



Connections

Santa Rosa On Track to Meet Recycled Water Goals

On March 4, 2004, the Board of Public Utilities (BPU) and Santa Rosa City Council concluded a three year environmental and engineering study by unanimously selecting a combination of projects (called a "Program") to expand recycled water use. The projects, identified in a study called the Incremental Recycled Water Program (IRWP), were selected to allow the Santa Rosa Subregional Water Reuse System (which provides treatment, disposal, reclamation, industrial waste inspection and laboratory services to Santa Rosa, Rohnert Park, Sebastopol, Cotati and the South Park County Sanitation District) to meet increased recycled water disposal demands generated by expected future growth and stricter state and federal rules. Today, most of the IRWP projects are completed or near completion.

The Geysers Recharge Expansion Project

The Geysers Recharge project is a unique public-private partnership that transports recycled water from the Subregional System's Laguna Treatment Plant along a 41-mile pipeline to the Geysers Steamfields, where a private energy company uses it to generate clean energy. The initial project was so successful that, as part of the IRWP, the

amount of water sent to the steamfields was increased in a project called the Geysers Recharge Expansion. Now about 13 million gallons per day of the Subregional System's highly treated recycled water generates enough electricity for 100,000 homes in Sonoma and other North Bay counties.

Additionally, though not specifically part of the IRWP, the Geysers Recharge Project was designed to allow other communities to tie into the pipeline. In November 2008, the Town of Windsor signed an agreement with the City of Santa Rosa to allow delivery of recycled water to the Geysers pipeline. This year, Windsor began sending up to a half million gallons per day of its recycled water to the Geysers steamfields.

Santa Rosa Urban Reuse Project

As part of the IRWP, a pilot project to expand the use of recycled water for irrigation purposes in urban areas such as parks, golf courses, commercial landscaping and street medians was approved. Water reuse is beneficial because it reduces demand on other water resources, such as groundwater and the Russian River and its tributaries.

With construction scheduled to be completed in 2011, the pilot project will

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Connections Newsletter Moving to Online Format

This issue of the Utilities *Connections* quarterly newsletter marks the end of the print edition, which began production in fall 2005 and has allowed the Utilities Department to provide timely information on various topics, including updates on water supply, recycled water, water-use efficiency, water and sewer pipeline replacements, and environmental projects, as well as spotlighting one of the many Utilities Department employees who provide services for the community.

As we wind down production of the print edition of *Connections*, we are excited to announce the newsletter will be moving to an all-digital format that will be available online.

The digital newsletter will be distributed bi-annually. Please visit srcity.org/Connections to sign up to receive it in your e-mail. At that same web address, every past and future issue of *Connections* will be available for viewing and downloading.

