Plant at Pah Tempe
Regional Pipeline
Gunlock to Santa Clara Pipeline
Water Treatment Plant
Toquerville Secondary Water System
Santa Clara Secondary Water System
Dixie Springs Water Tank
Kolob Water Tank
Conservation Program
Virgin River Program
Anasazi Water Tank

Future District Projects/Facilities

Crystal Creek Pipeline
Ash Creek Pipeline
Anderson Junction Reservoir
Sand Hollow Corridor Pipeline
Warner Valley Reservoir
Lake Powell Pipeline



Sand Hollow Reservoir
Photo: Ann Jensen

Continued from page 1

The planning and development of water for the future requires an understanding of concepts and facts related to:

- water rights and water law,
- hydrology and geology,
- engineering,
- biology,
- demographics, and
- economics and finance.

Particularly in the West, laws, rules, history, traditions and the complex facts of hydrologic cycles in desert river systems create layers of interacting factors. Our board members undertake extensive training to guide the decisions designed to ensure that water projects come on line when needed, at the most economical cost, while still being reliable to deliver water over time.

Water projects, especially large projects, take a long time to plan and to build, espe-

cially in today's world of careful study of the environmental effects of projects. The District's board members take a long view and are appointed rather than elected so that they will not be swayed by political pressures that might result in decisions leading to empty reservoirs, a damaged environment or unreliable delivery systems.

Without the systematic approach facilitated by an appointed board, water projects could fall to the whims of those who have the best public relations presentations but not the best substance or understanding. In today's world, special interest groups may be very effective at influencing opinion, but unlike the District's Board, they do not have to face the consequences of bad decisions.

I am grateful to our Board for their long-standing commitment to our community and their tireless efforts to ensure that we all have access to ample, quality water supplies.

History of water districts

A short history lesson may help explain why water district boards are appointed rather than elected. Water was recognized as so critical that special service districts were created to manage and develop water supplies. In the 1930s, Utah followed the path of southern California in creating a metropolitan water district. The Water Conservancy Act of 1943 authorized the appointment of board members.

Originally, the district court judge was given the power to appoint individuals to serve as board members. In the 1980s, the Senate concluded and the Supreme Court agreed that it was unconstitutional for a judge to appoint board members. It was at this time that county commis-

sioners were authorized to appoint board members in single-county districts like ours.

In accordance with state law, members of the District's Board are appointed to four-year staggered terms by the Washington County Commission. The openings are announced by legal notices and applicants are evaluated by the commissioners. The county has selected board members in accordance with Title 17B-2a-604 that states "*each trustee shall be appointed without regard to partisan political affiliations from among the citizens of the highest integrity, attainment, competence, and standing in the community.*"

Quail Creek Reservoir
Photo: Doug Wilson



The last Board meeting of 2008 will take place at the District office at 136 North 100 East in St. George on Wednesday, December 10th, at 6:00 p.m. The public is encouraged to attend.



LAKE POWELL PIPELINE

Delivering the future.

Frequently asked questions about conservation and the Lake Powell Pipeline

by Corey Cram

Do Washington County residents use far more water per capita than any other desert community?

Washington County is a desert community. Its population centers receive about six inches of precipitation annually. Most of that moisture occurs outside the growing season when outdoor landscaping and agriculture needs water.

Washington County still has a large agricultural and commercial base. Over 52 percent of our water goes to commercial, institutional and industrial needs. In other words, over half of the water in Washington County goes to support the economy.

Other communities like Las Vegas and Tucson have much smaller proportionate commercial water usage.

Water use is often calculated by taking the resident population and dividing it by the total water use.

Since institutional and industrial uses count as part of the per capita water use, the higher percentage of these uses skews our comparative use and makes it look higher.

Twenty-seven percent of the homes in Washington County are second homes. The water used in these homes counts as part of our residential population wa-

The actual residential water use of full-time residents in St. George is about 127 gallons per person per day, while Tucson is at 110 and Las Vegas is at 174.

ter use even though the occupants are not counted as part of the population base. The actual residential water use of full-time residents in St. George is about 127 gallons per person per day, while Tucson is at 110 and Las Vegas is at 174.

Washington County receives most of its precipitation during the winter months when it does little for our outdoor watering needs. Tucson receives several inches more precipitation each year than

Washington County and much of it comes in July, when it can be used to offset water demands.

Remember that the reported water use levels in Tucson are derived only from within the boundaries of the municipal service area, not the surrounding metropolitan area. The municipality has almost 3,000 people per square mile. Denser homes have smaller yards and less outdoor water usage yielding lower per capita water usage, but higher usage per square mile. When the actual water use in our desert community is carefully examined, our residential water use compares favorably to other desert communities.

Would more stringent conservation practices eliminate the need for the Lake Powell Pipeline Project?

The state of Utah and the District continue to work hard on water conservation. The District developed the first water conservation plan in the state, completed in 1995 before such plans were even required by the state.

