

## Major Sewer Improvement Projects Underway

The Pima County Regional Wastewater Reclamation Department (RWRD) is in the midst of a major sewer improvement project consisting of three distinct, interrelated projects. The North Rillito Interceptor (NRI) Project and the South Rillito Interceptor (SRI) Project consist of the rehabilitation and repair of existing sewer lines. The North Rillito Interceptor Relief (NRIR) Project will result in the construction of 1,863 feet of new pipe, connecting the NRI and the SRI in the Columbus Boulevard area.

The NRI is a large diameter pipeline that conveys wastewater from the City's far east side in the Woodland Road and Bear Canyon area, along the north bank of the Tanque Verde Creek and Rillito River, to the Tres Rios Water Reclamation Facility. Activities are currently underway to rehabilitate approximately 10 miles of this major



*Top: Bypass pipes being laid next to the Rillito River.*

*Right: SRI bypass pipes crossing a wash.*

*Bottom Left: NRI relief sewer during construction.*



and Tucson Boulevard. The SRI Project was also recognized for excellence by the Arizona Chapter of the American Public Works Association.

The NRI Relief Project will connect the NRI and the SRI in the Columbus Boulevard area. Ultimately, this new connection allows RWRD to divert 10 million gallons of wastewater a day from the NRI to the SRI, reducing the potential for sewer overflows and ensuring compliance with the U.S. Environmental Protection Agency

guidelines for capacity, management, operations, and maintenance. The estimated completion date is August 2015.

These three projects represent a \$36.5 million investment in the conveyance system, which will extend the life of significant reaches of the public sanitary sewer system for the next 50 plus years.



interceptor. The estimated completion date is January 2017.

The SRI is a major interceptor that runs parallel to the NRI along the south side of the Rillito River. Through the SRI rehabilitation project, which was completed in September 2014, RWRD repaired 3.9 miles of pipe starting from an area near Columbus Boulevard running west along the south bank of the Rillito River to the intersection of Roger Road

## Chair's Message

This was a very significant year for the Regional Wastewater Reclamation Advisory Committee (the Committee) on several echelons!

The Committee reviewed, evaluated, and provided input on a variety of significant issues and projects this past fiscal year, with a focus on the Regional Wastewater Reclamation Department's (RWRD) financial outlook. The Committee was established in 1986 to provide advice and guidance to RWRD on policy and financial issues, as well as to provide information and education on wastewater issues to the community. This Annual Report recaps some of the issues and projects that the Committee was involved in during Fiscal Year 2014/15.

A major topic of discussion was the 2015 Financial Plan. RWRD and the Pima County Finance and Risk Management Department gave several updates to the Committee to inform them of the possibility of future rate increases. The

Committee's Financial Sub-Committee met throughout the year to thoroughly understand the Financial Plan and the impact to RWRD. The Sub-Committee extensively reviewed multiple options and confirmed that the recommended increase to the current user fee was in order to maintain the 130% debt service coverage ratio.

The Committee held public meetings in January and February to discuss the proposed sewer user fee increase, to evaluate the possible impact on RWRD's future revenue and to receive public comment concerning the new fee increase. The Committee held a public meeting in June to discuss a proposed connection fee increase and to receive public input. The Committee recommended that both the user fee and connection fee should be increased. The Committee continues to be concerned that RWRD maintains adequate revenue to complete ongoing preventative maintenance and staff training.

Another focus of the Committee this past year was the five-year Capital Improvement Program. The South Rillito Interceptor (SRI), North Rillito Interceptor and North Rillito Interceptor Relief Sewer projects had a combined \$36.5 million budget. The condition assessment of the SRI indicated a large segment that was nearing the point of possible failure. The project was completed a year and a half ahead of schedule and one million dollars under budget. Additionally, the Committee was informed on the Aerospace Corridor that included the South East Interceptor Augmentation and the Old Nogales Highway Rehabilitation and Augmentation. RWRD continues to demonstrate excellent project management of its capital improvement projects, often completing projects ahead of schedule and under budget.



