



Board of Supervisors Memorandum

April 14, 2015

Pima County Code Text Amendment, Sanitary Sewer User Fees

Introduction

At its March 10, 2015 meeting, the Board of Supervisors asked questions about the proposed sewer user fee rate increases, and the matter was continued to the Board's April 14, 2015 meeting. The Regional Wastewater Reclamation Department (RWRD) summarized these questions and prepared responses, which are included in the attached report, *Responses to the Board of Supervisors' March 10, 2015 Questions*. Additional questions were submitted to RWRD and the Finance and Risk Management Department by the District 5 office. Responses to those questions are also attached.

In summary:

- The financial plans of 2011, 2012, 2013 and 2014 all indicated there would be future increases and that such would vary depending on economic recovery. These statements can be reviewed on Pages 5 and 6 of the attached report.
- Wastewater flows have declined by over 13 percent between 2007 and 2014, thus decreasing revenues. These declines are largely due to water conservation and slow growth in new connections.
- Connection fees, upon which we formerly significantly relied to reduce future user costs, are near or at historic lows and are not expected to significantly increase.
- Customer growth is significantly lower than average due to the Great Recession.
- Debt service has increased dramatically as we pay off our capital improvements associated with the Regional Optimization Master Plan (ROMP).
- While the ROMP program is complete, the system will continue to require capital repair and replacement investments. These capital investments will be much lower than past capital improvement programs.
- Operating and maintenance expenditures will increase and will likely parallel or be slightly greater than consumer price increases.
- Energy consumption and costs have decreased. Energy costs have decreased 24 percent. The present cost of energy is lower than it would have been by operating a methane electric generating facility and purchasing peaking energy from Tucson Electric Power.

As can be seen by the responses prepared by RWRD, during the three months since the Financial Plan was prepared and following my direction to all departments to reduce budgets by two percent, RWRD reduced its operating expenses and reduced the projected level of future capital projects. Based on these reductions, it appears rate increases could be lower than anticipated in the Financial Plan.

The County has not raised sewer rates for two years. Utility companies regularly increase their rates to offset ever-increasing costs. The City of Tucson is considering five annual rate increases of 7.3 percent for its water rates. Tucson Electric Power Company raised our electric rates approximately 14 percent in July 2013 and 4 percent in May 2014.

Based on these existing and projected utility increases, the County's modest increase of 4 percent appears very reasonable. The RWRD reduced expenses even further to reduce the proposed rate increase to 3 percent for the fiscal year beginning July 1, 2015 and for the following fiscal year only.

Recommendation

I recommend the Board of Supervisors approve a 3 percent sanitary sewer user fee rate increase rather than the 4 percent increase requested in the Financial Plan and that the Board approve two years of rate increases, effective July 1, 2015 and July 1, 2016. Between now and July 2017, the County will reevaluate the need for an additional increase for Fiscal Year 2017/18.

If the Board does not approve these recommended fee increases, operating and maintenance expenses will need to be reduced by two percent for every one percent of rate increase not approved. Thus, if a 3 percent rate increase is not approved,

1. Operating and maintenance expenses must be reduced by 6 percent, or
2. The capital program must be reduced by \$16 million for each percent of rate increase not approved, or
3. Any combination of reduced operating and capital costs to achieve equally proposed revenues from a 3 percent increase would be acceptable. Operating expense reductions would be concentrated in areas not tied to discharge permit compliance or health- or safety-related budget expenditures.

Respectfully submitted,

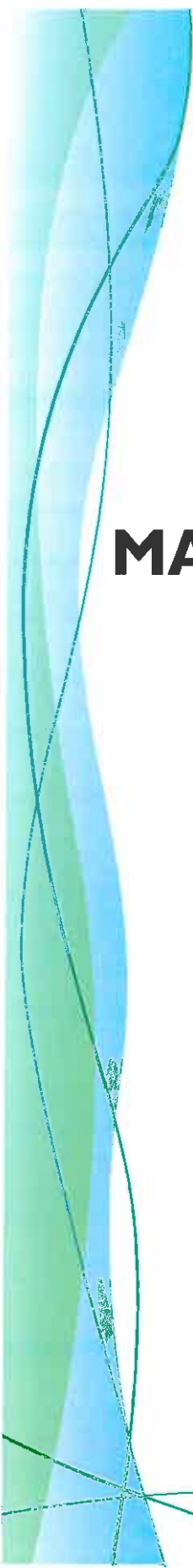


C.H. Huckelberry
County Administrator

CHH/mjk – April 8, 2015

Attachment

c: John Bernal, Deputy County Administrator for Public Works
Tom Burke, Deputy County Administrator for Administration
Jackson Jenkins, Director, Regional Wastewater Reclamation



RESPONSES TO THE BOARD OF SUPERVISORS' MARCH 10, 2015 QUESTIONS

REGARDING THE
REGIONAL WASTEWATER
RECLAMATION DEPARTMENT'S
2015 FINANCIAL PLAN

APRIL 6, 2015





ATTACHMENT I



REGIONAL WASTEWATER RECLAMATION DEPARTMENT
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

JACKSON JENKINS
DIRECTOR

PH: (520) 724-6500
FAX: (520) 724-9635

March 11, 2015

TO: C.H. Huckelberry, County Administrator
THRU: John M. Bernal, P.E., Deputy County Administrator - Public Works Administration
FROM: Jackson Jenkins, Director – RWRD
SUBJECT: Board of Supervisors March 10, 2015 Agenda Item 17 – Regional Wastewater Reclamation Hearing – Pima County Code Text Amendment

The Board of Supervisors requested additional information regarding this subject. A list of information requested appears below; please let me know if you have any edits. Responses are being compiled in coordination with the individuals copied on this memorandum and will be provided in preparation for the April 14, 2015 Board of Supervisors meeting.

Infrastructure Investment

1. Please provide an overview of the age of our sewer infrastructure.
2. What preventative maintenance and investments occurred to our sewer infrastructure pre-ROMP?
3. Provide information on current and future Capital Improvement Program projects, highlighting the recent reduction in spending in comparison to ROMP-era projects.
4. How is Capital Improvement Program project priority determined?
5. How many miles of interceptor repairs are currently underway or planned? Location and age of infrastructure for planned repairs should be included.
6. Provide information on the 2002 Speedway sinkhole costs and potential costs should a similar collapse occur.
7. Can you provide information on why ROMP was regulatory-driven and the consequences had we not embarked on that project?
8. How has the investment in ROMP increased the efficiency of our utility?

Industry Comparisons

1. Provide further information on the differences between the City of Phoenix and Pima County, specifically on operating expenses, growth, and effluent ownership.
2. Provide further information on the average monthly rate in the industry and other industry standards/comparisons.

Financial

1. Many Board members thought we were done with rate increases with the adoption of ROMP. Please explain how these rate increases are different than the ROMP rate increases.
2. Provide a historical overview of rate increases including the percent of increase since pre-ROMP.
3. Provide an analysis of a different rate increase structure, for example two years at 3% each year.
4. Provide an overview of our debt service payments and how that is driving a rate increase. Talk about 12-15 year pay off goals.

5. Why has the County Overhead cost increased exponentially over the past three years? Include an overview of how staff time for Financial, HR, ITD support is budgeted and charged and how that has changed in the past three years. Include a "shifting costs" explanation.
6. Discuss previous financial predictions and how and why they differ from the 2015 Financial Plan.
7. Provide an overview of the public meetings including advertisements and attendance.

Department Budget

1. Please provide information on why Professional Services has increased over the past few years. Board members thought privatizing Agua Nueva would save us money; identify areas that have seen a reduction which offsets the Professional Services increase.
2. Electricity use has gone up over the past few years which a Board member feels is in direct conflict with the Sustainability Resolution the Board of Supervisors approved a few years ago. However, energy costs have reduced overall and savings have been realized due to the shutdown of the powerhouse. Provide information on these items including that energy costs per rate payer are lower than they have ever been.
3. Please provide further information on the TEP rate increases, didn't we qualify for a lower rate?
4. Provide analysis of previous RWRD laboratories, why the expansion was needed, and cost savings we've experienced with the expansion.
5. Discuss the WEST expansion and U of A partnership, highlighting the collaboration for research into water quality issues.
6. Provide further information on the reduction of approximately 2.5% in sewer user fee revenue as a result of approximately 4% sewer flow volume reduction since 2013.

Spending Cuts

1. Please provide a list of cost-saving measures the Department has undertaken.
2. What are the non-mandated services that the Department provides (spending not required through regulation)?
3. Identify approximately \$6.5M in spending cuts should the rate increases not be approved.

Sewer Outreach Subsidy (SOS) Program

1. What changes did RWRD bring to the SOS program at the last rate increase?
2. What recommendations does the Department have to improve the SOS program?
3. Why do ratepayers have to reapply each year?
4. How are ratepayers currently made aware of the SOS program?
5. With 20% of Pima County at poverty level, how can we increase the exposure of our Sewer Subsidy Program?
6. Consult with the Pima Council on Aging and other low income advocacy groups on the Sewer Outreach Subsidy Program.

c: Jan Leshner, Deputy County Administrator, Medical and Health Services
Hank Atha, Deputy County Administrator, Community and Economic Development Administration
Tom Burke, Director, Finance and Risk Management
John Sherlock, Deputy Director – Treatment - RWRD
John Warner, Deputy Director – Conveyance RWRD
Eric Wieduwilt, P.E., Deputy Director - Planning & Engineering - RWRD
Jennifer C. Coyle, Special Assistant to the Director - RWRD
Jeff Prevatt, Program Manager, Compliance & Regulatory Affairs Office - RWRD
Judy Scrivener, Administrative Services Manager - RWRD

ATTACHMENT 2



Selection Criteria Used for Prioritizing PCRWRD Capital Improvement Program Projects

Protection of Human Health, Safety, and Property Through System Reliability and Capital Investment (10)

10 Prevents a potential loss of life OR a likely threat of injury or a health hazard where consequences of failure to act are extremely high.

8-9 Imminent failure within 2 years to include manholes, pump stations and interceptors that are at a high risk of resulting in a Sanitary Sewer Overflow (SSO) OR similar structures within a treatment facility, where consequences of failure to act are high potential to result in a regulatory violation exists but does not constitute an emergency.

5-7 Moderate, well documented, threat of an injury or health hazard through critical components' mechanical, structural or capacity failure likely by the time the project can be reasonably designed and constructed OR a high threat of an SSO exists.

2-4 Moderate, un-documented, threat of critical components' deterioration, failure possible in the near future OR less critical component (e.g. shallow, smaller diameter sewer line creating an SSO) failure likely OR capacity failure likely within 5 years OR documented improvement to the overall operation, function and effectiveness of a process.

0-1 Critical components presently have limited deterioration/wear and will likely suffer serious deterioration in near future OR may improve overall operation, function and effectiveness of a process OR the potential threat of SSO (likelihood or extent of adverse effects are un-documented for any of these conditions).

Regulatory or Contractually Driven Improvements (9)

8-10 Prevents immediate violation of contractual or regulatory commitments (where consequences of failure to meet commitment are extreme) within minimum time needed to implement the project.

5-7 Prevents probable violation of existing regulation within minimum time needed to implement project (where consequences of failure are extreme); prevents immediate violation of regulatory or contractual commitment where consequences of failure are not will documented or moderate risk.

2-4 Best management practice projects that are sufficiently detailed to insure they probably will avert a water quality violation; prevents probable violation of

contractual/regulatory commitment where consequences of failure are not well documented or moderate risk.

0-1 Prevents probable violation of future regulations.

Improvements which Enhance System Security (8)

8-10 Projects which enhance security for very high criticality assets where there could be full loss of treatment (or pretreatment or lift station) with high amounts of raw sewage being discharged to surrounding areas causing imminent or substantial damage or requiring evacuation, rescue or recovery of the public; or projects which promote a critical conformance to DHS standards or NIMS criteria, or which address a critical gap or deficiency in security, or which greatly enhance protection of other assets being constructed.

5-7 Projects which enhance security for high criticality assets where there may be long-term loss of a partial process stream (requiring use of emergency overflow basin) with low amounts of raw sewage being discharged to the surrounding area causing localized community disruption with moderate economic impact and need for external agency support; or projects which promote a substantial conformance to DHS standards or NIMS criteria, or which address significant gap or deficiency in security, or which significantly enhance protection of other assets being constructed.

2-4 Projects which enhance security for moderate criticality assets where there may be short-term loss of a partial process stream (or loss of process control), with partially treated sewage being discharged to a basin or outfall (i.e., no secondary treatment) causing a community nuisance or inconvenience (e.g., traffic disruption or odor problem) without need for external agency support; or projects which promote a minor conformance to DHS standards or NIMS criteria, or which address minor gap or deficiency in security, or which moderately enhance protection of other assets being constructed.

0-1 Projects which enhance security for low criticality assets where minimal disruption of process operations and services may occur with full treatment being provided but failure to meet permit standards may occur with little or no impact to environment or community; or projects which promote non-DHS/NIMS standards or criteria, or which address non-deficiency enhancements in security, or which slightly enhance protection of other assets being constructed.

Improvements which Eliminate or Control Odors in the System (5)

8-10 A widespread odor issue associated with a continuous event, in duration
OR an isolated odor issue associated with a continuous event, in duration.

5-7 A widespread odor issue associated with a lengthy event, in duration, **OR** a widespread odor issue associated with a medium event, in duration **OR** an isolated odor issue associated with a lengthy event, in duration.

2-4 A widespread odor issue associated with a short event, in duration **OR** an isolated odor issue associated with a medium event, in duration.

0-1 An isolated odor issue associated with a short event, in duration.

Improvements which Accommodate Smart Growth and Economic Development (3)

5-7 Projects which enhance RWRD's ability to accommodate the County's sustainability and economic development goals and provide documented return on investment.

2-4 Projects which would provide for near future capacity, but not immediate, for the Department's ability to accommodate the County's sustainability and economic development goals with less certain return on investment.

0-1 Provides support to other County projects that are consistent with the County's Comprehensive Plan.

Improvements which Reduce Long Term Department Costs (3)

8-10 Provides well documented payback to RWRD within 10 years.

5-7 Provides well documented payback to the Department within 15 Years OR well documented risk of substantial increase in the future cost unless project is accomplished now.

2-4 Project provides a payback within 20 years; or provides documented risk of an increase in future cost unless project completed now.

0-1 Project indicates an increase in future costs unless accomplished quickly, but the risk is limited or poorly documented.

ATTACHMENT 3



**Pima County Regional Wastewater Reclamation Department
DRAFT PROPOSED FY 15/16 CIP BUDGET**

Program	Program Name	Supervisory District	Program Manager	Projected Current FY14/15	Projected FY15/16	Projected FY16/17	Projected FY17/18	Projected FY18/19	Program Total
	Treatment - John Sherlock								
3SWT70	System Wide Treatment Rehabilitation & Enhancement	1-5	RWRD	\$0	\$200,000	\$500,000	\$500,000	\$500,000	
3SHARP	SE Houghton Area Recharge Project	4	Maria Berry	\$50,000	\$550,000	\$1,300,000	\$633,222	\$0	
3SRF13	SubRegional Facilities Security Improvements	1	Rod Graupmann	\$377,148	\$10,000	\$0	\$0	\$0	
3CSI21	Corona de Tucson WRF Security Improvements	4	Francisco Duchicela	\$445,604	\$0	\$0	\$0	\$0	
3GSI10	Green Valley WRF Security Improvements	2	Francisco Duchicela	\$194,961	\$0	\$0	\$0	\$0	
3GSC13	Green Valley WRF SCADA & Automation Improvements	2	Rod Graupmann	\$97,763	\$700,477	\$0	\$0	\$0	
3MLS13	Mt Lemmon WRF SCADA & Automation Improvements	4	Rod Graupmann	\$100,000	\$1,000	\$0	\$0	\$0	
3IRS09	Ina Rd WPCF SCADA Process Optimization	1	Rod Graupmann	\$87,894	\$0	\$0	\$0	\$0	
3SNI13	SCADA WAN Infrastructure Upgrade	1-5	Rod Graupmann	\$81,000	\$1,448,580	\$528,000	\$0	\$0	
3SCS02	SCADA Cyber Security Upgrade	1-5	Rod Graupmann	\$44,126	\$0	\$0	\$0	\$0	
3EOC14	SCADA Emergency Operations Center	3	Rod Graupmann	\$50,000	\$580,000	\$50,000	\$0	\$0	
3SIR14	Ina Rd Existing Plant SCADA Upgrades	1	Rod Graupmann	\$30,000	\$520,000	\$100,000	\$0	\$0	
3AVS18	Avra Valley WRF SCADA & Automation Impr FY 17/18	3	Rod Graupmann	\$0	\$0	\$0	\$614,000	\$0	
3CSC14	Corona de Tucson WRF SCADA & Operations Upgrade	4	Rod Graupmann	\$100,813	\$447,625	\$0	\$0	\$0	
3GVE14	Green Valley WRF Future Development Plan FY13/14	2	John Munden	\$1,129,982	\$1,300,000	\$1,350,000	\$0	\$0	
3CDT22	Corona de Tucson WWTF UV Disinfection & Filtration	4	John Munden	\$114,937	\$750,000	\$0	\$0	\$0	
3AVT14	Avra Valley WRF UV Channel Protective Shade Structure	3	Bobby DeAngelo	\$229,411	\$0	\$0	\$0	\$0	
3IPR14	Ina Rd WRF Emergency Overflow Basin Pump Replacement	1	Bobby DeAngelo	\$150,756	\$0	\$0	\$0	\$0	
3ICB12	Ina Rd WRF Centrifuge Bldg Sludge Screen	1	Bobby DeAngelo	\$53,929	\$0	\$0	\$0	\$0	
3IPC02	Ina Rd WRF Primary Clarifier Concrete Repair	1	Bobby DeAngelo	\$1,212,072	\$0	\$0	\$0	\$0	
3CDT15	Corona de Tucson WRF Facility Improvements	4	Bobby DeAngelo	\$216,849	\$0	\$0	\$0	\$0	
3AVP15	Avra Valley Parking Paving & Drainage Ph 2	3	Bobby DeAngelo	\$300,000	\$0	\$0	\$0	\$0	
3TRS15	Tres Rios Safety Upgrades	1	Bobby DeAngelo	\$249,000	\$0	\$0	\$0	\$0	
3SRF15	SRF - Additional Paving and Drainage	1	Bobby DeAngelo	\$0	\$300,000	\$0	\$0	\$0	
3EOB16	Emergency Overflow Basin #4 Improvements	1	Bobby DeAngelo	\$25,000	\$725,000	\$100,000	\$0	\$0	
3TRI16	Tres Rios Existing Infrastructure Upgrades	1	Bobby DeAngelo	\$1,500,000	\$500,000	\$2,000,000	\$2,800,000	\$2,700,000	
3SHT16	Tres Rios Sludge Holding Tank	1	Bobby DeAngelo	\$100,000	\$25,000	\$1,875,000	\$0	\$0	
3GVI16	Green Valley WRF Improvements	2	Bobby DeAngelo	\$0	\$460,000	\$0	\$0	\$0	
3AVB16	Avra Valley Emergency Overflow Basin	3	Bobby DeAngelo	\$100,000	\$30,000	\$1,370,000	\$0	\$0	
3AVM16	Avra Valley MOVs & SCADA	3	Bobby DeAngelo	\$0	\$130,000	\$0	\$0	\$0	
3CDS16	Corona de Tucson Influent Splitter Box Improvements	4	Bobby DeAngelo	\$0	\$200,000	\$0	\$0	\$0	
	TOTAL TREATMENT			\$7,041,245	\$8,877,682	\$9,173,000	\$4,647,222	\$3,200,000	\$32,839,149
	Financial Plan Totals				\$9,435,341	\$8,925,000	\$5,197,222	\$3,200,000	\$26,757,563
					-\$557,659	\$248,000	-\$650,000	\$0	-\$959,659