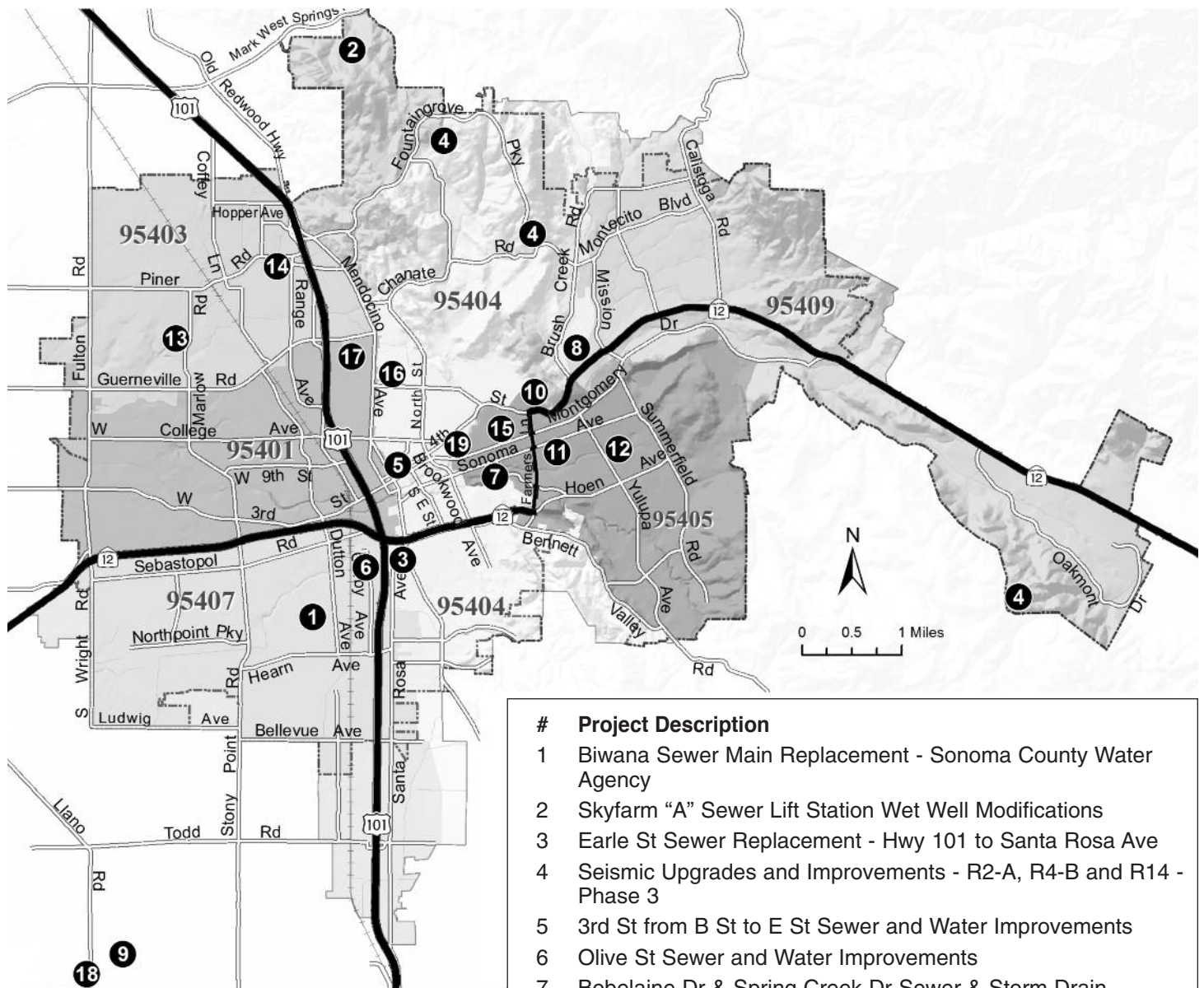
We thank you for your past interest in this newsletter and look forward to providing even more information through our future digital editions of *Connections*.

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- Newsletter Moving Online
- Capital Improvement Projects
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Water Smart Expo to be Rescheduled
 Due to the cancellation of the Wednesday Night Market on 5/25/2011, the Water Smart Expo will be rescheduled later this summer. Check your future water bills for information or visit srcity.org/wue for details.

Water and Sewer Capital Improvement Projects in Construction — July through September 2011



An important goal of your utility department is to be responsible stewards of the environment and the City's infrastructure. The Capital Improvement Program (CIP), funded by the water and sewer rates, ensures our ratepayers will have safe, reliable, and efficient water and wastewater services today and in the future.

This map shows capital improvement projects that will be under construction during the third quarter of 2011.

The map reflects projects that are estimated to occur during the period July 1 through September 30, 2011 and, due to varying factors, are subject to change without notice. The data represented has been generated from Utilities Asset Management.

Project Description

- 1 Biwana Sewer Main Replacement - Sonoma County Water Agency
- 2 Skyfarm "A" Sewer Lift Station Wet Well Modifications
- 3 Earle St Sewer Replacement - Hwy 101 to Santa Rosa Ave
- 4 Seismic Upgrades and Improvements - R2-A, R4-B and R14 - Phase 3
- 5 3rd St from B St to E St Sewer and Water Improvements
- 6 Olive St Sewer and Water Improvements
- 7 Bobelaine Dr & Spring Creek Dr Sewer & Storm Drain Improvements
- 8 Sewer Lining Highway 12 - Mission Blvd Easement
- 9 Laguna Treatment Plant Trunk Sewer Interconnect and Vault Improvements
- 10 Proctor Heights Walking Pathway
- 11 Spring Creek Dr Sewer and Water Improvements
- 12 Colorado Blvd Sewer and Water Improvements
- 13 Marlow Siphon Rehabilitation
- 14 Range Ave Water Main Installation - Russell to Piner
- 15 Montgomery Dr Sewer & Water Improvements - Talbot to Farmers
- 16 King St Phase I
- 17 Nordyke Ave/Oliver Ln/Victor Dr Sewer and Water Improvements
- 18 Laguna Treatment Plant Safety Improvements
- 19 Pierce/2nd/Montgomery Sewer and Water Improvements