*Current members of the Committee. L to R: Mark Taylor, Rob Kulakofsky, John Lynch, Armando Membrila, Barbee Hanson, Robert Iannarino, Sheila Bowen, Mark Stratton, Matt Matthewson and Ann Marie Wolf.*

The Committee also received regular updates and presentations on other significant RWRD related matters throughout the year, such as: Regional Optimization Master Plan Project, Energy Optimization, Biogas, Tres Rios Water Reclamation Facility, Agua Nueva Water Reclamation Facility, Pasqua Yaqui, Davis-Monthan, Randolph Park Water Reclamation Facility, Roger Road Repurposing, Annual Effluent Utilization, System-wide Odor Control, Raftelis Fee Study, Annual Grease Campaign, Fee Study Report, Water Quality and Emerging Contaminants, Biosolids Handling, North/South Rillito Interceptor Projects, Dispose-A-Med Program, Sewer Outreach Subsidy Program, County Legislative Agenda, County Administrator's Economic Report, Tucson Water, Community Outreach, RWRD Staff Training, High Strength User Audit, South Houghton Area Recharge Project, Trihalomethane and the Mt. Lemmon Wastewater Services. A presentation from Tucson Water staff on Tucson Water operations and activities was informative and provided great dialogue. RWRD staff has done an outstanding job in

keeping the Committee well-informed in all areas.

This has been a very successful year for the Committee and I am very pleased with the work the Committee has accomplished. I am confident that the Committee, along with RWRD and their continued cooperation and effective wastewater services that we will have another great and productive year in Fiscal Year 2015/16. This is my last year as Chair; however, I have accepted the position of Vice Chair. Mark Taylor will be the new Chair for Fiscal Year 2015/16. Mr. Taylor is incredibly knowledgeable and I look forward to working with him and the Department on future projects.



Ann Marie Wolf, Chair



Mark Taylor, Vice Chair

## Fiscal Year 2014/15 Awards

Each year, the National Association of Clean Water Agencies (NACWA) recognizes the commitment of member agencies in the clean-water community through its Peak Performance Awards. These awards acknowledge excellence in wastewater treatment, through compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirement limits, in meeting clean water discharge standards.

**Platinum Awards:** 100% compliance with no NPDES permit violations over at least five consecutive year periods.

**Platinum Award:**

Avra Valley Water Reclamation Facility  
Green Valley Water Reclamation Facility  
Mt. Lemmon Water Reclamation Facility

**Silver Awards:** No more than five NPDES permit violations over a one-year period.

**Silver Award:**

Agua Nueva Water Reclamation Facility  
Tres Ríos Water Reclamation Facility  
Since 1998, RWRD has received a total of 68 NACWA Awards.



RWRD also received the AZ Water Association’s “2015 Wastewater Treatment Project of the Year Award” for the *Tres Ríos Water Reclamation Facility Capacity and Effluent Upgrade Project*.

The Arizona Chapter of the American Public Works Association presented RWRD with two “2015 Project of the Year” awards in the category of Environmental Projects and in the category of Sustainability to the *South Rillito Interceptor Sewer Rehabilitation Project* and the *Integrated Sustainability and Resource Recovery Program*.

### Director’s Message

The RWRAC had a very productive year and participated in many important discussions related to the RWRD various activities. The Committee worked on important issues, such as the 2015 Financial Plan and recommendation to increase the existing user fee and connection fee, and stayed updated on major Departmental projects, including the South Rillito Interceptor, North Rillito Interceptor, North Rillito Interceptor Relief Sewer projects, and the Randolph Park Water Reclamation Facility temporary cessation.

On an annual basis, the Committee reviews the Financial Plan which outlines the optimal sewer rates needed to ensure that the Department has sufficient revenues to meet all operating and maintenance expenses, all debt service payments and required reserves, and maintain an adequate debt service coverage ratio to obtain favorable bond ratings. The Committee supported the 2015 Financial Plan and agreed that a user fee increase was necessary.