**Pima County Regional Wastewater Reclamation Department
DRAFT PROPOSED FY 15/16 CIP BUDGET**

Program	Program Name	Supervisory District	Program Manager	Projected Current FY14/15	Projected FY15/16	Projected FY16/17	Projected FY17/18	Projected FY18/19	Program Total
	Conveyance Rehabilitation - John Warner								
3CRP01	System-Wide Conveyance Rehabilitation Program	1-5	RWRD	\$0	\$0	\$1,500,000	\$5,000,000	\$5,000,000	
3SWOC1	System-Wide Odor Control Capital Program	1-5	RWRD	\$0	\$0	\$999,000	\$750,000	\$500,000	
3CCE15	Conveyance Campus Expansion	3	Jaime Rivera	\$1,350,000	\$0	\$0	\$0	\$0	
3CSS14	Congress and Silverbell Rehab	5	Ray Pagel	-\$693	\$0	\$0	\$0	\$0	
3HE614	Helen St to Elm St 6th Ave to 1st Ave	5	Sandi Garrick	\$423,723	\$29,624	\$0	\$0	\$0	
322C14	22nd to Congress Osborne to Toole	5	Sandi Garrick	\$442,070	\$29,157	\$0	\$0	\$0	
3HSU13	Hanson Software Upgrade to Version 8	3	Sydne Meyers	\$476,000	\$189,780	\$0	\$0	\$0	
3CSU04	Conveyance SCADA System Upgrade Richey Rd to Ina Rd	1 & 3	Rod Graupmann	\$604,809	\$1,425,124	\$0	\$0	\$0	
3DTL1A	Downtown Links Phase 1A St. Mary's Segment	5	Francisco Duchicela	\$195,000	\$0	\$0	\$0	\$0	
3DBS13	Dodge Blvd Security Improvements	3	Francisco Duchicela	\$100,342	\$170,000	\$0	\$0	\$0	
312225	12th to 2nd to 22nd and 36th Rehab	2	Francisco Duchicela	\$345,532	\$0	\$0	\$0	\$0	
312A15	12th to 4th to 36th to Ajo Rehab	2	Francisco Duchicela	\$255,640	\$0	\$0	\$0	\$0	
3LCS15	LaCholla to Calle Pacifica to Speedway to Silverbell Rehab	5	Francisco Duchicela	\$230,162	\$0	\$0	\$0	\$0	
3LMS15	LaCholla to Mission to Starr Pass to 36th Rehab	5	Francisco Duchicela	\$195,699	\$0	\$0	\$0	\$0	
3SCS15	St. Mary's to Cuesta to Speedway to Silverbell Rehab	5	Francisco Duchicela	\$256,960	\$0	\$0	\$0	\$0	
3VAL15	Valencia to Los Reales to Cmo De La Tierra to Cardinal Rehab	2	Francisco Duchicela	\$229,677	\$0	\$0	\$0	\$0	
3WRD12	Wilmot Rd & I-10 Manhole Rehabilitation	2 & 4	Glen Peterson	\$210,048	\$0	\$0	\$0	\$0	
3HME02	Harrison Rd Millmar Rd to Escalante Rd	2	Glen Peterson	\$1,104,827	\$0	\$0	\$0	\$0	
3APS13	Arivaca Pump Station	4	Michelle Dodroe	\$410,000	\$0	\$0	\$0	\$0	
3CPS13	Cardenal Pump Station	1	Michelle Dodroe	\$485,766	\$0	\$0	\$0	\$0	
3MPS14	Mission Pump Station Rehabilitation	5	Michelle Dodroe	\$72,549	\$0	\$0	\$0	\$0	
3SCP06	Sabino Creek Pump Station	1	Michelle Dodroe	\$576,386	\$92,009	\$0	\$0	\$0	
3PPS13	Principal Pump Station	4	Michelle Dodroe	\$574	\$0	\$119,815	\$393,861	\$0	
3LTS14	La Tierra Pump Station Conversion to Gravity Sewer	5	Michelle Dodroe	\$131,000	\$654,856	\$0	\$0	\$0	
3DPS15	Silverbell Pump Station Rehabilitation	3	Michelle Dodroe	\$50,000	\$423,000	\$0	\$0	\$0	
3ASP14	State Prison Pump Station Rehabilitation FY13/14	2	Michelle Dodroe	\$150,000	\$715,000	\$0	\$0	\$0	
3SPS15	Silverado Pump Station Rehabilitation	3	Michelle Dodroe	\$0	\$0	\$0	\$0	\$514,000	
3NRI14	North Rillito Interceptor Rehabilitation	1 & 4	Noel Ortiz	\$5,742,217	\$7,410,000	\$3,214,748	\$0	\$0	
3TFM13	Tangerine Rd Force Main Relocation	1	Noel Ortiz	\$78,222	\$616,881	\$101,954	\$0	\$0	
3SRWC4	South Rillito West Central Interceptor Rehab	3	Noel Ortiz	\$1,688,462	\$0	\$0	\$0	\$0	
3DFM01	DMAFB Flow Meter Station	2	Mario Robles	\$249,902	\$0	\$0	\$0	\$0	
3CRS05	CRRPS Facility Modifications	3	Noel Ortiz	\$532,256	\$2,300,000	\$2,000,000	\$659,101	\$0	
3MRP14	Minor Rehabilitation Projects FY 13/14	1-5	Ray Pagel	\$474	\$0	\$0	\$0	\$0	
3MR414	Sewer Manhole Rehabilitation #4	1-5	Ray Pagel	\$2,130	\$0	\$0	\$0	\$0	
3MR515	Sewer Manhole Rehabilitation #5	1-5	Ray Pagel	\$1,500,000	\$1,000	\$0	\$0	\$0	

**Pima County Regional Wastewater Reclamation Department
DRAFT PROPOSED FY 15/16 CIP BUDGET**

Program	Program Name	Supervisory District	Program Manager	Projected Current FY14/15	Projected FY15/16	Projected FY16/17	Projected FY17/18	Projected FY18/19	Program Total
3CRP15	Conveyance Rehabilitation Project	1-5	Ray Pagel	\$6,499,000	\$1,000	\$0	\$0	\$0	
3MRP15	Minor Rehabilitation Projects FY14/15	1-5	Ray Pagel	\$8,000,000	\$5,000	\$0	\$0	\$0	
3MRP16	Minor Rehabilitation Projects FY15/16	1-5	Ray Pagel	\$0	\$9,995,000	\$5,000	\$0	\$0	
3MR616	Sewer Manhole Rehabilitation #6	1-5	Ray Pagel	\$0	\$1,599,000	\$1,000	\$0	\$0	
3MR717	Sewer Manhole Rehabilitation #7	1-5	Ray Pagel	\$0	\$0	\$1,599,000	\$1,000	\$0	
3MRP17	Minor Rehabilitation Projects FY 16/17	1-5	Ray Pagel	\$0	\$0	\$9,995,000	\$5,000	\$0	
3MR818	Sewer Manhole Rehabilitation #8	1-5	Ray Pagel	\$0	\$0	\$0	\$1,599,000	\$1,000	
3MRP18	Minor Rehabilitation Projects FY 17/18	1-5	Ray Pagel	\$0	\$0	\$0	\$9,995,000	\$5,000	
3KMP12	Kostka Ave Michigan to Pennsylvania	3	Mario Robles	\$627,014	\$200,000	\$0	\$0	\$0	
3SEI15	Southeast Interceptor Rehabilitation Phase2	2 & 5	Mario Robles	\$647,692	\$0	\$0	\$0	\$0	
3SSB13	SE Interceptor Subsurface Biofilter Vapor Treatment Uni	2	Mandley Rust	\$132,774	\$0	\$0	\$0	\$0	
3SAB15	Sahuara Bio-Filter	4	Mandley Rust	\$80,000	\$270,000	\$0	\$0	\$0	
3SFT14	Safe Flush Tanks for LowFlow Sewers	2 & 4	Mandley Rust	\$0	\$0	\$0	\$0	\$0	
3RCI13	Randolph Pk WRF & Pump Station Security Improvements	2	Rod Graupmann	\$6,877	\$0	\$0	\$0	\$0	
3PIC15	Pantano Interceptor CDS	2	Francisco Duchicela	\$218,413	\$35,500	\$0	\$0	\$0	
3NRIC4	Tanque Verde Siphon	4	Mandley Rust	\$0	\$80,000	\$521,000	\$0	\$0	
	TOTAL CONVEYANCE			\$34,301,304	\$26,241,931	\$20,056,517	\$18,402,962	\$6,020,000	\$105,022,714
	Financial Plan Totals				\$25,536,424	\$21,170,393	\$20,082,138	\$14,883,000	\$81,671,955
					\$705,507	-\$1,113,676	-\$1,679,176	-\$8,863,000	-\$10,950,545

**Pima County Regional Wastewater Reclamation Department
DRAFT PROPOSED FY 15/16 CIP BUDGET**

Program	Program Name	Supervisory District	Program Manager	Projected Current FY14/15	Projected FY15/16	Projected FY16/17	Projected FY17/18	Projected FY18/19	Program Total
	Augmentation - Eric Wieduwilt								
3PES21	System-Wide Sewer Conveyance Augmentation Program	1-5	RWRD	\$0	\$51,000	\$0	\$0	\$0	
3SEI13	SE Interceptor Augmentation	2	Glen Peterson	\$377,289	\$1,250,000	\$5,750,000	\$4,662,596	\$0	
3NRR02	North Rillito Interceptor Relief Sewer	1 & 3	Noel Ortiz	\$1,010,326	\$1,913,018	\$0	\$0	\$0	
3CFS15	Continental Ranch Pump Station - Second Force Main	1 & 3	Michelle Dodroe	\$0	\$0	\$610,000	\$6,330,000	\$6,696,000	
322AS5	22nd St Alvernon Way to Swan Rd Augmentation	2 & 5	Mandley Rust	\$275,000	\$2,089,000	\$0	\$0	\$0	
3ASC15	AeroSpace Corridor Augmentation	2	Jaime Rivera	\$100,274	\$2,077,000	\$6,000,000	\$6,000,000	\$6,000,000	
3SAC15	Speedway BL - Warren to I10 Augmentation	5	Francisco Duchicela	\$0	\$171,000	\$574,000	\$5,249,000	\$6,103,000	
3CDA16	Broadway Augmentation - Chantilly to Craycroft	2 & 5	Mario Robles	\$0	\$85,000	\$572,000	\$1,000	\$0	
	TOTAL AUGMENTATION			\$1,762,889	\$7,636,018	\$13,506,000	\$22,242,596	\$18,799,000	\$63,946,503
	Financial Plan Totals				\$12,023,526	\$10,340,212	\$17,666,164	\$13,709,000	\$53,738,892
					-\$4,387,508	\$3,165,788	\$4,576,442	\$5,090,000	\$8,444,722
	Utility - Eric Wieduwilt								
3SUMP1	Sewer Utility Modification Program	1-5	RWRD	\$0	\$0	\$1,500,000	\$1,500,000	\$3,000,000	
3CMT01	PCDOT La Cholla Blvd Magee Rd to Tangerine Rd	1	Francisco Duchicela	\$30,000	\$0	\$0	\$0	\$0	
3GOS01	COTDOT Grant Rd Corridor Improvement Sewer Utility	3 & 5	Francisco Duchicela	\$0	\$33,000	\$153,000	\$0	\$0	
3HBI06	COTDOT Houghton Rd Broadway Blvd Intersection Improve	4	Francisco Duchicela	\$91,000	\$63,000	\$0	\$0	\$0	
3HIV01	COTDOT Houghton Rd I-10 to Valencia Rd	4	Francisco Duchicela	\$5,000	\$0	\$0	\$0	\$0	
3BEC01	COTDOT Broadway Blvd Euclid Campbell Ave Sewer Utility	2 & 5	Francisco Duchicela	\$0	\$0	\$0	\$110,900	\$4,100	
3TTT01	COTDOT 22nd St I-10 to Tucson Blvd Sewer Utility	2	Francisco Duchicela	\$0	\$0	\$15,000	\$100,000	\$500,000	
3SR863	ADOT SR86 Valencia Rd to Kinney Rd	3 & 5	Glen Peterson	\$513,057	\$60,000	\$0	\$0	\$0	
3PIT03	Prince Rd & I-10 ADOT Sewer Modifications	3	Glen Peterson	\$230,500	\$0	\$0	\$0	\$0	
3AI195	ADOT Ajo Way & I-19 Sewer Modifications	5	Glen Peterson	\$66,416	\$145,000	\$0	\$0	\$0	
3II105	ADOT Ina Rd & I-10 Sewer Modifications	1 & 3	Glen Peterson	\$106,000	\$1,850,000	\$0	\$0	\$0	
3RI105	ADOT Ruthrauff Rd & I-10 Sewer Modifications	1 & 3	Glen Peterson	\$0	\$150,000	\$1,780,000	\$15,000	\$0	
3LRI01	PCDOT La Canada River Rd to Ina Rd Sewer Utility	1	Ray Pagel	\$0	\$0	\$0	\$0	\$0	
3SR773	ADOT SR77 - Oracle Rd - Tangerine Rd to Pinal County Line	1	John Munden	\$0	\$15,000	\$0	\$0	\$0	
3DTL2A	Downtown Links Phase 2 St Marys Segment	5	Francisco Duchicela	\$0	\$0	\$240,000	\$0	\$0	
3MMP16	Utility Minor Modifications	1-5	Francisco Duchicela	\$0	\$100,000	\$0	\$0	\$0	
	TOTAL UTILITY			\$1,041,973	\$2,416,000	\$3,688,000	\$1,725,900	\$3,504,100	\$12,375,973
	Financial Plan Totals				\$2,364,000	\$3,462,000	\$725,900	\$3,504,100	\$10,036,000
					\$62,000	\$236,000	\$1,000,000	\$0	\$1,298,000

**Pima County Regional Wastewater Reclamation Department
DRAFT PROPOSED FY 15/16 CIP BUDGET**

Program	Program Name	Supervisory District	Program Manager	Projected Current FY14/15	Projected FY15/16	Projected FY16/17	Projected FY17/18	Projected FY18/19	Program Total
	ROMP - John Sherlock								
3RIR03	ROMP Ina Rd WPCF HPO Replacement	1	Jaime Rivera	\$2,032,600	\$0	\$0	\$0	\$0	
3RIR04	ROMP Ina Rd WPCF 12.5 MGD Expansion	1	Jaime Rivera	\$414,465	\$0	\$0	\$0	\$0	
3RIR05	ROMP Ina Rd WPCF BNRAS System Modification	1	Jaime Rivera	\$0	\$0	\$0	\$0	\$0	
3RIR06	Ina Rd WPCF Biosolids Facilities Improvements	1	Jaime Rivera	-\$125,058	\$0	\$0	\$0	\$0	
3RIR07	ROMP Ina Rd WPCF Power Generation & Distribution	1	Bobby DeAngelo	\$188,517	\$0	\$0	\$0	\$0	
3RIR08	Ina Rd WPCF Class A Biosolids Improvements	1	Jing Luo	\$200,000	\$286,469	\$0	\$0	\$0	
3RIR09	Biogas Sales and Utilization	1	Jing Luo	\$255,040	\$536,403	\$0	\$0	\$0	
3RIR11	Side Stream Treatment	1	Jing Luo	\$87,295	\$305,384	\$0	\$0	\$0	
3RSC15	ROMP SCADA	1	Rod Graupmann	\$607,053	\$0	\$0	\$0	\$0	
3RWC11	ROMP 32 MGD Reclamation Campus	1	Mandley Rust	\$951,481	\$1,000	\$0	\$0	\$0	
3RWC12	Roger Rd WRF Clean Closure	1	Dave Kay	\$646,914	\$566,623	\$0	\$0	\$0	
3RWC15	Addition to RWRD Central Laboratory	1	Robert Patze (FM)	\$4,902,131	\$100,000	\$0	\$0	\$0	
3RPI09	ROMP Plant Interconnect	1	Jaime Rivera	\$0	\$0	\$0	\$0	\$0	
3RWC13	Central Lab Complex	1	Robert Patze (FM)	\$0	\$0	\$0	\$0	\$0	
3RWC14	Central Lab Complex Site Civil	1	Dave Kay	\$0	\$0	\$0	\$0	\$0	
3RRP15	Roger Road Entry Post-Closure Implementation	1	Sandi Garrick	\$375,000	\$275,000	\$0	\$0	\$0	
3REW15	Santa Cruz Park Path Embankment Widening	1	Sandi Garrick	\$150,000	\$265,000	\$0	\$0	\$0	
	TOTAL ROMP			\$10,685,438	\$2,335,879	\$0	\$0	\$0	\$13,021,317
	Financial Plan Totals			\$12,735,210	\$1,359,204	\$2,115,739			\$16,210,153
				-\$2,049,772	\$976,676	-\$2,115,739	\$0	\$0	-\$3,168,836
	Submitted Totals		RWRD CIP Budget Request	\$54,832,849	\$47,507,510	\$46,423,617	\$46,918,680	\$31,523,100	\$227,205,666
	Financial Plan Totals		RWRD CIP Budget Request	\$69,719,367	\$50,706,495	\$46,003,344	\$43,671,414	\$35,296,100	\$245,398,720
				-\$14,886,518	-\$3,200,985	\$420,173	\$3,247,266	-\$3,773,000	-\$18,193,064