Green Energy Resources

Several thousand people turned out on a sunny spring day in Courthouse Square to celebrate the 41st anniversary of Earth Day on Saturday, April 16, 2011. The Earth Day extravaganza provided an opportunity for community-building and increasing awareness of green programs and resources, such as water and energy efficiency. The celebration kicked off with live music, great local food, and arts and crafts.



The Clean Energy Advocates (CEA) also had a booth at the Earth Day event where they gave out information about their program and upcoming free workshops. The CEA is a free, unbiased advocate for homeowners, providing information on energy efficiency, water efficiency and renewable energy.

If you have questions about the

best ways to save the most energy and money at home, or are curious about solar power for your house, turn to the CEA. They will help you with these topics and more.

In addition to assisting homeowners, the Clean Energy Advocate program is also helping the City of Santa Rosa reduce its energy usage. The City is placing solar photovoltaic systems on many of its buildings. The Utilities Department owns a majority of these systems with a total solar array portfolio of 302 kilowatts (kW). This produces roughly 597,083 kWh/year of energy, providing a savings of \$73,000 in electricity costs and offsetting 299 metric tons of greenhouse gas emissions per year. Two additional projects are expected to be completed in the next year, which will boost the City's solar energy portfolio by another 200kW.

To see photos from the Earth Day event, please visit srcity.org/earthday. To contact the Clean Energy Advocates, visit srcity.org/CEA or call 707-543-3886. For questions about the City's solar projects, contact Tasha Wright at Twright@srcity.org.

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use about 45 million gallons per year of highly-treated recycled water. The ultimate goal of the Santa Rosa Urban Reuse Project (SRURP) is to use up to one billion gallons per year of recycled water for urban landscape irrigation and other approved uses, thus saving the same amount of drinkable water for human consumption.

The Discharge Diffuser Project

The Santa Rosa Subregional Water Reuse System recycles up to 100 percent of the water it produces. The recycled water is used by the Geysers Project to recharge steamfields and produce energy and by agricultural and urban customers for irrigation. However, occasionally, more recycled water is generated in winter months than can be stored and/or reused, and the remainder needs to be discharged.

In December 2008, after completion of numerous studies and analyzing vari-

ous alternatives, the Board of Public Utilities selected the most cost-effective and environmentally superior alternative to allow recycled water to be occasionally discharged during winter months while meeting increasingly stringent regulations.

The selected alternative consists of making improvements to the existing Delta Pond discharge point located at the confluence of the Laguna de Santa Rosa and Santa Rosa Creek. Extensive modeling under several different flow conditions showed that a multi-port diffuser configuration will result in a discharge that meets new regulations and will allow the City to discharge only when needed. Construction on this project was completed in late 2010 and the diffuser is ready for use when needed. For more information about the IRWP projects and other Utilities Department news, please see Web Resources, page 4.

Outdoor Water Wise Simple Ways to Improve Your Water-Use Efficiency This Summer

Although adequate rainfall this spring has delayed the need to turn on irrigation systems, as the peak of summer approaches, you will want to begin irrigating your landscape. Landscape irrigation drives summer water use to more than twice the use of winter months. During these months of peak water demand, there are simple ways to improve the water-use efficiency of your irrigation system:

- If you haven't already done so, perform an irrigation system check and tune it up prior to turning it on for the season. Check for broken sprinkler heads, leaks or breaks in your drip system, and misaligned or blocked sprinkler patterns and fix accordingly. It is also a good practice to check your system on a monthly basis to make sure it continues to operate efficiently.
- Set timers to irrigate in the pre-dawn hours to reduce the amount of water lost to evaporation.