The District's water contracts require that municipal customers implement conservation measures including time-of-day watering and conservation water rates, as well as secondary water systems and wastewater reuse wherever feasible. Average water use per capita in our service area is steadily decreasing through time. Our data indicates that through water conservation, we have saved almost 23 billion gallons of water since 1995.

Conservation is not accomplished in

one great step, but takes many different approaches. There is the heavy-handed approach of government forcing people to undertake extreme measures to limit their water use. We have chosen to emphasize education and cooperation instead. It is the District's belief that, over time, voluntary measures will be most effective. We have also chosen to select water conservation measures that are cost effective for our community, rather than copying measures used in other communities that would not work as efficiently here.

Our residents make lifestyle choices

It is not possible to double our current population and support it with the water supply we are currently using.

reflected in the decisions of their elected representatives. Historically, our area was built on agriculture and small residential gardens or a few fruit trees that are still important to many people. These gardens may prove invaluable as other economic factors change our ability to access food supplies. These green zones also provide relief from the desert heat, reducing power demands that will continue to stress local power supplies.

Some may have a different and drier vision of what they would like our community to look like. Some wish to

create a "cultural revolution" to make our area like Tucson. Even if this vision prevails and people here choose a hotter, drier, denser urban landscape, there would still not be enough water to serve anticipated growth without building the Lake Powell Pipeline.

It is not possible to double our current population and support it with the water supply we are currently using. If you double the number of residences, businesses, hotels, *etc.* then each home, business and hotel gets half as much water.

Water conservation is part of the answer, but not the total solution. Significantly more money could be spent for less water, but demand would not be met to support our future needs.

Conservation Corner

by Julie Breckenridge — Water Conservation Coordinator

FREE Landscaping Workshops January - February 2009

These workshops are held at the Tonaquint Nature Center
1851 Dixie Drive

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

**Thursday, January 15th:
6:00 – 7:30 p.m.**

Laying out your landscape plan

Why is Xeriscape a natural choice in our climate? In order to get some specific ideas bring a rough sketch of your property with you.

**Thursday, February 12th:
6:00 – 7:30 p.m.**

Understanding drip systems and new technologies

Learn how to design, install, maintain and schedule your water-efficient drip systems.

**Thursday, January 22:
6:00 – 7:30 p.m.**

Designing your lawn irrigation system

Learn the basics of irrigation system design and how to recognize potential problem areas. Turf varieties will be demonstrated. You will learn how to grow a lush lawn without a high water bill.

**Thursday, February 19th:
6:00 – 7:30 p.m.**

Develop your plant palette

Design your landscape with color and variety. Choose plants that complement one another. Discover which plants work in the microclimates of your yard. You've drawn your plan, now select the plants.

**Saturday, January 24:
10:00 to 11:00 a.m.**



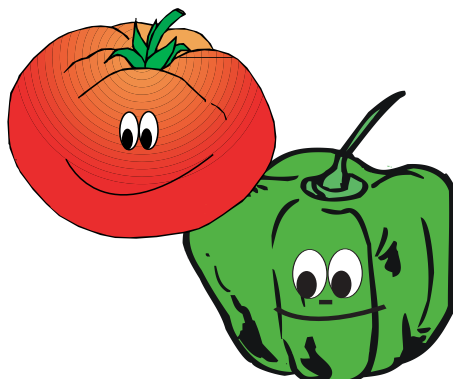
Total Tree Care

Protect your investment. Instruction will be given how to properly care for your trees and shrubs.

**Saturday, February 21:
10:00 – 11:00 a.m.**

Spring into vegetable gardening

Learn how to make this climate work for you and your vegetables.



Water-wise plant feature

Russian Sage – *Perovskia atriplicifolia*

The Russian Sage is a striking perennial plant that can be used as a hedge or a background to a border. It does well when planted in median strips along with other desert shrubs. It tolerates drought conditions very well and has a long life span.

It thrives with very little water. In fact, too much water will cause the plant to grow too large and have a floppy appearance. If it is cut back each spring, the Russian Sage will have a compact appearance and will flower profusely.

This plant's lavender-blue flowers attract bees and butterflies. It flourishes in full sun and requires well-drained soil.



Photo: Julie Breckenridge

The Demonstration Garden features this plant



Board of Trustees

Morgan Jensen, Chair
(Toquerville)

Dennis Iverson, Vice Chair
(Washington)

Edward Bowler
(Gunlock)

Howard Bracken
(Enterprise)

Jim Lemmon
(Hurricane)

Daniel D. McArthur
(St. George)

James N. Ence
(Santa Clara)

Water Line Fall 2008

Editor: Ann Jensen

Contributors:

Ron Thompson, *General Manager*
Julie Breckenridge, *Conservation Coordinator*
Corey Cram, *Watershed Coordinator*

Photography:

Doug Wilson, *Special Projects Coordinator*

Production, Printing and Circulation:

The Spectrum

The *Water Line* is published by the
Washington County Water Conservancy District
136 North 100 East
St. George, UT 84770
435-673-3617

This publication may be accessed
on the District's web site at
<http://wcwcd.state.ut.us>