ATTACHMENT 4



RWRD Director Level Key Performance Indicators (KPIs)



Fiscal Year 2014-2015

March 24, 2015

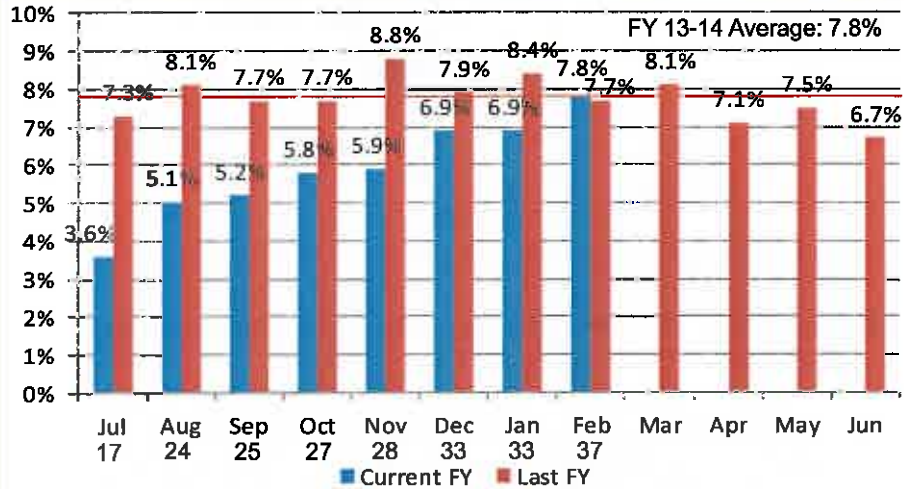
Agenda



- Safety Share
- Employee Pillar
- Compliance Pillar
- Safety Pillar
- Customer Pillar
- Financial Pillar
- Sustainability Pillar
- Discussion/Action Items

Vacancy Rate

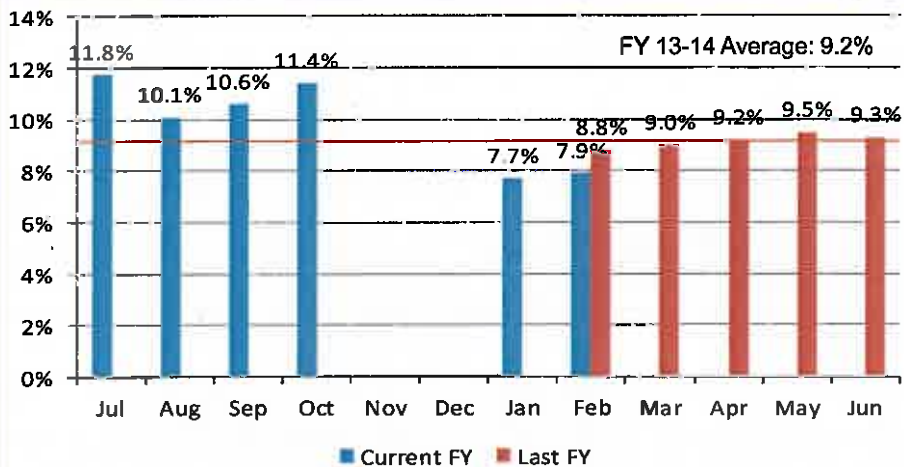
Judy Sullivan & Duane Vile, Co-Pillar Champions



The Vacancy Rate is the percentage of unfilled positions relative to the total number of budgeted positions (475 for FY 14-15)

Absenteeism Rate

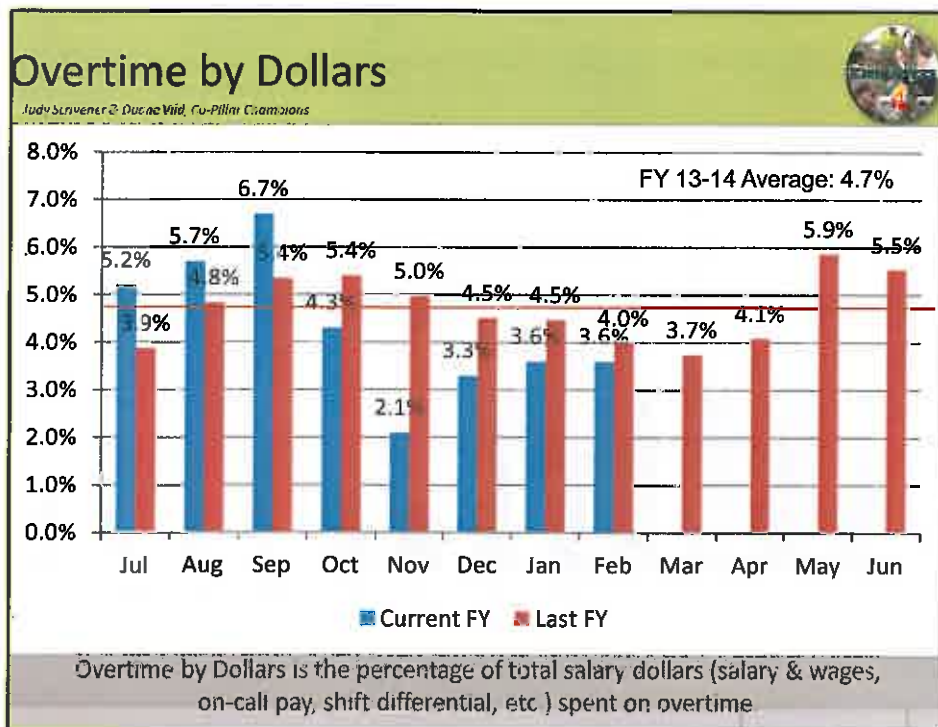
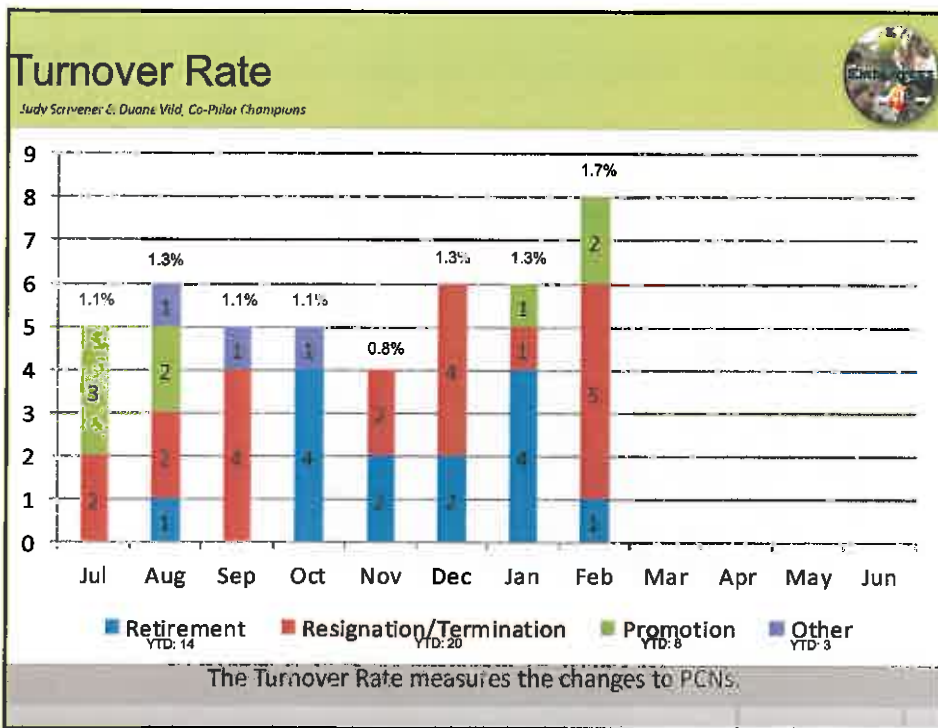
Judy Sullivan & Duane Vile, Co-Pillar Champions

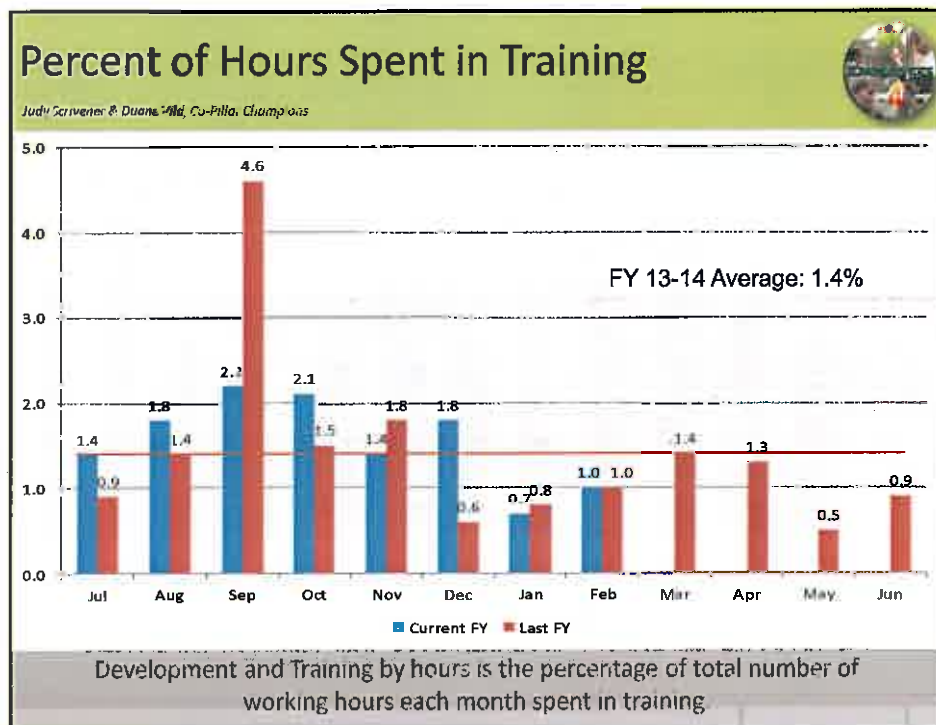
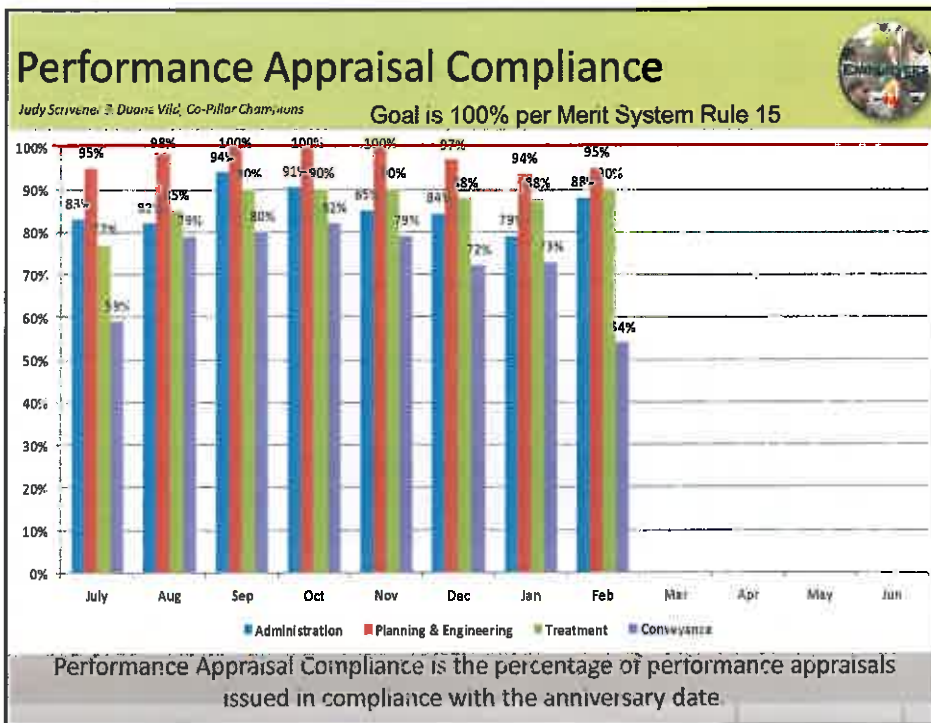


The Absenteeism Rate is the percentage of absences from work including scheduled absences as well as unscheduled absences

The Absenteeism Rate does not include paid County holidays

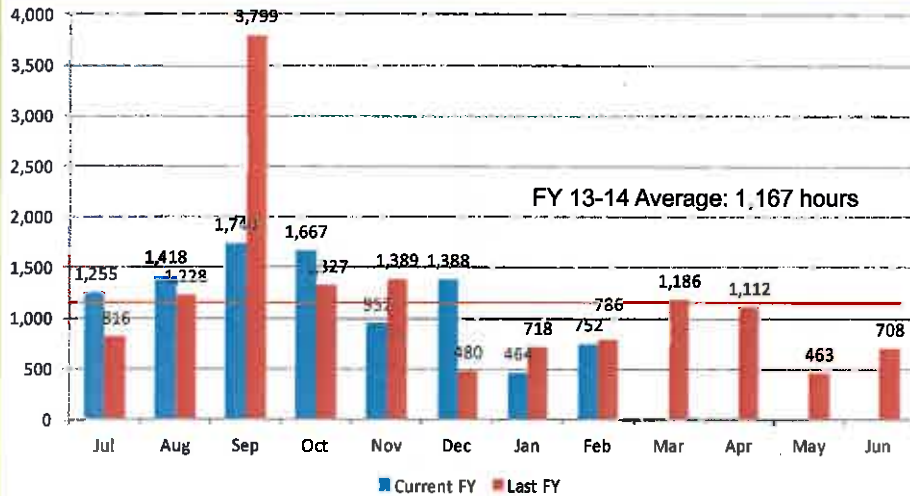
Did not submit a data to the County July 2014 through January 2015





Total Hours of Development & Training

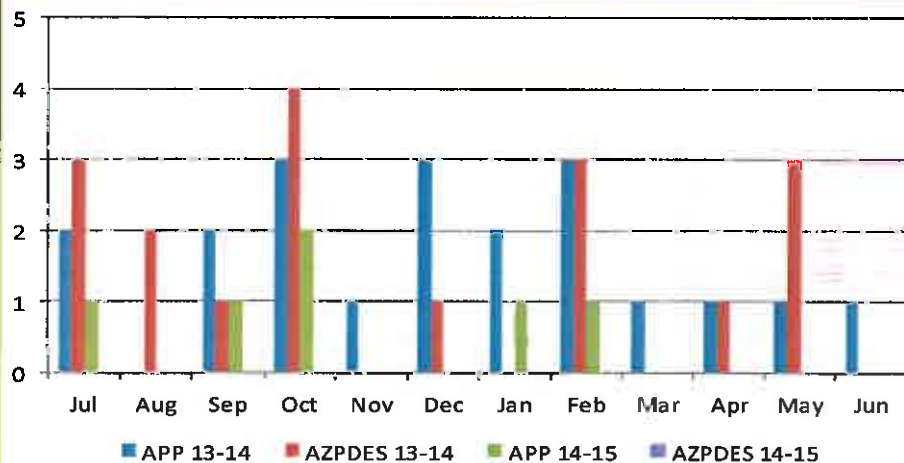
Judy Scrivener & Duane Wilk, Co-Pillar Champions



Total Hours of Development and Training is the total number of hours spent in development and training. Goal is 1,538 hours per month.

Non-Compliance Events

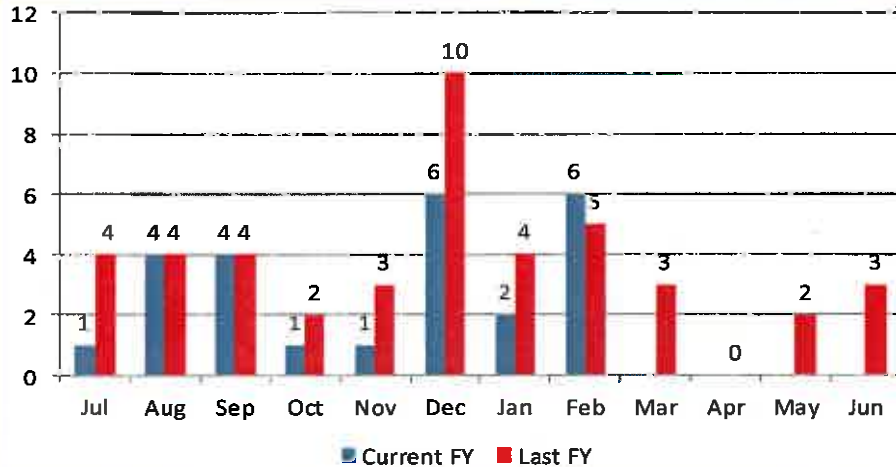
Jeff Frevoet, Pillar Champion



Non-compliance events are the total number of discharge events occurring in violation of the AZPDES permit. Groundwater non-compliance events are not included in this data. Goal is 0 non-compliance events.