The Financial Sub-Committee met from September through December to fully understand the 2015 Financial Plan. They discussed the financial assumptions and debt service schedule in detail. The Financial Sub-Committee received information regarding the method and rationale for cost allocation and the different allocation categories for RWRD. They reviewed the bond debt service and the Certificates of Participation. Additionally, the Sub-Committee reviewed the Capital Improvement Projects (CIP) and the five-year forecast. After careful consideration and review of the Department’s expenses and revenues, the Sub-Committee recommended an increase to user fees.

Two public meetings were held to receive public input on the proposed user fee increase. In May, the Board of Supervisors requested that the connection fee also be reviewed, in which an additional public meeting was held for the public’s information and feedback. I appreciated the Committee’s interest in this matter and the feedback received on the proposed increases. The Committee has recommended that both the user fee and connection fee be increased.

RWRD’s budget was approved by the Board of Supervisors in June and the outlook for the Fiscal Year 2015/16 budget is favorable.

The Board of Supervisors discussed the proposed user fee and connection fee increases at the August 17, 2015 board meeting.

The Committee and RWRD accomplished a lot this year. I truly appreciate the Committee’s ongoing efforts and their continued support, as well as providing guidance and oversight with other key activities of the Department. RWRD continues to maintain the Department’s mission to protect the public’s health, safety and environment, and with the Committee’s assistance, we will continue to address any issues that arise in the coming year. On behalf of the Department, I thank the Committee for their continued support and look forward to another eventful year!



A handwritten signature in black ink that reads "Jackson Jenkins".

Jackson Jenkins, Director

# Temporary Cessation of the Randolph Park WRF

The Randolph Park Water Reclamation Facility (WRF) was constructed, owned, and operated by the City of Tucson (COT) and began operations in 1975. It was originally built to provide relief for near-capacity sewer lines in mid-town Tucson, and to provide a source of reclaimed water for COT's Randolph Park golf course. A 1979 Intergovernmental agreement (IGA) transferred all city-owned sewer lines and treatment facilities to Pima County.

After operating for 20 years, the Randolph Park WRF stopped operations in 1995 due to the closure and subsequent reconstruction of the golf course. In 2000, a Supplemental IGA was signed, and preparations began for the re-establishment of the WRF. The plant was expanded, and new technologies including an ultraviolet light disinfection system and membrane bioreactor technology were put into place. In 2005, the facility went on-line, and produced A+ quality effluent.

However, with substantial completion of the Regional Optimization Master Plan in April of 2014, the Pima



Main plant building at the Randolph Park WRF.

County on-line, and ceased operations on December 30, 2014.

The expanded Tres Rios WRF (formerly referred to as the Ina Road WRF) and the new Agua Nueva WRF both produce high-quality effluent and sufficiently meet the reclaimed water needs of the COT. Temporary cessation of operations at the Randolph Park WRF will result in significant cost savings to the Department and Pima County sewer rate payors.

## Comings and Goings

The Committee welcomes **Charles "Matt" Matthewson**, who retired from RWRD in 2014 and was appointed to the RWRAC by District 4 Pima County Supervisor Ray Carroll. Matt's management and leadership skills, his financial and budgeting savvy, and his institutional knowledge of RWRD operations make him a great asset to the RWRAC.



**Ed Curley**, Program Manager-Unclassified in the Special Assistance Office retired from the RWRD on December 27, 2014 after thirty-five years of service. Ed served as the department's liaison to the Pima County Attorney's Office and was involved in business, regulatory, and litigation issues. In recent years, Ed worked on a number of administrative and

special projects including coordination of the activities of the RWRAC. His experience, institutional knowledge and colorful personality are missed. Jackson Jenkins stated that, "Mr. Curley was a great asset to RWRD and to the RWRAC members and I appreciate his dedication to the Department." The RWRAC members wished him well on his future endeavors.