- Use repeat start times and short run times for each station. For example, apply 15 minutes of irrigation in three 5-minute applications, separated by one hour each. This will allow more water to soak into the ground and reduce runoff.
- Check the schedule on your irrigation timer once a week for maximum efficiency. Changing the programs to match the plants' water needs even once or twice a month can make a positive impact on plant health and on your water bill.
- Reduce the amount of irrigation in

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Deputy Director of Subregional Operations

Dan Carlson Says Goodbye

Dan Carlson saw a lot of changes in his 35 years with the City of Santa Rosa. In fact, he was instrumental in many of those changes. Dan retired on June 2, 2011 from his position as Deputy Director of Subregional Operations — a position he held since 2004 and in which he was responsible for managing the Wastewater Treatment Plant and Water Reuse System.

The City of Santa Rosa Utilities Department provides wastewater collection and treatment for the City and is the managing partner for the Subregional Water Reuse System, which provides treatment, disposal, reclamation, industrial waste inspection and laboratory services to Santa Rosa, Rohnert Park, Sebastopol, Cotati and the South Park County Sanitation District. The Subregional Water Reuse System consists of eight sections that operate and maintain the Laguna



Treatment Plant, the Oakmont Treatment Plant, the Subregional Compost Facility and the Reclamation system including the Geysers Recharge Project.

In 1975, Dan graduated from San Diego State University with a degree in civil engineering and a minor in mathematics. In 1976, he began his 35 year career with the City of Santa Rosa as a temporary construction inspector, and in 1977, became a project engineer. He served in that capacity for many

familiar Santa Rosa sites including the Fourth Street Mall and the reconstruction of City Hall, which included the City's first computer system. In addition, he engineered the

After a distinguished 35-year career with the City, Dan Carlson, Deputy Director of Subregional Operations, says goodbye.

first Howarth Park train tunnel, the City Fire Training center on West College Avenue and the Galvin Park Softball Complex.

In 1987, Dan was promoted to Utilities Capital Projects Coordinator and was the project engineer and manager for the Laguna Compost Facility, the Rohnert Park Urban Reuse System, the Gallo Reuse Project, the upgrades of the Laguna Treatment Plant, and the highly successful Geysers Pipeline Project.

Most recently, Dan was responsible for managing the operations and maintenance of the very projects he helped construct.

Dan says that his formal education and work experience are important but he believes what makes an employee stand out is their dedication and commitment to the job. What he liked most about his job was “the diversity of projects and issues on a daily basis and the incredibly dedicated, smart, and skilled people that I got to work with everyday.”

Dan gained a national reputation for his work including that in the recycled water field. He will be greatly missed.

For more information about the City of Santa Rosa Utilities Department and the Subregional System, please visit our web site at srcity.org/ut.

“Outdoor Water Wise” continued from page 3...

the later summer months. Plants need the most water in July. As we enter into the fall months, even when the weather is hot, shorter days mean plants need less water.

- Call Turf-Time at (707) 543-3466 or visit srcity.org/turftime for suggested weekly lawn watering and drip watering recommendations. Turf-Time is updated on a weekly basis, and watering recommendations are based on actual plant needs and current weather conditions.

The Water-Use Efficiency Program offers many incentive and assistance programs that can help you improve your outdoor water-use efficiency. Rebates are available for improving the

efficiency of your irrigation hardware, replacing turf with low water-use alternatives, installing rainwater harvesting systems, and installing graywater systems. A free pre-inspection is required in order to participate in these rebate programs.

Additionally, you can take advantage of free conservation “Check-Ups,” in which expert staff will visit your home, review your current water uses, and make recommendations for improving your water-use efficiency. To schedule a rebate program pre-inspection, conservation “Check-Up,” or to request assistance in reducing your water use, please contact the Water-Use Efficiency Hotline at 707-543-3985 or visit srcity.org/wue.

Web Resources

Visit these web sites to learn more about issues mentioned in this Update.

Incremental Recycled Water Program:

SRCity.org/IRWP

Water-Use Efficiency:

SRCity.org/wue

Turf-Time:

SRCity.org/turftime

Water Quality:

SRCity.org/waterquality

Santa Rosa Utilities Department:

SRCity.org/ut

Clean Energy Advocate:

SRCity.org/CEA

Twitter:

twitter.com/SantaRosaWater