Sanitary Sewer Overflows

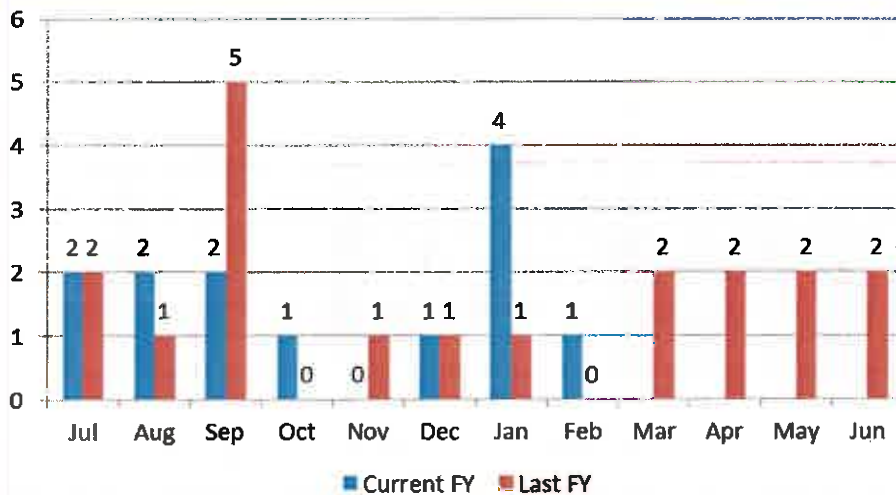
Jeff Prevett, Pillar Champion



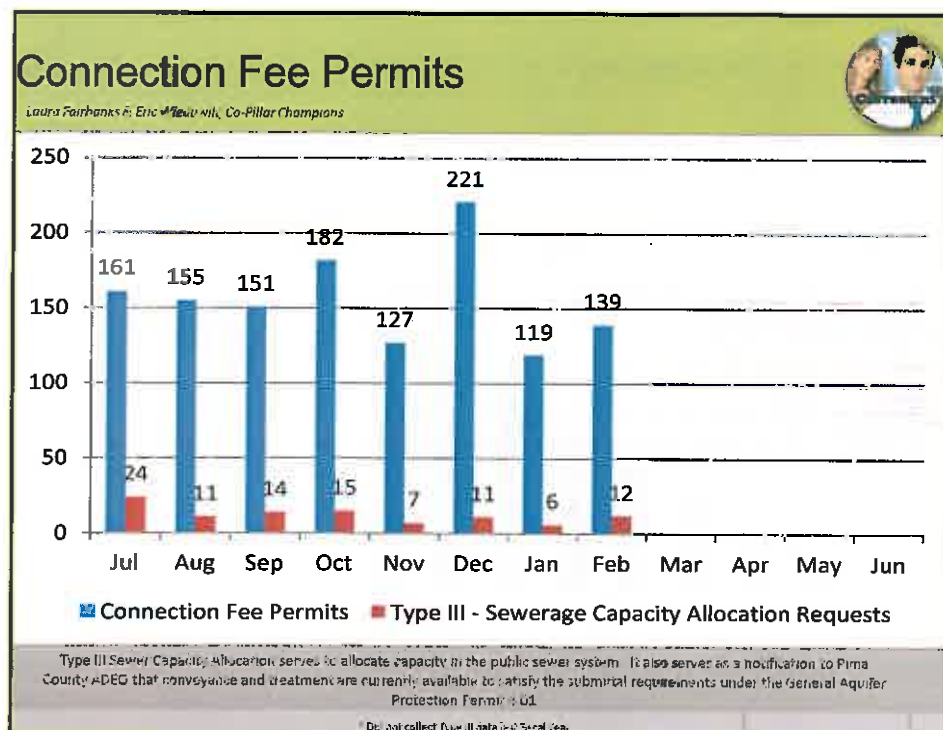
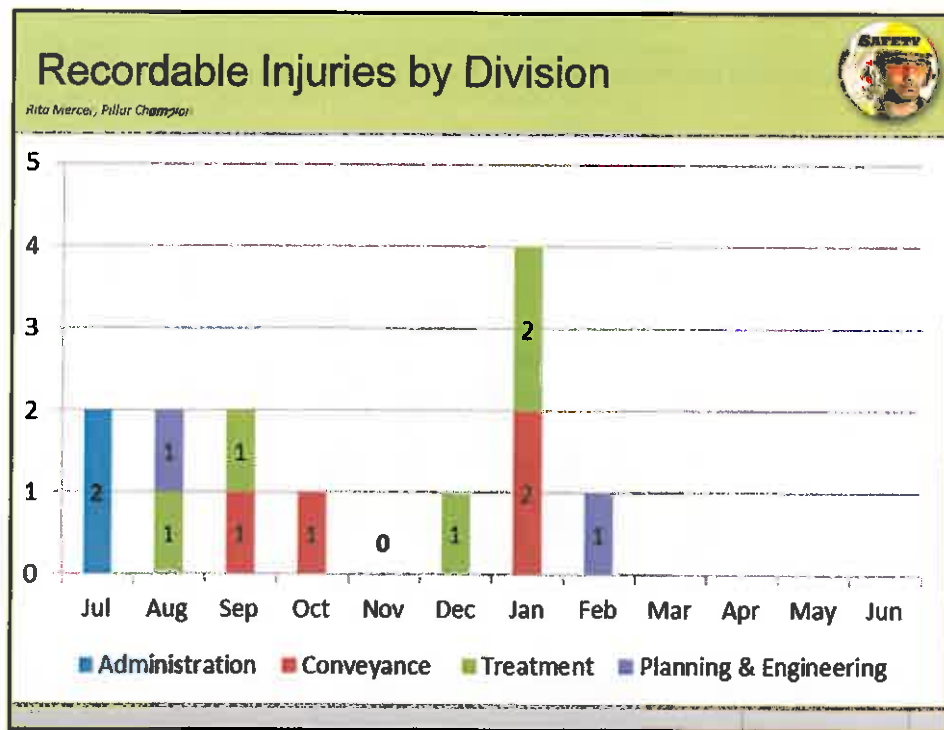
Benchmark: the National Average is 4.5 SSOs per 100 miles of conveyance line (2004 EPA Report to Congress)
RWRD average per 100 miles of conveyance line was 1.3 in Fiscal Year 13-14.

Recordable Injuries

Rita Prezas, Pillar Champion

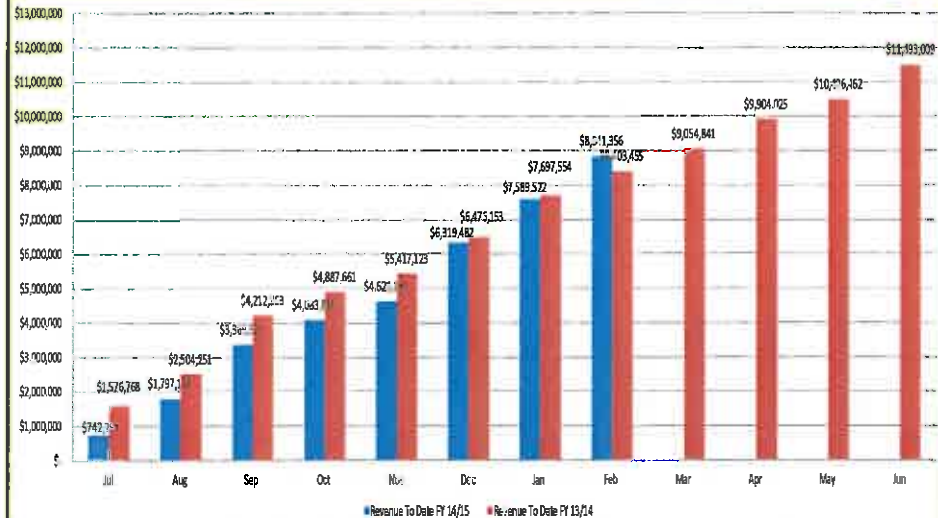


The goal for RWRD is 0 Recordable Injuries. OSHA defines a Recordable Injury as one that results in days away from work, restricted work, transfer to another job, loss of consciousness, or medical treatment beyond first aid.



Connection Fee Permits – Revenue Comparison

Laura Fairbanks & Eric Medendorp, Co-Pillar Champions

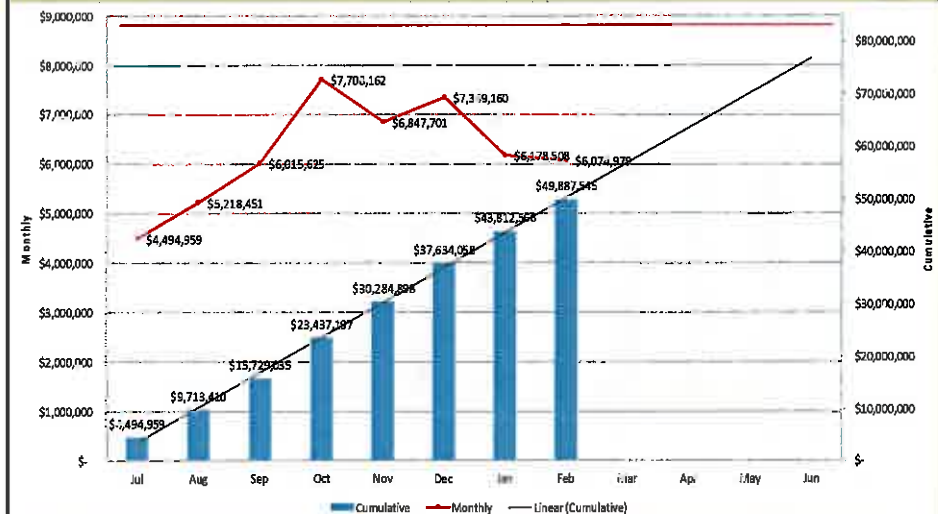


The data collected for Connection Fee Permits – Revenue Comparison was obtained from Advantage Financial System (AMS).

O & M Spending

Jennifer Coyle & Jamie Priebe, Co-Pillar Champions

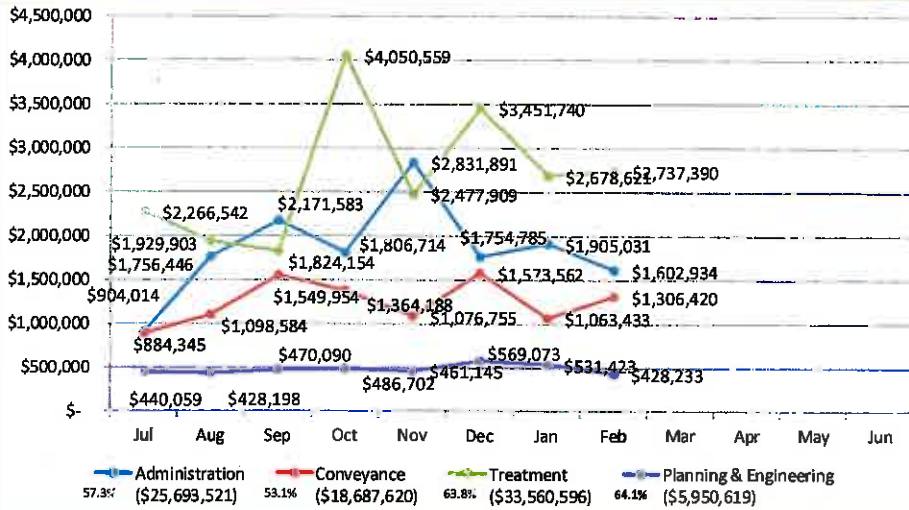
Fiscal Year 2014-2015 Adopted Budget: \$83,892,356
Adjusted Budget: \$83,897,521



The goal of spending for Operations and Maintenance is to spend the fiscal year budget, but not to go over budget.

O & M Spending by Division

Jennifer Coyle & Jaime Rivera, Co-Pillar Champions

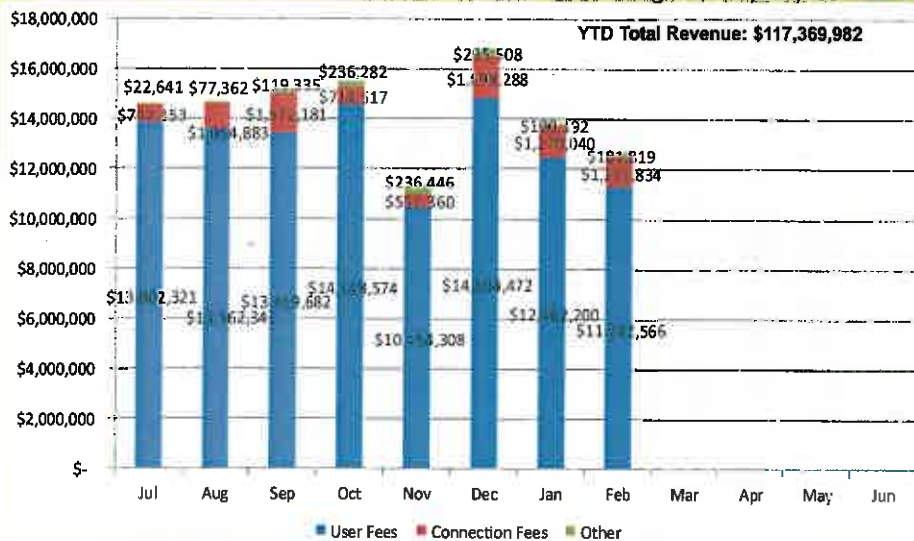


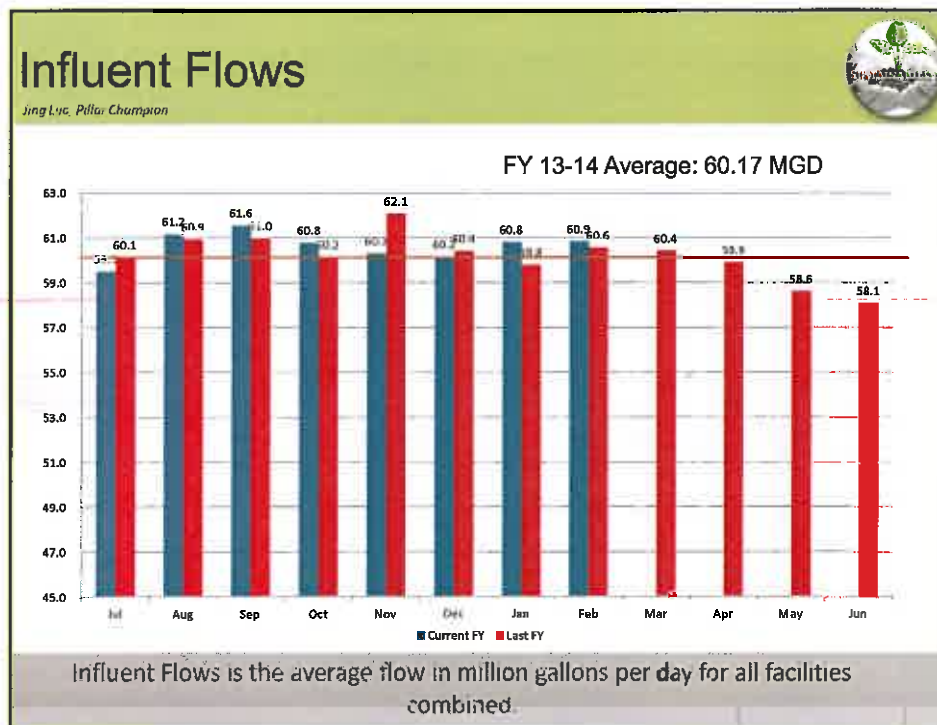
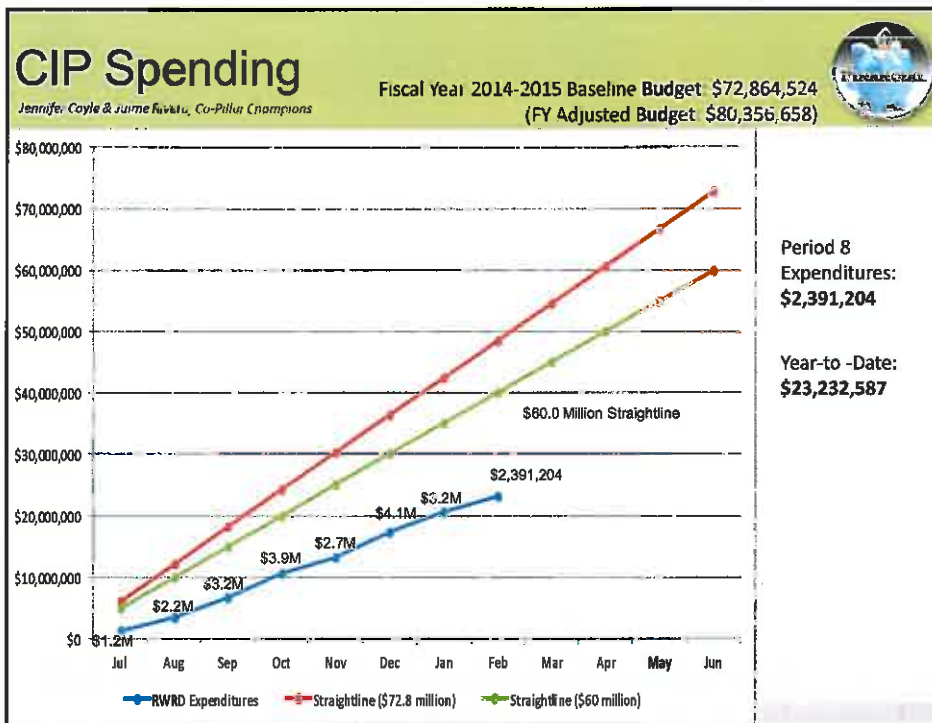
Leadership Representatives from each Division should be prepared to discuss any anomalies in spending periods

Revenue

Jennifer Coyle & Jaime Rivera, Co-Pillar Champions

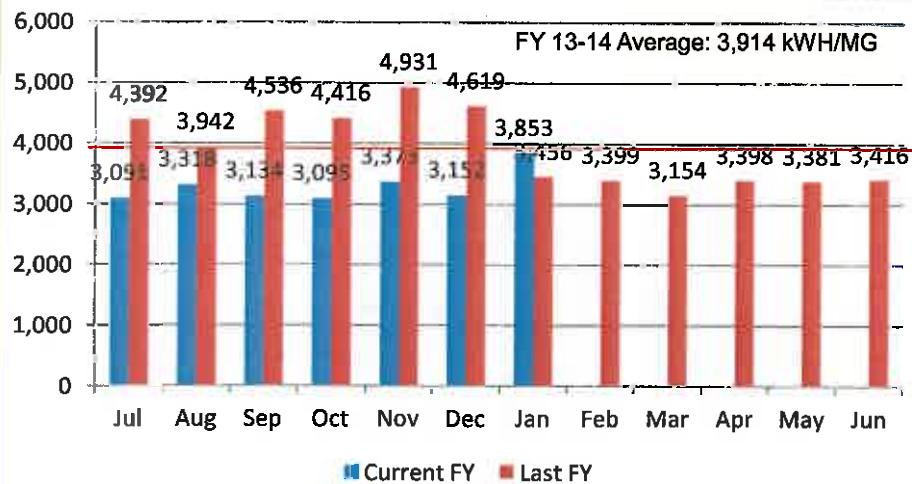
Fiscal Year 2014-2015 Budget \$180,813,965





Unit Energy Consumption

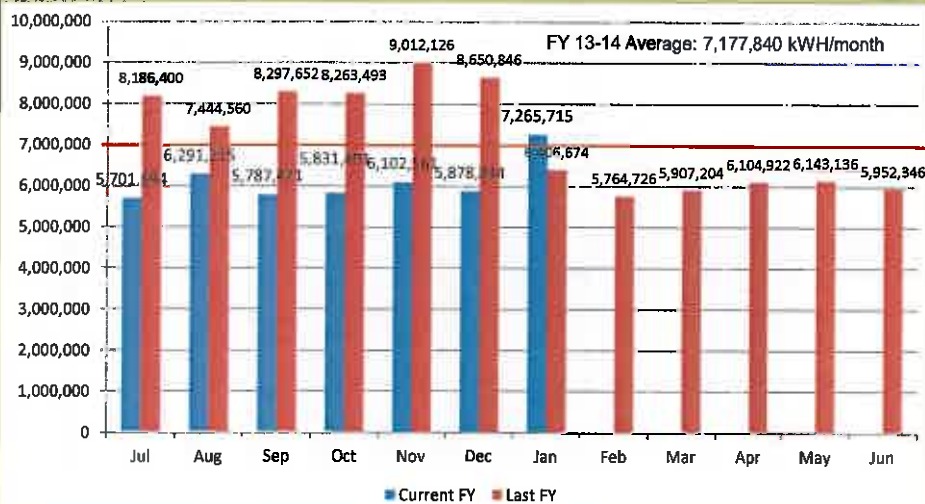
Jing Luo, Pillar Champion



Unit Energy Consumption is the energy used in kilowatt hours per million gallons for all WRFs, Conveyance, and RWRD buildings. *NOTE: this data lags by a month due to the timing of TEP invoices.