After more than three years supporting RWRAC activities, **Veronica Lopez** left the Committee and RWRD to pursue other opportunities within Pima County.

The RWRAC bids farewell to Ex-Officio member, **Alan Forrest**, Tucson Water, for his years of service. Alan began serving on the Committee on June 21, 2012, shortly after beginning his tenure as Director of Tucson Water on June 4, 2012.



"I wish Alan the best in his future endeavors and will miss his camaraderie," stated Jackson Jenkins, RWRD Director. "He has been a key ingredient in the positive relationships forged between Tucson Water and RWRD. He has been willing to address difficult long-standing issues between the two utilities and maintain a positive attitude as well as a focus on the big picture that benefits the community and our respective ratepayers."



**Kendall Kroesen**, a three-year member of the RWRAC, recently stepped down from this position. Kroesen was appointed by the Environmental Planning Advisory Committee of the Pima Association of Governments and served on the committee from April 3, 2012 to May 21, 2015. Kendall brought a keen awareness of environmental impact issues to the committee.

His expertise will be missed.

# 2015 Financial Plan

One of the main functions of the Regional Wastewater Reclamation Advisory Committee (RWRAC) is to review RWRD’s annual Financial Plan and provide guidance to the Department and to the Pima County Board of Supervisors. The RWRAC’s Financial Subcommittee reviews the Financial Plan in great detail and reports back to the full committee at regular meetings.

### **Sewer User and Connection Fee Increases**

In Fiscal Year 2014/15, the Financial Subcommittee held a series of meetings with Tom Burke, Deputy County Administrator. During these meetings, committee members were told of the importance of the County’s debt ratio to the overall financial health of the County government. Due to the debt incurred by the Department for the recently completed (mandated) Regional Optimization Master Plan, the Financial Subcommittee recommended two consecutive three percent sewer user rate increases for Fiscal Years 2015/16 and 2016/17. The Advisory Committee approved this recommendation.

In discussing the recommended increases, the Board of Supervisors asked that a three percent connection fee increase also be studied and presented. Board action on both user and connection fee increases was scheduled for the August 17, 2015 meeting.

### **Comparison of Fiscal Year Budgets**

RWRD’s 2014/15 Fiscal Year Operations and Maintenance (O&M) budget was \$83,927,521. The O&M budget for this fiscal year 2015/16 is \$84,549,649.

Although this year’s budget is \$616,028 higher than last year’s budget, this year’s budget was severely impacted by two new major costs.

- RWRD had to budget \$1,475,268 to lease new computers and upgraded software. It also must now pay the IT Department for providing servers. These are expenses the Department did not have to pay in the past or that were included in overhead.

- With a work force of approximately 450, RWRD is never fully staffed. A certain number of vacancies is normal for a department of this size. In the past, RWRD was permitted to calculate personnel expenses based on an expected position vacancy rate. This year, RWRD was required to prepare its budget as if it was fully staffed at all times. This had an impact to the budget of \$645,000 in personnel costs.

These unique challenges resulted in \$2,120,268 in expenses to this Fiscal Year’s budget. On paper, the 2015/16 Fiscal Year budget is 0.73% higher than last year’s budget. However, without these impacts (which were not part of last year’s budget), the 2015/16 Fiscal Year budget would actually be two percent lower than the 2014/15 Fiscal Year budget. The department is also dealing with an inflation rate of approximately two percent.

Another financial challenge facing RWRD is related to water consumption. In the midst of a slow but steady-growing population, water consumption in Pima County is declining. Many residents are adopting conservation practices and are replacing high-water-use appliance with lower-water use models. Developers are mandated to install low-water-use appliances in all new homes after drought stricken environmental conditions and RWRD supports these conservative efforts.

Although water conservation is of critical importance in our arid and drought-stricken environment, sewer user fees are based on water consumption. Therefore water conservation results in less revenue. Approximately 90% of RWRD’s revenues are based on sewer user fees. Although water usage and influent flows are lower, this does not reduce O&M costs. The City of Tucson is experiencing the same challenge of decreased water use. In response, the City Council has had five consecutive years of rate increases.