Total Energy Usage

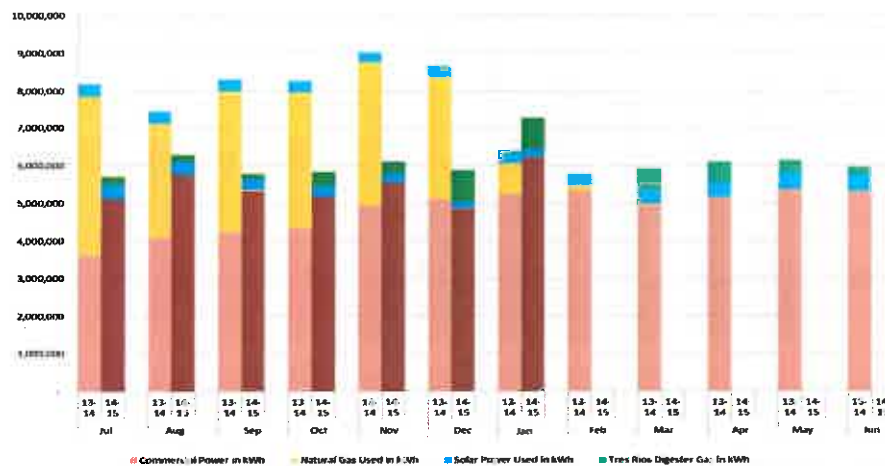
Jing Luo, Pillar Champion



Total Energy Usage is the total energy used in kilowatt hours per month for all WRFs, Conveyance, and RWRD buildings. *NOTE: this data lags by a month due to the timing of TEP invoices.

Energy Consumption by Type

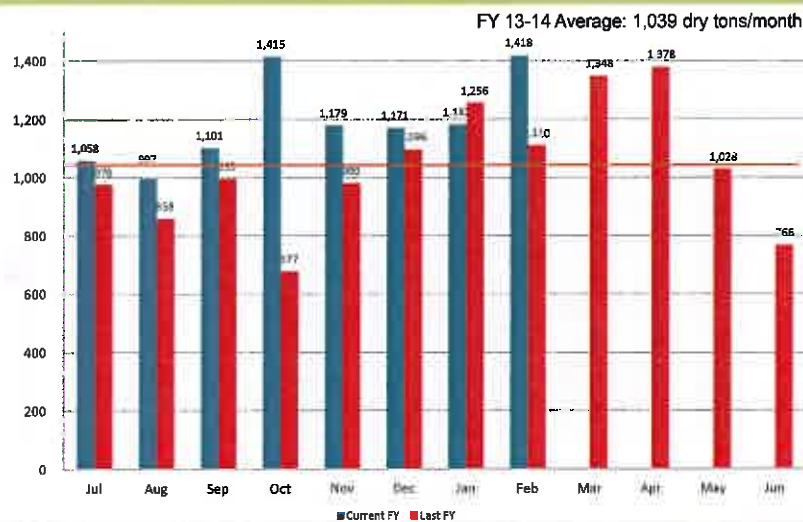
Jing Luo, Pillar Champion



Energy Consumption by Type is the amount of energy used in kWh by all RWRB Buildings, WRFs and Conveyance

Biosolids Production

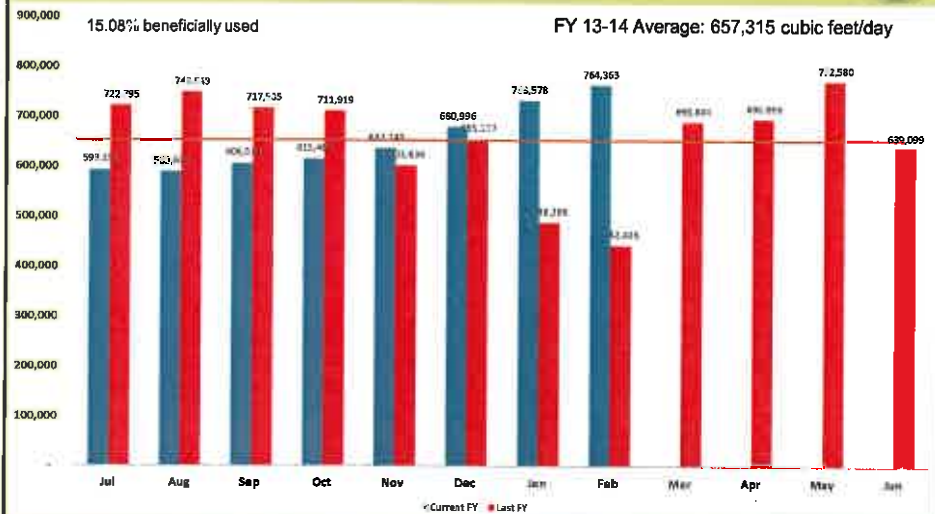
Jing Luo, Pillar Champion



Biosolids Production is the dry tons per month of biosolids produced from both the regional and sub-regional facilities

Biogas Production

ling Luo, Pillar Champion



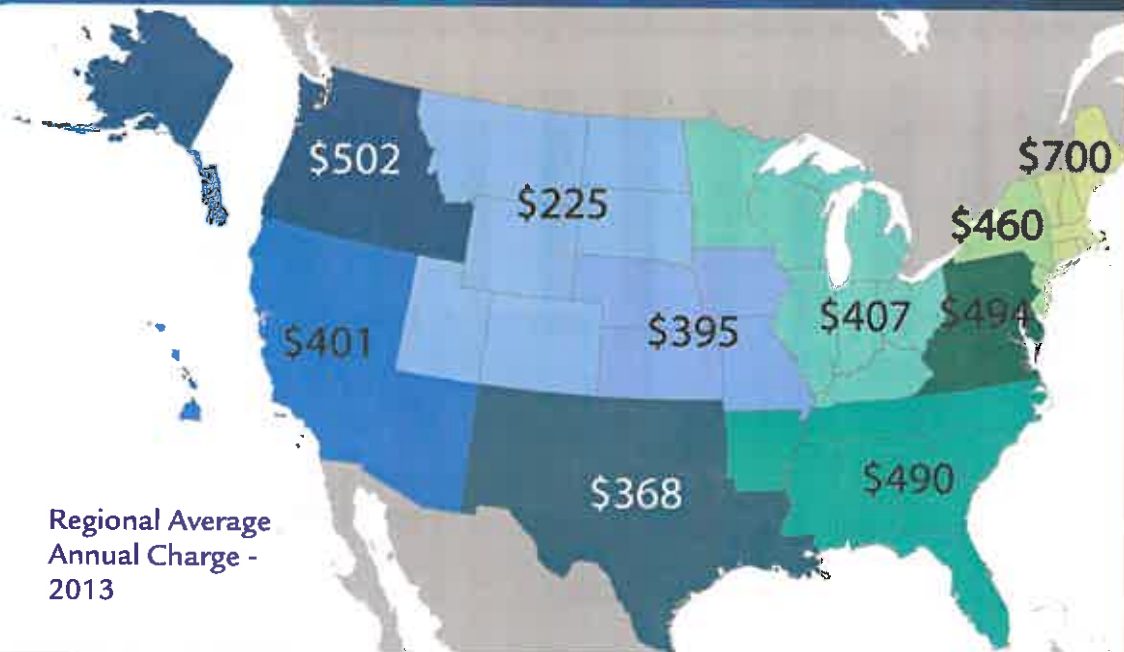
Biogas Production is the average biogas production rate in cubic feet per day from the regional WRFs.

Discussion/Action Items

ATTACHMENT 5



NACWA 2013 COST OF CLEAN WATER INDEX



Average Charge for Wastewater Services Increases 5.5% in 2013

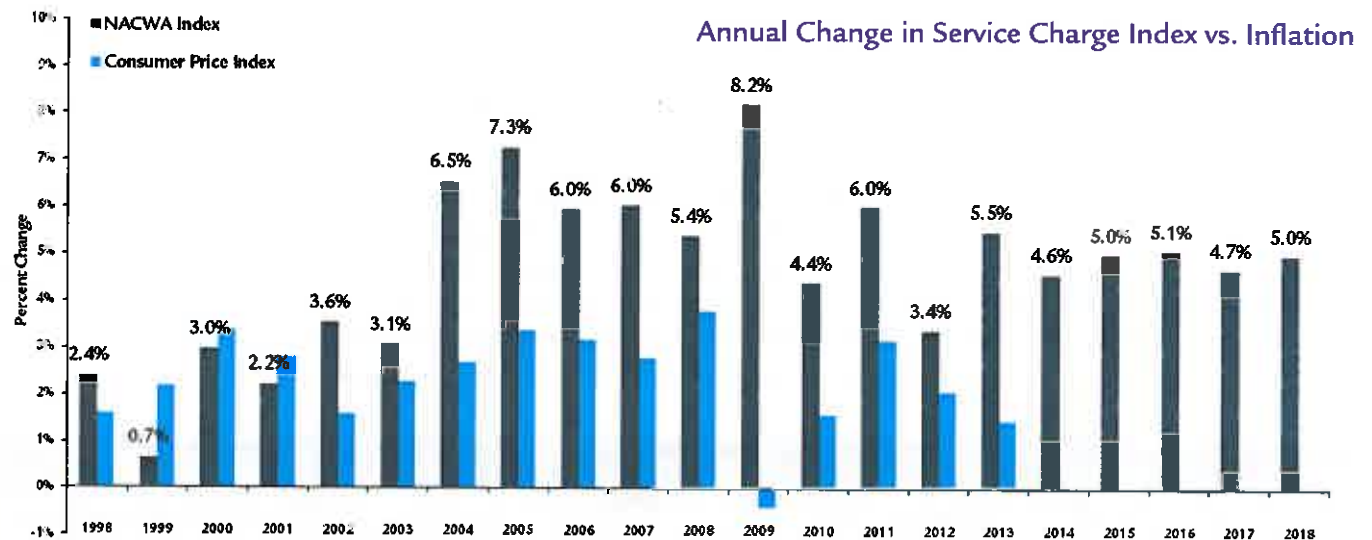
NACWA's 2013 *Cost of Clean Water Index* indicates that the average cost of wastewater services rose 5.5 percent in 2013, more than triple the rate of inflation as measured by the Consumer Price Index (CPI) (see *Service Charge Index vs. Inflation* chart below). The national average amount a single family residence pays for wastewater treatment, also known as the sewer service charge, is now \$435 per year. This is the 12th consecutive year that sewer service charges have increased faster than inflation, nearly doubling the average wastewater service charge since 2002.

The national average of \$435 only tells part of the story. The *Regional Average Annual Charge* map (left) shows a breakdown of charges by EPA Region. The average service charge by Region varies from a low of \$225 in EPA Region 8 to a high of \$700 in EPA Region 1.

2013 NACWA CLEAN WATER COST INDEX SUMMARY

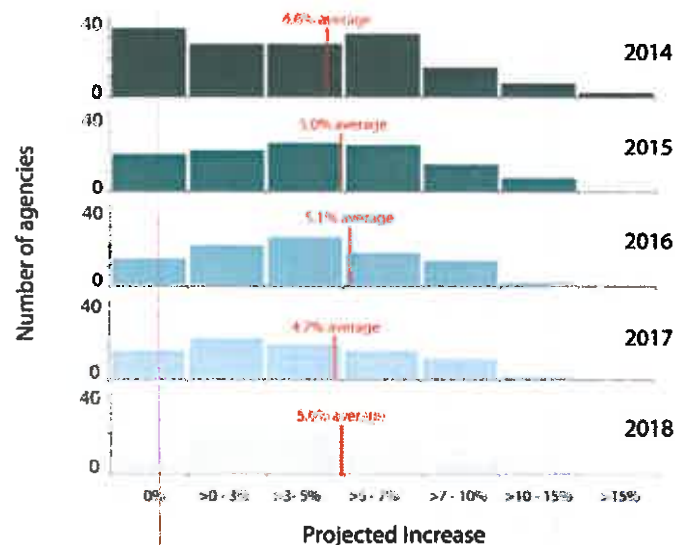
108 Million POPULATION SERVED	184 UTILITY RESPONDENTS	\$435 AVERAGE NATIONAL SEWER SERVICE CHARGE	5.5% INCREASE IN SEWER CHARGES FROM 2012-2013	1.5% INCREASE IN CONSUMER PRICE INDEX 2012-2013
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The *Service Charge Index vs. Inflation* chart (right) presents a national snapshot of the increase in service charges, as compared to inflation, since 1998. Table A-1 (see *Cost of Clean Water Table Data Annex*) provides a breakdown of NACWA *Index* values and service charges back to 1985, the base year for the *Index*. The values for 2013 are based on the responses from 184 NACWA members serving over 108 million people. Additional national and regional data are included in Tables A-1 and A-3 (see *Cost of Clean Water Data Table Annex*).



NACWA 2013 COST OF CLEAN WATER INDEX

Projected Increases in Charges, 2014-2018



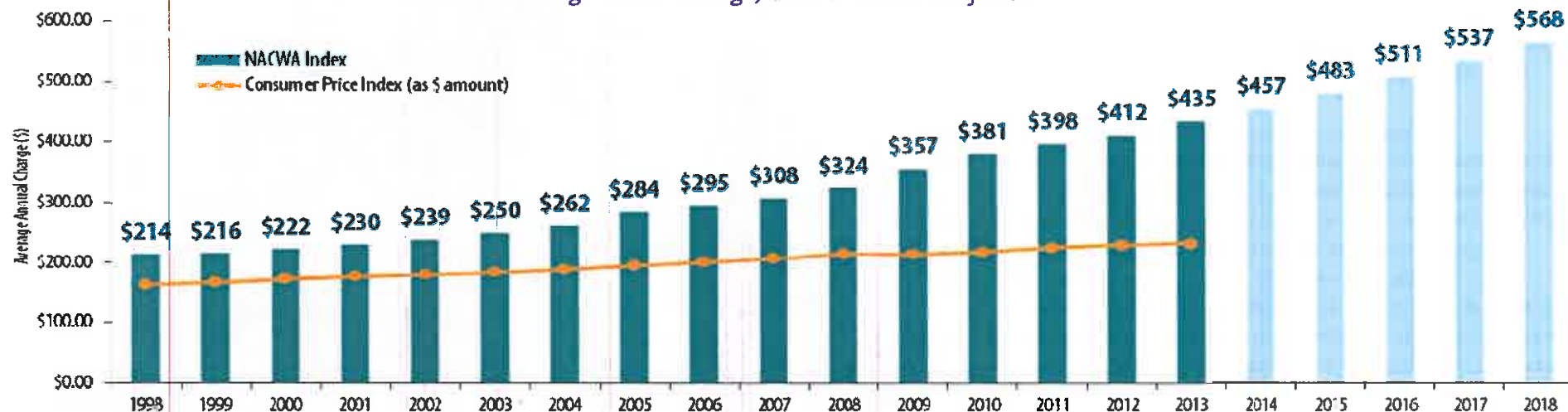
Projected Charges Expected to Increase 5% per Year Through 2018

Customers pay for sewer services in a variety of ways. Charges may be based on property values, gallons of water used, on a flat rate, or include some combination of these values. Because of this variability, the *NACWA Index* uses what the average single-family residence pays annually because it is a more consistent measure to track the cost of services over the years. This year NACWA's *Index* indicates that clean water utilities are expecting average charges to continue to increase about 5 percent per year for the next five years. The *Projected Increases in Charges, 2014-2018* chart (left) shows the projected percentage increase in charges distributed among agency respondents.

Average Charge to Reach \$500 in 2016

The *Annual Average Service Charge* chart (below) presents a national snapshot of sewer service charges since 1998, and provides a projection of charges through 2018. The national average sewer service charge is expected to top \$500 in 2016.

Annual Average Service Charge, 1998 – 2013 & Projected



Disclaimers: The NACWA Index strives to use the best available data each year when determining current and historical household charges and trends. These data are intended for comparison purposes only, and are subject to change from one year to the next. While this document presents the most up-to-date data available, if better data become available in the future, the data presented here may be modified.

Additional data and information on the NACWA Index, past years' surveys, and regional summaries of the data from the 2013 NACWA Index are available on NACWA's website at www.nacwa.org/utilitymanagement

ATTACHMENT 6





REGIONAL WASTEWATER RECLAMATION ADVISORY COMMITTEE
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

February 25, 2015

The Honorable Chair and Members
Pima County Board of Supervisors
130 West Congress Street, 11th Floor
Tucson, Arizona 85701

RE: Proposed Rate Increases as Outlined in the 2015 Financial Plan

Dear Honorable Chair and Members:

The Pima County Regional Wastewater Reclamation Advisory Committee (RWRAC) was established by the Pima County Board of Supervisors, in part, to act as the official advisory body on the Regional Wastewater Reclamation Department's (RWRD) Capital Improvement Program planning and rate structure formulation to County government; annually review the proposed RWRD Capital Improvement Program and recommend to the governing body an annual and five-year Capital Program; and annually review the revenue requirements of the sanitary sewerage system and recommend to the governing body rate adjustments as required.

The Pima County Finance and Risk Management Department prepares an annual report, the Financial Plan, addressing the financial needs of RWRD based on the projected expenses and projected capital improvement program for the current fiscal year and for the following four fiscal years.