## 2014/15 Regional Wastewater Reclamation Advisory Committee

<b>District 1</b> Barbee Hanson Robert Iannarino	<b>District 2</b> Sheila Bowen Armando Membriola	<b>District 3</b> John Lynch Amber Smith	<b>District 4</b> Bill Katzel Charles Matthewson	<b>District 5</b> Rob Kulakofsky Ann Marie Wolf
<b>Citizens’ Water Advisory Committee</b> Mark Taylor	<b>AZ Water Association</b> Mark Stratton		<b>Ex-Officio</b> Jackson Jenkins, Director, RWRD Alan Forrest, Director, Tucson Water	
<b>Environmental Planning Advisory Committee (EPAC)</b> Kendall Kroesen				

The Regional Wastewater Reclamation Advisory Committee (RWRAC) was established by the Pima County Board of Supervisors in 1986 to act as its official advisory body on wastewater management matters.

The RWRAC is charged with advising RWRD on program and policy decisions, as well as short- and long-term operating and Capital Improvement Program funding needs and the annual Financial Plan. The Committee held monthly meetings in 2014/15 to accomplish these functions. During the last fiscal year, the RWRAC discussed and acted upon a number of issues of importance to Pima County as described in this report.

# Regional Wastewater Reclamation Advisory Committee

## Highlights: August 2014 - June 2015

**August 2014:** Jing Luo, Civil Engineering Manager, Regional Wastewater Reclamation Department (RWRD), presented a PowerPoint on the RWRD **Integrated Sustainability Program**. Pima County has made a huge effort to promote sustainability County-wide. The first five-year Action Plan began in 2008 and the second five-year Action Plan was adopted by the Board of Supervisors in June 2014. Claire Zucker, Sustainable Environment Program Director, Pima Association of Governments' (PAG), provided a brief overview of the current status of the **Dispose-A-Med Program**. PAG has been working to develop the program into a non-profit organization.

**September 2014:** The Financial Sub-Committee was given a presentation by Tom Burke, Director, Finance and Risk Management Department (FRMD) on the **2015 Financial Plan**. The Sub-Committee and staff discussed the financial assumptions and reviewed the Debt Service/Balance Sheet and County Overhead Charges. No regular RWRAC meeting was held in September

**October 2014:** Jaime Rivera, RWRD Project Manager, gave a **Capital Improvement Project (CIP)** update. There were eight completed projects, 25 under development, and 30 under construction. Melaney Seacat gave a short presentation on the updated **Strategic Plan** which includes the Core Business Systems and the six Enterprise Pillars: Employees, Compliance, Safety, Customers, Financial, and Sustainability.

**November 2014:** John Lynch, Financial Sub-Committee Chair, gave an update on the November 5, 2014 meeting. John Warner Deputy Director of Conveyance, RWRD, presented a slide to the Committee detailing the proposed **CIP Program** over the next five years. Jim DuBois, RWRD Hydrologist, gave a PowerPoint presentation to the Committee entitled, "**RWRD's 2013 Effluent Generation and Utilization Report**". Mary Allen, Program Manager, RWRD, gave a PowerPoint presentation to the Committee regarding the "**Service Fee Review and Evaluation**" study.

**December 2014:** Mr. Lynch gave an update on the December 10, 2014 Sub-Committee meeting. Mr. Burke gave a PowerPoint presentation entitled, "**Financial Plan Regional Wastewater Reclamation Department 2015**". Dr. Shane Snyder, University of Arizona, gave a PowerPoint presentation regarding "**water quality and emerging contaminants**". Mr. Warner provided a PowerPoint presentation entitled, "**System Wide Odor Control Update January – June 2104**".

**January 2015:** The Committee received updates on the potential user fee increases and the **2015 Financial Plan**. Mr. Burke presented a PowerPoint presentation on the **2015 RWRD Financial Plan**. A recommendation for three automatic annual rate increases was made. The Financial Sub-Committee extensively reviewed the proposed Financial Plan. The Committee held a **public meeting** on January 29, 2015.

**February 2015:** The Committee hosted two public meetings regarding a potential user fee increase. Mr. Burke made a PowerPoint presentation describing the **2015 RWRD's Financial Plan**. Jackson Jenkins, Director, RWRD, made a presentation at the **public meeting**. Mr. Warner gave a PowerPoint presentation and breakdown of the budgets on several projects – the **South Rillito Interceptor** (\$14 million budget), the **North Rillito Interceptor Rehabilitation** (\$19 million budget), and the **North Rillito Interceptor Relief Sewer** (\$3.5 million budget). Ms. Zucker, PAG, gave a brief update of the **Dispose-A-Med Program**.

**March 2015:** The Committee was presented with a PowerPoint presentation on "**The Sewer Outreach Subsidy**" by Mr. Jenkins. John Bernal, Deputy County Administrator for Public Works addressed the Committee regarding the State Legislative session and its impacts on Pima County. Mr. Rivera presented a PowerPoint presentation entitled, "**Pima County Economic Development Plan**". One of the significant items in the **Economic Development Plan** was the **Aerospace Corridor**. Mr. Rivera reviewed both the **South East Interceptor Augmentation** and the **Old Nogales Highway Rehabilitation and Augmentation** as they relate to the **Aerospace Corridor Augmentation Project**.

**April 2015:** Mr. Jenkins referred to a handout titled "**Responses to the Board of Supervisors' March 10, 2015 Questions**" regarding the proposed user fee increase. Mr. Warner provided a PowerPoint presentation regarding "**System Wide Odor Control Update**". Wally Wilson, Chief Hydrologist, Tucson Water also provided a PowerPoint presentation "**Water Production for Tucson Water Service Area 1899-2014**" and "**Water Production for Tucson Water Service Area 1940-2014**".

**May 2015:** The Financial Sub-Committee updated the members on their May 6, 2015 meeting. Relative to the revised proposal of the recommendation to the Board of Supervisors on the **user rate increase**, the main focus was on three areas. One was the "**in-house services**", allocation to Pima County Wastewater and the support services, mainly IT and Finance. The Committee received a request to entertain and evaluate changes to the **User Connection Fee**. Mr. Adam Bliven, Civil Engineering Manager, RWRD, provided a PowerPoint presentation on the **South Houghton Area Recharge Project**. Mr. Jeff Prevatt, RWRD Program Manager, provided information on the **Trihalomethane** project. The Committee was given a tour of the new **WEST Center**, 2959 W. Calle Agua Nueva.

**June 2015:** The Committee held a **public meeting** regarding the proposed **Connection Fee increase**. Mr. Jenkins gave a PowerPoint presentation at the public meeting. Following the public meeting, a lengthy discussion ensued regarding the proposal to increase sewer connection fees. The Committee endorsed both the user fee and connection fee increases.

### Regional Wastewater Reclamation Advisory Committee Fiscal Year 2015/16 Meetings

**August 20, 2015**

**February 18, 2016**

General Regional Wastewater Reclamation Department activities can be viewed on the department's website:

[www.pima.gov/wastewaterreclamation](http://www.pima.gov/wastewaterreclamation)

To view agendas and minutes from the Regional Wastewater Reclamation Advisory Committee visit the department's webpage and click on the right sidebar button:

**Boards, Commissions & Committees**

**October 15, 2015**

**April 21, 2016**

**December 17, 2015**

**June 16, 2016**

Regional Wastewater Reclamation Advisory Committee meetings are generally held bi-monthly on the third Thursday, in the Radon conference room, at the Water & Energy Sustainability Center (WESC), 2955 W. Calle Agua Nueva, Tucson.

**Committee Coordinator:**

Jody Watkins 724-9517 ([jody.watkins@pima.gov](mailto:jody.watkins@pima.gov))