2015 Financial Plan

The 2015 Financial Plan recommends the following:

1. The issuance of \$60 million of Certificates of Participation (COPs) in the current fiscal year as anticipated in the Adopted Budget.
2. The issuance of \$165 million of new sewer revenue obligations in the upcoming years as follows:
 - a. \$45 million in Fiscal Year 2015-16,
 - b. \$40 million in Fiscal Year 2016-17,
 - c. \$45 million in Fiscal Year 2017-18, and
 - d. \$35 million in Fiscal Year 2018-19.
3. The early repayment of \$38 million of WIFA Loans and sewer revenue bonds as those become callable in Fiscal Year 2016-17.
4. The adoption of a series of three automatic annual rate increases of 4% occurring July 1, 2015, July 1, 2016, and July 1, 2017.

Standard & Poor's rating agency, which rates the County's sewer debt, has indicated that a debt service ratio of 130% is key to maintaining favorable ratings. On April 18, 2013, the RWRAC adopted a recommended goal of achieving debt service ratios of 130%. In order to maintain a debt service ratio of 130%, by Fiscal Year 2018/19, the County will need to increase net operating revenues by approximately \$22.3 million. This level of revenues will not be generated from the anticipated growth in the system. It will be necessary to increase user fee rates to sustain the system and complete the planned capital projects.

RWRAC Review of the 2015 Financial Plan

Over the past six months, the RWRAC has worked diligently to review the 2015 Financial Plan in preparation for the Fiscal Year 2015/16 budget adoption.

- Since September 2014, the RWRAC and the RWRAC Sub-Committee have reviewed in depth the financial issues for the Department and the draft 2015 Financial Plan.
- On December 10, 2014, the Financial Sub-Committee voted 4-1 in favor of recommending to the full RWRAC the approval of the proposed rate increases as outlined in the 2015 Financial Plan.
- In an effort to give the public multiple opportunities to provide meaningful input into this process, the RWRAC held a public meeting in the evening on January 29, 2015, a second public meeting in the morning on February 19, 2015, and solicited public comments in person, via email, and in writing.

Recommendation

At the February 19, 2015, RWRAC meeting, the RWRAC voted 8-3 in favor of recommending to the Pima County Board of Supervisors the approval of the proposed rate increases as outlined in the 2015 Financial Plan. This approved motion included a friendly amendment to further investigate the ability to broaden the eligibility requirement of the Sewer Outreach Subsidy Program for low income users. The 2015 Financial Plan is tentatively scheduled to be presented to the Board of Supervisors in March, 2015.

The RWRAC looks forward to continuing its close working relationship with the Board of Supervisors and RWRD. The Committee members and I are available at your convenience for any questions or further discussion.

Sincerely,



Ann Marie Wolf, Chair
Regional Wastewater Reclamation Advisory Committee

cc: C.H. Huckelberry, County Administrator, Pima County
Robin Brigode, Clerk of the Board, Pima County
John M. Bernal, Deputy County Administrator for Public Works, Pima County
Jackson Jenkins, Director, Regional Wastewater Reclamation Department
Tom Burke, Director, Finance and Risk Management Department
Charles Wesselhoft, Attorney, Pima County Attorney's Office
Members, Regional Wastewater Reclamation Advisory Committee

ATTACHMENT 7





Sewer Outreach Subsidy Program

Help for Low-Income Individuals and Families

On May 1, the Pima County Board of Supervisors approved a low-income subsidy program that will take effect on July 1, 2007. This action was in response to concerns about the ability of low-income residents to pay steadily increasing sewer rates needed to meet rising costs associated with operations and maintenance, rehabilitation of aging sewer infrastructure, and projects to meet increasingly stringent environmental standards.

The Sewer Outreach Subsidy program has a tiered rate structure based on federal poverty guidelines. For instance, individuals earning \$10,210 annually are at 100% of the federal guideline and would qualify for a 75% reduction in their flow rate charges: a reduction of \$10.55 for the average \$19.78 residential sewer bill. A family of four earning \$20,650 per year is also at 100% of the federal guideline and would qualify for the same rate reduction. This discount does not apply to the flat monthly service fee of \$5.72 that all customers pay. It also does not discount sewer connection fees.

Program Tiers - Federal Poverty Level Guidelines:

- 75% rate reduction – 100% or below
- 50% rate reduction – 101% -125%
- 25% rate reduction – 126% -150%

To be eligible for a discount on the monthly sewer user fees, customers must meet the following guidelines:

- Be a residential sewer customer.
- Have a water/sewer bill in your name.
- Meet income guidelines.

The Pima County Wastewater Management Department (PCWMD) is partnering with the Pima County Action Agency (PCAA) to administer the program.

It is estimated that about 14% of the households in Pima County are at the poverty income level and would qualify for the program.

For more information call Pima County Community Action Agency at 243-6794 or visit our web site at www.pima.gov.wwm/.

Rate Increase Goes Into Effect

On May 1, the Pima County Board of Supervisors voted to increase the monthly flow volume rate on the sewer bills by 6%. A typical sewer bill calculated on 10 CCFs of water usage (one CCF is equivalent to 100 cubic feet of water) will increase from \$18.98 to \$19.78 per month. This rate increase goes into effect on July 1.

Recalculation of Sewer Bills

In July of each year, your sewer bill is recalculated based on the amount of water use in December, January, and February. These three months represent the period when outside water usage is normally at a minimum.

If you have questions about your bill, please call our Customer Service section at 740-6609 weekdays between 7:30 a.m. and 4:30 p.m. If you have any concerns, a representative will explain the appeal process to you. Under Pima County Ordinance 13.24 you have 60 days after receipt of a bill to appeal a new rate, a new usage class, or a new discharge factor.

In Pima County, the funds needed to provide sewer services are generated by the Wastewater Management Department through the assessment of fees. During the 2006/2007 fiscal year, all the sewer user fees collected were used for the costs of providing wastewater treatment services to the residents of Pima County.



Wastewater News



Bill Assistance for Low -Income Customers



JULY 2008

THE Regional Wastewater Reclamation Department (RWRD) offers sewer bill assistance through the **Sewer Outreach Subsidy (SOS)** Program. The **SOS** Program has a tiered rate structure based on federal poverty guidelines. This discount applies only to the part of the sewer bill based on water usage; it does not apply to the flat monthly service fee of \$6.82. There are no discounts for sewer connection fees.

Program Tiers – Federal Poverty Level Guidelines:

- 75% rate reduction – 100% or below
- 50% rate reduction – 101% – 125%
- 25% rate reduction – 125% – 150%

To be eligible for a discount on the monthly sewer user fees, customers must meet the following guidelines:

- Be a residential sewer customer.
- Have a water/sewer bill in your name.
- Meet income guidelines.

It is estimated that about 14 percent of the households in Pima County are eligible for a sewer bill discount through the **SOS** Program.

The Pima County Action Agency (PCAA) is administering the SOS program on behalf of PCRWRD.

For more information call PCAA at 243-6794 or visit our web site at

<http://www.pima.gov/www/>

Rate Increases Goes Into Effect On July 1

The Pima County Board of Supervisors has approved a 9.5% rate increase to the monthly sewer bill. This increase will be applied to the part of the bill which is based on water usage. The Board of Supervisors also approved an increase to the fixed administrative fee. Beginning July 1, that fee will increase from \$6.23 a month to \$6.82 a month. With these increases, the average monthly residential sewer bill will increase from \$21.56 a month to \$23.61 a month.



Annual Recalculation of Sewer Bills

In July of each year, your sewer bill is recalculated based on the amount of water use in the previous months of December, January and February. These three months represent the period when outside water usage is normally at a minimum.

If you have questions about your bill, please call our Customer Service section at 740-6609 Monday through Friday between 7:30 a.m. and 4:30 p.m. A representative will explain your bill to you and can provide you with information about the department's appeal process. Under Pima County Ordinance 13.24, customers have 60 days after receipt of a bill to appeal a new rate, a new usage class, or a new discharge factor.

During our 2007/2008 fiscal year, all the sewer user fees collected were used for the costs of providing wastewater reclamation services to the residents of Pima County.



JULY 2009

Bill Assistance for Low-Income Customers

The Pima County Regional Wastewater Reclamation Department (PCRWRD) offers sewer bill assistance through the Sewer Outreach Subsidy (SOS) Program. The SOS Program has a tiered rate structure based on federal poverty guidelines.

Program Tiers – Federal Poverty Level Guidelines:

- 75% rate reduction – 100% or below
- 50% rate reduction – 101% – 125%
- 25% rate reduction – 125% – 150%

Both the flow volume charge and the monthly service fee are eligible for the discounted rate under the program. There are no discounts for sewer connection fees.

To be eligible for a discount on the monthly sewer fees, you must meet the following guidelines:

- Be a residential sewer customer
- Have a water/sewer bill in your name
- Meet income guidelines

It is estimated that about 14 percent of the households in Pima County are eligible for a sewer bill discount through the SOS Program.

The Pima County Action Agency (PCAA) administers the SOS Program on behalf of PCRWRD.

For more information call PCAA at 243-6794 or visit the PCRWRD web site at

<http://www.pima.gov/www/>



Rate Increases Goes Into Effect On July 1

The Pima County Board of Supervisors (BOS) has approved a 12.75% rate increase to the monthly sewer bill. This increase will be applied to the flow volume charge portion of the bill.

With this increase, the average monthly residential sewer bill will increase from \$27.25 a month to \$29.66 a month.



Annual Recalculation of Sewer Bills

In July of each year, your sewer bill is recalculated based on the amount of water use in the previous months of December, January and February. These three months represent the period when outside water usage is normally at a minimum.

If you have questions about your bill, please call our Customer Service section at 740-6609 Monday through Friday between 7:30 a.m. and 4:30 p.m. A representative will explain your bill to you and can provide you with information about the department's appeal process. Under Pima County Ordinance 13.24, customers have 60 days after receipt of a bill to appeal a new rate, a new usage class, or a new discharge factor.

During our 2008/2009 fiscal year, all the sewer user fees collected were used for the costs of providing wastewater reclamation services to the residents of Pima County.

Wastewater News



JULY 2010

Annual Recalculation of Sewer Bills

In July of each year, your sewer bill is recalculated based on the amount of water used in the previous months of December, January and February. These three months represent the period when outside water usage is normally at a minimum. Pima County measures water use in hundred cubic feet. One hundred cubic feet (ccf) is equivalent to 748 gallons; a typical residential household in Pima County discharges approximately 6,700 gallons of sewage into the sewage system each month.



Rate Increase Goes Into Effect on July 1, 2010



The Pima County Board of Supervisors has approved increases in sewer rates that go into effect on July 1, 2010. These increases include a 10 percent sewer volume fee increase from \$2.40 to \$2.64 per ccf and a 6.5 percent increase to the monthly service fee. The monthly service fee will increase from \$9.82 per month to \$10.46 per month. These increases will raise the average monthly residential sewer bill from \$29.66 a month to \$34.28 a month.

Questions About Your Sewer Bill

If you have questions about your bill, please call our Customer Service section at 740-6609 Monday through Friday between 7:30 a.m. and 4:30 p.m. A representative will explain your bill to you and can provide you with information about the department's appeal process. Under Pima County Code, Ordinance 13.24.120, customers have 60 days after receipt of a bill to appeal a new rate, a new usage class, or a new discharge factor.

During our 2009/2010 fiscal year, all the sewer user fees we collected were used for the costs of providing wastewater reclamation services to the residents of Pima County.



Bill Assistance for Low-Income Customers

The Pima County Regional Wastewater Reclamation Department (PCRWRD) offers sewer bill assistance through the Sewer Outreach Subsidy (SOS) Program. The SOS Program has a tiered rate structure based on federal poverty guidelines.

Program Tiers – Federal Poverty Level Guidelines:

- 75% rate reduction – 100% or below
- 50% rate reduction – 101% – 125%
- 25% rate reduction – 125% – 150%

Both the flow volume charge and the monthly service fee are eligible for the discounted rate under the program. There are no discounts for sewer connection fees.

To be eligible for a discount on the monthly sewer fees, you must meet the following guidelines:

- Be a residential sewer customer
- Have a water/sewer bill in your name
- Meet income guidelines

It is estimated that about 14 percent of the households in Pima County are eligible for a sewer bill discount through the SOS Program. The Pima County Action Agency (PCAA) administers the SOS Program on behalf of PCRWRD.

If you think you might qualify for a rate reduction or if you want more information, call PCAA at 243-6794 or visit the PCRWRD web site at <http://www.pima.gov/www/>

PIMA COUNTY

**Sewer Bill Payment Assistance
for Low-Income Customers**

The Pima County Regional Wastewater Reclamation Department (PCRWRD) offers sewer bill payment assistance for low-income customers through the Sewer Outreach Subsidy (SOS) Program. The SOS Program offers discounts on monthly sewer fees based on federal poverty guidelines. Depending on income and household size, customers may qualify for a 25%, 50% or 75% discount on their monthly sewer fees:

Program Tiers	Federal Poverty Levels
75% rate reduction	100% or below
50% rate reduction	101%–125%
25% rate reduction	125%–150%

Both the flow volume charge and the monthly service fee are eligible for the discounted rate with the SOS Program, however, there are no discounts for sewer connection fees.

To be eligible for a discount on monthly sewer fees, customers must meet the following guidelines:

- Be a residential sewer customer
- Have a water/sewer bill in your name
- Meet income guidelines

The Pima County Community Action Agency (PCCAA) administers the SOS Program on behalf of PCRWRD.

To find out if you qualify for the SOS Program, please call PCCAA at (520) 243-6794. You will hear a recorded message and will be asked to provide specific information via voice mail. A PCCAA staff member will return your call as soon as possible.

Visit the PCRWRD website at www.pima.gov/wwm for more SOS Program information including tables specifying reductions, poverty level, household size and poverty income levels.

CITY OF TUCSON

***Resolve to Recycle*
More Plastic in 2012**

With the holidays complete, you are probably looking to make room for new toys and gadgets. It's also the time when we think about organizing and storing things that we aren't regularly using. If you find yourself with lots of plastic to dispose of, remember that rigid plastics can be recycled in your blue barrel as long as they fit with the lid closed. Here's a list of just some of the rigid plastics that can go in your blue recycle bin:

- ⊗ Hard plastic toys and play equipment
- ⊗ Hard plastic food storage tubs
- ⊗ Plastic flower pots that are rinsed and clean
- ⊗ Plastic laundry and waste baskets
- ⊗ Plastic lawn furniture
- ⊗ Plastic totes
- ⊗ Plastic pet carriers (no metal)
- ⊗ Plastic coolers/ice chests
- ⊗ Plastic dish drainers/racks
- ⊗ Plastic water bottles (5-gallon size)

If you have large, hard plastic items, you can take them to a neighborhood recycling center.

Check out the list of recyclables at tucsonrecycles.org and make the resolution to Do More Blue in 2012.

Your utilities services statement includes fees for your water, wastewater, and environmental services.

The Pima County Regional Wastewater Reclamation Department (RWRD) – For more information about the regional wastewater system, call (520) 740-6500 or visit pima.gov/wwm.

Environmental Services (ES) – Learn about how ES is protecting our groundwater and the environment at tucsonaz.gov/esd and (520) 791-3171.

PIMA COUNTY

*Sewer Subsidy Program***Assists Low-Income Customers**

Recent sewer user fee increases are necessary to meet rising costs associated with operations and maintenance, rehabilitation of aging sewer infrastructure, and mandated projects to meet increasingly stringent environmental standards. To help offset some of these sewer bill increases for low-income customers, the Pima County Board of Supervisors authorized the Sewer Outreach Subsidy (SOS) Program.

The SOS program has a tiered-rate structure based on federal poverty guidelines. Depending on income and household size, low-income customers may qualify for a 25%, 50%, or 75% discount on their monthly sewer fees, including the flat monthly service fee of \$11.86.

To be eligible for a discount on the monthly sewer user fees, customers must meet the following guidelines:

- Be a residential sewer customer
- Have a water/sewer bill in your name
- Meet income guidelines

Income is determined by the combined earnings of all persons residing in the home. Earning sources include, but are not limited to salary, child support, alimony, interest income, rental income, Supplemental Security Income, Social Security, veteran disability, and retirement benefits.

Those who meet the federal poverty guidelines are encouraged to apply for the SOS Program. The Pima County Regional Wastewater Reclamation Department has contracted with the Pima County Community Action Agency (PCCAA) to administer this program.

An appointment with PCCAA is required to determine eligibility. To schedule an appointment, please call PCCAA at (520) 243-6794. You must provide the following documents at your appointment: a picture ID, proof of income for the last thirty days, and your current wastewater utility bill.

More information about the SOS program is at pima.gov/www/fees/low_income.htm

Your utilities services statement includes fees for your water, wastewater, and environmental services.

The Pima County Regional Wastewater Reclamation Department (PCRWRD) – For more information about the regional wastewater system, call (520) 740-6500 or visit pima.gov/www

CITY OF TUCSON

*Schedule Now Available***2013 Brush & Bulky**

The 2013 Brush & Bulky Collection (B&B) schedule is now available on the Environmental Services (ES) website at <http://esd.tucsonaz.gov>. It's easy to access the B&B map and schedule, and use the look-up tool to get the B&B date slated for your neighborhood.

B&B is provided twice each year to ES residential customers as part of their ES service – approximately every 6 months. Residents will receive a door hanger prior to their B&B collection week that provides information about the collection date, and a list of accepted materials. B&B collection is a great time to clean the garage or trim trees and have those bulky items picked up at your home. You can set out up to 10 cubic yards of material for B&B pick-up; that's about the size of 10 washing machines!

B&B is just one way to help keep your neighborhood clean and keep trash and other debris off streets and in alleys. If your B&B collection isn't scheduled for a few months, ES offers other options:

- Call and schedule a special B&B pick up any time of year for a fee.
- Neighborhood and homeowners' associations can organize a neighborhood clean-up and order roll-off containers at no cost. This is also available to groups of 10 or more neighbors if you live in an area not supported by an association.

For more information about B&B Collection or the neighborhood clean-up program, visit our website or call Customer Service at 791-3171.

Please – Do not store B&B material in alleys or at the curb for months before your scheduled collection. It makes an unsightly mess and can attract illegal dumpers. Materials may be set out two weeks before your collection date.



Environmental Services (ES) – Learn about how ES is protecting our groundwater and the environment at tucsonaz.gov/esd and (520) 791-3171.

Wastewater News



WHAT CAN YOU DO TO LOWER YOUR SEWER BILL?

As you make your way through the busy holiday season, you may not be thinking about next year's sewer bill. However, it is important to know that the Pima County Regional Wastewater Reclamation Department (PCRWRD) uses your water consumption during the winter months to calculate your fees for the following billing year which begins each July 1.

Your sewer bill is based on your water consumption during the "reading months" of December, January and February. We use these three months because they are typically the lowest three consecutive months of water usage during the year.

Your reading month depends on the day when your water meter is read. For example, if your water meter is read on December 15, your December billing cycle will cover November 15 – December 15.



WATER CONSERVATION EFFORTS THAT CAN HELP TO REDUCE YOUR SEWER BILL

To generate the lowest possible sewer charges during the next billing year (beginning July 1, 2014); make a special effort to conserve water during these winter months.

Conservation efforts can include actions as simple as turning off the water while brushing your teeth or washing dishes, as well as more complex efforts such as installing low-flow appliances. Finding and repairing any water leaks in your toilets and sinks and modifying showerheads and other faucets with low-flow devices can also help to reduce your water usage. Save water outdoors by maintaining irrigation systems and taking your vehicle to a commercial car wash instead of washing it at home.

ASSISTANCE FOR LOW-INCOME CUSTOMERS

Low-income customers may be able to offset their sewer bills through the department's Sewer Outreach Subsidy (SOS) Program.

The SOS program has a tiered-rate structure based on federal poverty guidelines. Depending on income and household size, low-income customers may qualify for a partial discount (25%, 50%, or 75%) on their monthly sewer fees.

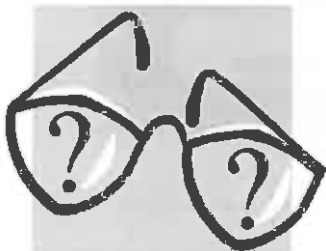
Participants must meet the following guidelines to qualify for this program:

- Be a residential sewer customer
- Have a water/ sewer bill in your name
- Meet income guidelines

Those who meet the federal poverty guidelines are encouraged to apply for the SOS Program. PCRWRD has contracted with the Pima County Community Action Agency (PCCAA) to administer this program.

You will need to schedule an appointment with PCCAA to determine your eligibility to participate in the SOS Program. Please call PCCAA at (520) 243-6794 to schedule an appointment. You will be prompted to leave your name and phone number and a PCCAA representative will contact you to set up an appointment time.

For more information about this program, please visit our website at: http://www.pima.gov/www/fees/low_income.htm



If you have any questions about your sewer bill, please contact our Customer Service section at 724-6609, Monday through Friday, from 7:30 a.m. – 4:30 p.m. You may also email us at wastewatercs@pima.gov.

WHY IS MY SEWER BILL HIGHER THAN MY WATER BILL?

A common question we hear is, "Why is my sewer bill higher than my water bill?" The answer is simple: the cost of treating sewage is greater than the cost incurred by your local water provider to pump, treat and deliver ground water or to purchase, treat, and deliver Central Arizona Project water.

CITY OF TUCSON ENVIRONMENTAL SERVICES

Environmental Services Protects Groundwater, Air and Soil Quality with On-Going Monitoring

Groundwater Sampling

- 20 different sites
- 342 groundwater wells

Soil Vapor Sampling

- Sample 7 landfills
- 65 Soil vapor wells

Industrial Wastewater Sampling

- Sample 36 sites for wastewater & Aquifer Protection Permits

Landfill Gas Monitoring

- 18 different sites
- 480 monitoring probes

Surface Emission Monitoring at Los Reales Landfill

- 15 different routes
- 314+ monitoring points

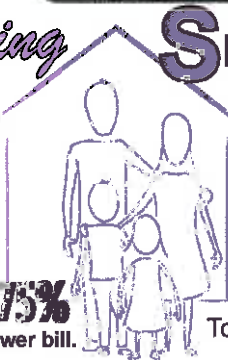
Methane Sensors at Los Reales & Prudence Landfills

- 11 methane sensors



PIMA COUNTY WASTEWATER RECLAMATION

Depending on your income, you may be eligible for a reduction of 25%, 50% or 75% off your monthly sewer bill.



SEWER OUTREACH SUBSIDY PROGRAM

*Sewer Bill Assistance for Low-Income Customers
Based on the Federal Poverty Guidelines*

To be eligible you must meet the following:

- Be a residential sewer customer
- Have a water/sewer bill in your name
- Meet combined household income requirements

To schedule an appointment to apply for a discount, contact:

Pima County Community Action Agency (PCCAA)

(520) 243-6794



For additional information on the program, visit:

www.webcms.pima.gov/government/wastewaterreclamation/billing

and select the Sewer Outreach Subsidy (SOS) Program tab

Your utilities services statement includes fees for your water, environmental services, and wastewater.

Environmental Services (ES) (520) 791-3171 or visit tucsonaz.gov/esd

Pima County Regional Wastewater Reclamation Department (PCRWRD) (520) 724-6500 or visit pima.gov/www

Wastewater News


PIMA COUNTY
WASTEWATER RECLAMATION
DECEMBER 2014

ASSISTANCE FOR LOW-INCOME CUSTOMERS

Low-income customers may be able to offset their sewer bills through the department's Sewer Outreach Subsidy (SOS) Program. The SOS program has a tiered-rate structure based on federal poverty guidelines. Depending on income and household size, low-income customers may qualify for a partial discount (25%, 50%, or 75%) on their monthly sewer fees.

Participants must meet the following guidelines to qualify for this program:

- Be a residential sewer customer
- Have a water/ sewer bill in your name
- Meet income guidelines

Those who meet the federal poverty guidelines are encouraged to apply for the SOS Program. PCRWRD has contracted with the Pima County Community Action Agency (PCCAA) to administer this program.

You will need to schedule an appointment with PCCAA to determine your eligibility to participate in the SOS Program. Please call PCCAA at (520) 724-3794 to schedule an appointment. Once you call, a recording will prompt you to leave your name and phone number. Please provide the information requested; a PCCAA representative will contact you to set up an appointment time. If you qualify for a discount, that discount will be valid for one year. Requalification for the program is required annually.

For more information about this program, please visit our website at: http://www.pima.gov/www/fees/low_income.htm

If you have any questions about your sewer bill, please contact our Customer Service section at 724-6609, Monday through Friday, from 7:30 a.m. – 4:30 p.m. You may also email us at wastewatercs@pima.gov.



Regional Wastewater Reclamation Department Now Produces A+ Quality Reclaimed Water

You may recall that the Pima County Regional Wastewater Reclamation Department (PCRWRD) recently completed the Regional Optimization Master Plan (ROMP). The ROMP consisted of multiple projects that have allowed us to comply with regulatory requirements mandated by the Arizona Department of Environmental Quality. The mandate required that PCRWRD improve the quality of the effluent (treated wastewater) we release into the Santa Cruz River. Approximately 60 million gallons a day of effluent is discharged into the river.

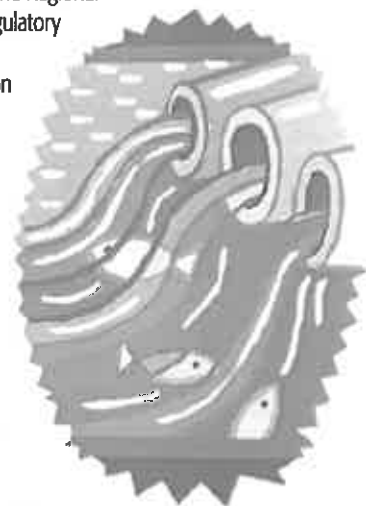
PCRWRD invested \$605 million in the ROMP projects needed to meet the new state and federal environmental requirements. With the completion of those projects, we now have state-of-the-art infrastructure that produces exceptionally high-quality effluent.

The effluent we now produce can be used for a multitude of purposes, including but not limited to:

- filling of man-made lakes or ponds where fishing and boating are allowed
- toilet flushing
- fire suppression
- irrigation of food crops, and
- residential and public landscaping

The cleaner effluent that is now discharged into the Santa Cruz River has resulted in a number of beneficial changes:

- The water in the Santa Cruz River near our discharge points is much clearer; fish and other wildlife in the river are visible as is the bottom of the riverbed.
- The improvement in water quality has increased the number of fish and fish species in the river.
- The percolation of the effluent into the aquifer is much improved.

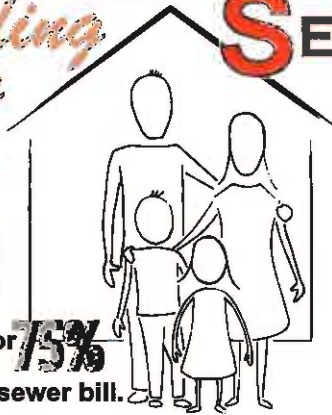


*Depending
on your
income,*

*you may be
eligible for a
reduction of*

25%, 50% or 75%

off your monthly sewer bill.



PIMA COUNTY

WASTEWATER RECLAMATION

SEWER **O**UTREACH **S**UBSIDY PROGRAM

To be eligible you must meet the following:

- Be a residential sewer customer
- Have a water/sewer bill in your name
- Meet combined household income requirements based on Federal Poverty Guidelines

Call the **Pima County Community Action Agency**
to schedule an eligibility appointment

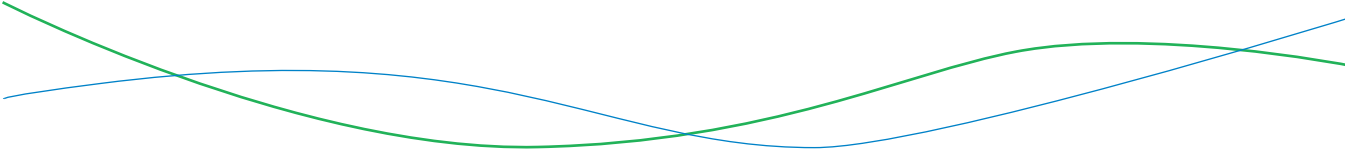
at **(520) 243-6794**

For additional information on the program, visit:

www.pima.gov/government/wastewaterreclamation

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ATTACHMENTS

Attachment 1 - Summary of Board of Supervisors’ Questions at the March 10, 2015 Meeting

Attachment 2 - Selection Criteria Used for Prioritizing PCRWRD Capital Improvement Program Projects

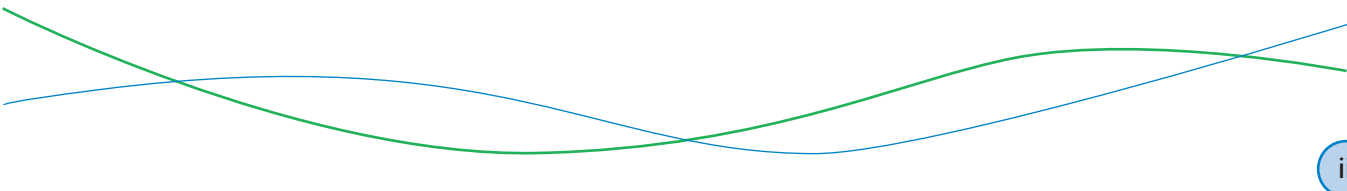
Attachment 3 - Draft Proposed FY 15/16 CIP Budget

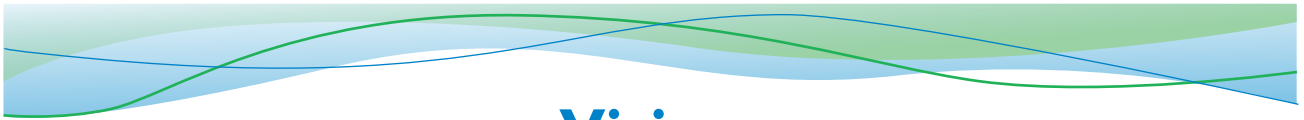
Attachment 4 - March 24, 2015 Director’s KPI Review PowerPoint

Attachment 5 - National Association of Clean Water Agencies, 2013 Cost of Clean Water Index

Attachment 6 - Regional Wastewater Reclamation Advisory Committee Letter of Recommendation

Attachment 7 - Sewer Outreach Subsidy Program Bill Inserts



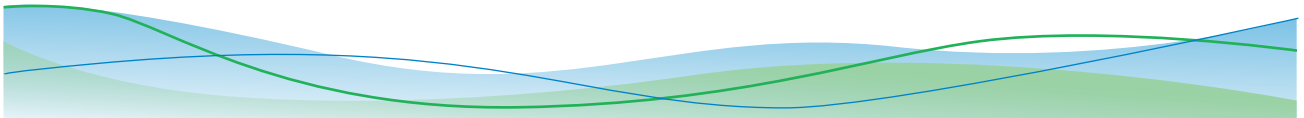


Vision

To be an industry leader in the management and sustainability of the water reclamation cycle and other renewable resources.

Mission

To protect the public health, safety, and the environment by providing quality service, environmental stewardship, and renewable resources.



I. INTRODUCTION

This report responds to the Board of Supervisors' discussion on March 10, 2015, regarding the Regional Wastewater Reclamation Department's 2015 Financial Plan. The discussion centered on the three automatic annual rate increases of four percent proposed to be effective July 1 of 2015, 2016, and 2017.

This report outlines the historical and current operational and financial situation of the Department and provides information and responses on each of the questions asked at the meeting; these questions are outlined in Attachment I. In addition, this report discusses significant financial challenges the Department has faced in the last decade, details on operating and maintenance budgets, process improvements and cost cutting measures the Department has implemented, and the historic and proposed rate increases with the customer impacts.

Key financial opportunities and challenges include:

- ▶ The annual wastewater flows to the Department's eight water reclamation facilities have been decreasing an average two percent each year for a total decrease of 13.5 percent since fiscal year 2006/07. This reduction in flow correlates to approximately \$16 million decrease in fiscal year 2013/14 revenues alone and approximately \$58 million total for the past eight years.
- ▶ Prior to the recession, development-related connection fee revenue made up as much as 39 percent of the Department's annual revenue when connection fees peaked in fiscal year 2005/06 at \$42.2 million. Beginning the following year, connection fees began to decrease significantly and leveled off around the \$13 million of fees currently being collected annually.
- ▶ The recession suppressed customer growth from the normal 1.5 – 1.7 percent increase per year to an average of 0.6 or just above one-half of one percent. The Department has been directly impacted as growth equates to more flow and greater revenue and additional connection fee revenue.
- ▶ The Department relies on debt to fund the Capital Improvement Program which addresses current and future wastewater system needs. Although the annual level of projects is declining, debt service payments are expected to continue to increase to almost \$88.5 million by fiscal year 2019/20, an increase of approximately \$65 million since fiscal year 2008/09.
- ▶ Through fiscal year 2013/14, the highly regulated and mandated Regional Optimization Master Plan (ROMP) Program has expended approximately \$560 million to upgrade and expand the two metropolitan water reclamation facilities and other projects in the ROMP Program.
- ▶ The Department is past the highest levels of construction for ROMP and will have much lower capital needs in coming years. Capital Improvement Program expenditures are estimated to be approximately \$227 million through the end of fiscal year 2018/19. This budget request reflects a funding level the Department believes is appropriate to ensure Pima County infrastructure is rehabilitated in an efficient manner to avoid impacting the community with unforeseen emergencies and resulting costs.

Highlights of the Department's Operation and Maintenance (O&M) budget include:

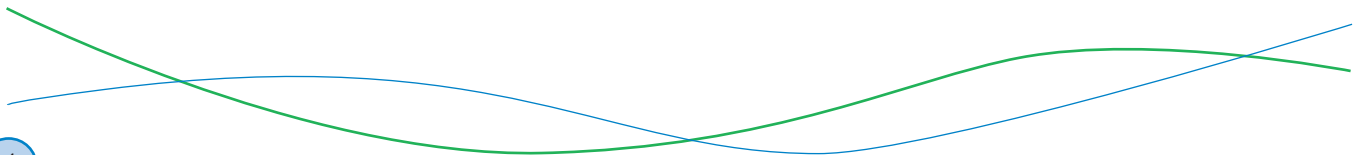
- ▶ The Department's O&M actual expenditures have ranged from a high of \$78.5 million in fiscal year 2007/08 to a low of \$69.9 million in fiscal year 2009/10 and are expected to be approximately \$82 million at the end of the current fiscal year.
- ▶ The fiscal year 2015/16 Department O&M budget request is \$84,661,178. This is a \$2,592,243 reduction from the anticipated O&M budget of \$87,253,421 identified in the 2015 Financial Plan. This requested budget is also only a \$768,822, or 0.9 percent, increase from the fiscal year 2014/15 adopted budget of \$83.9 million.

Sewer User Fee highlights include:

- ▶ Sewer User Fees have increased 122 percent since July 2007.
- ▶ Increases were necessary in order to maintain the needs of an aging system, finance the regulatory mandates of the ROMP Program, and maintain revenue levels due to financial challenges and declining revenue the Department has faced in the last decade.
- ▶ Should a four percent increase be implemented for fiscal year 2015/16, the average Pima County wastewater bill would be \$509 annually. By comparison, average sewer user fees nationwide are expected to continue to outpace inflation and will exceed, on average, \$511 per year by 2016.

The Department has taken extensive measures to control costs, optimize its business, and ensure financial decisions are in the best interest of the rate payers. Careful and difficult decisions have been made by the Department in an effort to limit expenditure growth, budget only for necessities, maintain the wastewater system within industry recommended best practices, and fulfill budgeted performance commitments without exceeding budget targets. Due to these efforts, the overall fiscal health of the Department remains strong despite financial challenges such as declining revenues, a slow growth rate, increases in annual debt service payments, and demand for repair and replacement of existing infrastructure to maintain compliance and current service levels.

Drafts of the Financial Plan and the assumptions upon which it is based were discussed for many months by the Regional Wastewater Reclamation Advisory Committee (RWRAC). The Committee approved the assumptions and ultimately recommended the three rate increases of four percent each year for July 1 of 2015, 2016, and 2017. However, based on changes to projected operating costs and capital costs that the Department has proposed in the three months since the RWRAC approved the Plan, we would recommend a rate increases of three percent rather than four percent, for July 1 of 2015 and 2016, and with the Board of Supervisors reconsidering whether to adopt a third increase for 2017 after the close of fiscal year 2016.



2.THE FINANCIAL PLAN

2.1 The Financial Plan

On an annual basis, the Finance and Risk Management Department reviews the rate structure for the sanitary sewer services provided by the Department and prepares a report and an analysis of the current fee structure. The focus of the review is to determine 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.

In order to determine rates, key assumptions are used and a financial model is developed. Some key assumptions used in the 2015 Financial Plan include a four percent increase in O&M expenditures an increase in user fee and in connection fee revenue at the rate of population growth, and a Capital Improvement Program of \$245.4 million.

The excess of net revenues over required debt service, known as the Debt Service Coverage Ratio (DSCR), is a main goal of the Financial Plan. The Regional Wastewater Reclamation Advisory Committee set a goal to maintain a DSCR of 1.3 in order to maintain the financial stability of the utility.

According to the 2015 Financial Plan, by fiscal year 2016/17, the DSCR is expected to drop to 1.13, and continue dropping to a low of 1.04 by fiscal year 2018/19. This downward trend assumes no rate increases are adopted.

In order to maintain a DSCR of 1.3, by fiscal year 2018/19 the Department will need to increase net operating revenues by approximately \$22.3 million. This level of revenue will not be generated from the anticipated growth in the system. It will be necessary to increase user fee rates to sustain the system and complete the planned capital projects.

2.2 Historic and Financial Plan Recommendations

The Financial Plans sent to the Board of Supervisors have consistently indicated that the rate increases adopted in 2010 would not be the final rate increases needed. The following are excerpts from the Financial Plans.

2014 Financial Plan

Page 1 and Page 13: [Under Recommendations] “4. During Fiscal Year 2014-15, adopt rate increases beginning in Fiscal Year 2015-16 through Fiscal Year 2017-18 in order to maintain adequate debt service ratios in future years.”

Page 8: “Based on the current projections of increases in user fees, connection fees and operating expenses, the County will not be able to maintain adequate debt service ratios without additional rate increases in future years. The County will need to adopt rate increases taking effect no later than Fiscal Year 2015-16. Standard & Poor’s rating agency, which rates the County’s sewer debt, has indicated that a debt service ratio of 130 percent is key to maintaining favorable ratings.

The County would need either to adopt one significant rate increase or a series of moderate multi-year increases taking effect for Fiscal Year 2015-16. As discussed in the final section below, the County will likely need to adopt rate increases of 3 to 4 percent annually for several years.”

Page 11: “In order to maintain adequate bond ratings for existing and future sewer revenue debt, the County needs to continue to adopt rate increases in the future to generate adequate financial resources for the Regional Wastewater Reclamation Enterprise Fund. Based on the analysis contained in this report, such rate increases are currently expected to be 4.0 percent for Fiscal Year 2015-16 and 5.5 percent for Fiscal Year 2016-17.”

2013 Financial Plan

Page 1 and Page 13: [Under Recommendations] “3. In Fiscal Year 2013-14, an evaluation of rate increases that may be necessary for future years in order to maintain adequate debt service ratios in future years and to maintain low interest rates.”

Page 9: “In order to have adequate debt service coverage at the time the County was beginning to issue major sewer obligations, four annual sewer rates increases were adopted by the Board. Those increases enabled the County to maintain a debt service ratio of more than 150 percent for each of the years of the automatic rate increases. Based on the projected decline in the debt service ratios, unless sewer revenues increase above these projections, the County will need to adopt a moderate rate increase, potentially in the range of 3 percent beginning in July 2015.”

2012 Financial Plan

Page 1 and Page 10: [Under Recommendations] “5. The evaluation of a possible rate increase by Fiscal Year 2014-15 in order to maintain adequate debt service ratios.”

Page 6: “Unless the number of users and the number of connections increases more than projected in this Financial Plan, the County will need to either increase the fee structure or decrease operating expenses to maintain a minimum debt service ratio.

Page 7: “For this reason, Finance is recommending an evaluation of a possible rate increase by Fiscal Year 2014-15.”

2011 Financial Plan

The Plan did not predict future rate increases. In early 2011, the growth in customer accounts was projected to generate \$178 million of sewer fee revenues by fiscal year 2014/15. That estimate, four years ago, was not met because the economy did not recover as quickly as expected. Only \$161 million, \$17 million less than projected four years ago, is projected for this year. Additionally, connection fees, which are forecasted to be \$13.5 million this year were projected to be more than \$19 million for 2015. If revenues this fiscal year 2014/15 included the additional \$22 million more annually than the system is currently generating, then the proposed rate increases would not be requested at this time.

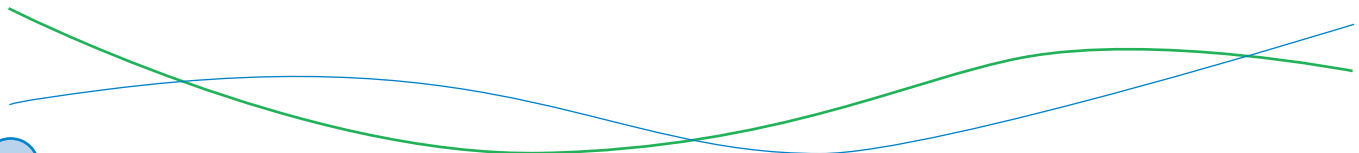


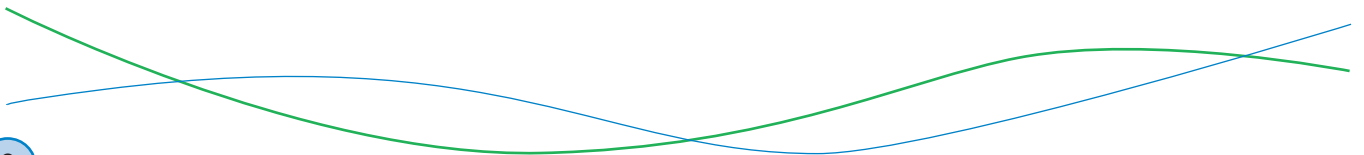
Table I shows the Department's adopted and actual budget expenditures each fiscal year as compared to the Financial Plan projections. As can be seen the Department's expenditures are right in line with or lower than Financial Plan projections.

**Table I. Department Adopted Budget and Actual Expenditures
as Compared to Annual Financial Plans (millions)**

Fiscal Year	Adopted Budget	Actual Expenditures	The Financial Plan							
			2008	2009	2010	2011	2012	2013	2014	2015
2007/08	\$ 73.7	\$ 78.5	\$ 72.8							
2008/09	\$ 82.3	\$ 73.2	\$75.9	\$ 79.9						
2009/10	\$ 79.4	\$ 69.9	\$ 78.9	\$ 83.4	\$ 80.3					
2010/11	\$ 72.3	\$ 74.6	\$ 82.0	\$ 86.5	\$ 82.9	\$ 72.3				
2011/12	\$ 72.7	\$ 73.2	\$ 84.9	\$ 89.6	\$ 85.3	\$ 73.0	\$ 73.0			
2012/13	\$ 75.5	\$ 73.6	\$ 88.4	\$ 93.0	\$ 88.2	\$ 75.5	\$ 75.0	\$ 75.5		
2013/14	\$ 79.4	\$ 77.9	\$ 92.9	\$ 97.6	\$ 92.6	\$ 78.1	\$ 77.0	\$ 80.2	\$ 78.2	
2014/15	\$ 83.9	\$ 82.5*	\$ 98.2	\$103.2		\$ 80.7	\$ 78.0	\$ 81.8	\$ 82.9	\$ 83.9
2015/16	\$ 84.7**		\$102.1	\$107.2		\$ 83.4	\$ 79.0	\$ 83.4	\$ 86.2	\$ 87.3
2016/17			\$105.4	\$110.7			\$ 81.0	\$ 85.1	\$ 89.7	\$ 90.7
2017/18				\$114.3				\$86.8	\$ 93.3	\$ 94.4
2018/19										\$ 98.1

* FY 2014/15 Period 8 Forecast

** FY 2015/16 Revised Requested Budget



3. FINANCIAL CHALLENGES

The Department has faced many financial challenges over the past decade such as declining revenues, a slow growth rate, increases in annual debt service payments, and demand for repair and replacement of existing infrastructure to maintain compliance and current service levels. Careful and difficult decisions have been made by the Department in an effort to limit expenditure growth, budget only for necessities, maintain the wastewater system within industry recommended best practices, and fulfill budgeted performance commitments without exceeding budget targets during these times.

3.1 Wastewater Flow Revenue Decline

Due to improved water-saving fixtures and technology, the successful adoption of water conservation practices, and the severe economic downturn, water sales and water-related revenues are falling on a local, regional, and national level. The economic impact of this decline in wastewater flows to the Department has amounted to millions of dollars in decreased revenue in recent years.

Monthly sewer user fees are based on a rate per unit of consumption and a fixed service charge. The consumption portion of the bill makes up 69 percent of the total bill and the fixed service charge accounts for 31 percent¹. While fixed charges contribute to revenue stability because they do not vary from month to month regardless of consumption, the larger portion of the bill directly relates to consumption. When consumption drops, user fee revenue decreases as well.

Because there is not much irrigation during the winter, winter water usage is typically used as a proxy for wastewater generation. The low winter quarter average is the basis for calculation of customers' year-round bill. Understanding this, many ratepayers will limit their winter water consumption in an effort to realize those savings throughout the year. Over the past decade, the monthly Residential User Class Average has reduced from 11 centum cubic feet (CCFs) to eight CCFs or 5,984 gallons per month.

Table 2 below shows that the annual wastewater flows to the Department's eight water reclamation facilities have been decreasing an average two percent each year for a total decrease of 13.5 percent since fiscal year 2006/07. This reduction in flow correlates to approximately a \$16 million² decrease in fiscal year 2013/14 revenues alone and approximately \$58 million total for the past eight years.

Table 2. Wastewater Flow Decline

Fiscal Year	Total Wastewater Flow (millions of gallons)	Annual Percentage Change
2006/07	25,380	
2007/08	24,836	-2.19%
2008/09	24,315	-2.10%
2009/10	23,349	-3.98%
2010/11	22,867	-2.06%
2011/12	22,701	-0.72%
2012/13	22,258	-1.95%
2013/14	21,961	-1.34%
Percent Change from 2007 to 2014 -13.5%		

¹ On the average monthly Residential bill of \$40.81, \$28.18 is volume (69%) and \$12.63 is the service charge (31%).

² (((25,380,000,000 - 21,961,000,000)/748)*\$3.523)

Lastly, declining water usage has a negative impact on the wastewater infrastructure. Reduced wastewater flow can impact infrastructure integrity. The liquid volume decrease makes it more difficult to transport wastewater from the point of discharge to the treatment plant, especially in some of the older and flatter areas within the system. This can lead to increased concentrations of hydrogen sulfide gas which causes deterioration of the sewer pipes and potential odors being emitted to the local area. In addition, low flow results in a higher strength waste stream for the system to contend with. Fixed costs associated with the operation of wastewater treatment systems are generally not impacted by fluctuations in wastewater flows. Therefore, treatment costs are not lower because of lower flows, in fact, higher strength waste streams are more expensive to address. The combined impact of these operation issues leads to increased O&M costs.

3.2 Connection Fee Revenue Decline

The recession has negatively impacted growth & development in Pima County resulting in a substantial decrease in connection fee revenue. Prior to the recession, development-related connection fee revenue made up as much as 39 percent³ of the Department's annual revenue. Today, connection fees account for 6.5 percent⁴ of the Department's annual revenue. This reduction in connection fee revenue results in a \$31 million decrease in fiscal year 2013/14 revenues.

A change in the methodology for calculating connection fees was implemented in 2012 which also impacted revenue. On May 15, 2012, the Board of Supervisors adopted Ordinance No. 2012-27, which enacted a new method to calculate wastewater connection fees and established a new rate structure for those fees. While the new rate structure provided a benefit to the development community, connection fee revenues were reduced further. The average residential connection fee dropped 36 percent, from \$6,350 to the current fee of \$4,066.

The combined impact of these two events is reflected in the drop from \$42 million in fiscal year 2005/06 to \$13 million projected this fiscal year for a total of approximately \$29 million.

Table 3 outlines connection fee revenues since fiscal year 2005/06.

Table 3. Connection Fee Revenue Decline

Fiscal Year	Connection Fee Revenue (millions)	Dollar Change from Previous Year (millions)	Annual Percent Change
2005/06	\$42.22		
2006/07	\$30.76	(\$11.46)	-27.1
2007/08	\$31.04	\$.28	0.9
2008/09	\$18.28	(\$12.75)	-41.1
2009/10	\$17.70	(\$.58)	-3.2
2010/11	\$19.62	\$1.92	10.8
2011/12	\$16.51	(\$3.12)	-15.9
2012/13	\$11.36	(\$5.15)	-31.2
2013/14	\$11.40	\$.039	0.4
2014/15 Period 7 Projected	\$13.26	\$1.86*	16.3
2015/16 2015 Financial Plan	\$13.25	(\$.010)	-0.1

The economy in Pima County is experiencing a gradual recovery from the recession and the principal factor impacting revenues from future connection fees will be the level of new construction within Pima County.

³ FY 2006 \$42,219,962 total connection fee revenue of \$107,732,251 total revenue

⁴ FY 2014 \$11,397,157 total connection fee revenue of \$174,270,846 total revenue

* FY 2014/15 includes a \$1.24 million revenue settlement with the Pascua Yaqui Tribe

3.3 Customer Growth is Flat

Table 4 below indicates the average number of customers per year since fiscal year 2006/07, as well as the annual percentage change. As can be seen, customer growth is essentially flat. This reflects the general economic condition of the region since the beginning of the recession in 2007. The recession has suppressed customer growth from a normal 1.5 – 1.7 percent increase per year to an average of 0.6 or just above one-half of one percent.

Table 4. Average Number of Customers

Fiscal Year	Average Number of Customers	Annual Percent Change
2006/07	255,555	
2007/08	260,007	1.7
2008/09	261,949	0.7
2009/10	263,596	0.6
2010/11	264,882	0.5
2011/12	265,051	0.1
2012/13	265,792	0.3
2013/14	267,921	0.8

Due to the decline in connection fee revenues as discussed in Section 3.2, the Department has shifted to relying more heavily on user fees (92% in fiscal year 2013/14⁵) as opposed to connection fees (7% in fiscal year 2013/14⁶) for a stable revenue stream.⁷ Without additional rate increases, user fee revenues are expected to remain relatively level for the foreseeable future, with increases dependent upon future growth in the number of new users.

⁵ \$159,779,708 user fee revenue out of \$174,270,846 total revenue

⁶ \$11,937,157 connection fee revenue out of \$174,270,846 total revenue

⁷ Fiscal year 2006/07 - user fees 61%, connection fees 27%

3.4 Increase in Debt Service

The Department's cost structure is comprised of operating and maintenance (O&M), and capital costs. The Department relies on debt to fund the Capital Improvement Program (CIP) which addresses current and future wastewater system needs.

Debt service is the principal and interest payments that the Department makes to the holders of the bonds, loans, or other forms of debt issued to fund the Department's Capital Improvement Program. Because the County has issued significant debt in recent years, primarily to fund the Regional Optimization Master Plan and other capital projects of the sewer system, debt service payments have steadily increased over the past five years.

The Department's debt service obligation for fiscal year 2014/15 is \$71.3 million, up from \$67.4 million last fiscal year. Even though the annual level of projects is declining, debt service payments are expected to continue to increase to almost \$88.5 million by fiscal year 2019/20 and remain near that level for three years, beginning to decrease rapidly after fiscal year 2022/23⁸.

Table 5 outlines the historic and projected annual debt service payments through fiscal year 2022/23.

Table 5. Debt Service Payments

Fiscal Year	Debt Service Payment Amount (millions)
2008/09	\$23.7
2009/10	\$26.8
2010/11	\$34.2
2011/12	\$42.6
2012/13	\$58.0
2013/14	\$67.4
2014/15	\$71.3
2015/16	\$70.1
2016/17	\$80.5
2017/18	\$81.1
2018/19	\$85.7
2019/20	\$88.5
2020/21	\$88.5
2021/22	\$88.5
2022/23	\$88.5

Sections 3.4.1 and 3.4.2 outline in detail the Department's Capital Improvement Program and the Regional Optimization Master Plan which are the two primary reasons for the increase in debt service and the need to increase user fees.

3.4.1 Capital Improvement Program

Background

Prior to the Regional Optimization Master Plan (ROMP), the Department was not adequately investing in its maintenance and upgrade of the system infrastructure. The years immediately following the September 7, 2002, Speedway interceptor collapse proved to be devastating to the Department's financial health.

Table 6 represents the economic impact the interceptor collapse had on the Department's finances.

Table 6. Speedway Interceptor Collapse Direct Repair Cost (millions)

North West Outfall Cured-in-place Pipe Rehabilitation	\$14.02
Speedway Interceptor Collapse Intersection Repair	\$4.78
Southeast Houghton Area Recharge Project	\$3.00
Other Related Costs	\$3.20
Total	\$25.00

Pima County was close to being required to operate under a federal or state consent order or consent decree. Under either situation the County could have significantly lost control of the operation and management of the Department infrastructure and would have been required to unilaterally increase rates as needed to complete the maintenance and repair projects directed by federal and state agencies. As can be seen by the following examples of other cities and jurisdictions, costs and damages for such projects are significantly increased under consent decree⁹:

- ▶ City of Kansas City, Missouri issued May 18, 2010, for making extensive improvements to its sewer system. Estimated cost of \$2.5 billion over 25 years.
- ▶ Miami-Dade County, Florida issued June 6, 2013, for the substantial repair of three wastewater treatment plants and sewer system. Estimated cost of \$1.6 billion.
- ▶ City of Columbia, South Carolina issued on September 10, 2013, for improvements to its sanitary sewer system. Estimated cost of \$750 million.
- ▶ East Bay Municipal Utility District issued July 28, 2014, for the repair and upgrade sewer system infrastructure to eliminate discharges of raw and partially-treated sewage into the San Francisco Bay and other east bay water bodies. Capital investment is approximately \$1.5 billion in addition to \$1.5 million in civil penalties for past discharges to the San Francisco Bay.
- ▶ City of Fort Smith, Arkansas issued January 4, 2015, for upgrades to its sewer collection and treatment system to reduce discharges of raw sewage and other pollutants into local waterways. Capital investment is estimated at \$255 million.

It was not until ROMP, with the new infusion of monies through the rate increases approved by the Board of Supervisors that the repairs and system upgrade costs were sufficiently funded.

⁹ <http://cfpub.epa.gov/>. Retrieved March 31, 2015

The Arizona Department of Environmental Quality and the U.S. Environmental Protection Agency saw that the Department and Pima County were on the path to recovery without a consent order or consent decree. The regulatory agency instead issued effluent quality requirements and compliance schedules.

Today's Capital Improvement Program

The Department has developed a comprehensive Capital Improvement Program to address wastewater system needs. Excluding \$115.7 million to build or upgrade four subregional facilities, the Department has spent an average of \$22.7 million per year over the course of 17 years on non-ROMP capital projects.

Table 7 outlines CIP expenditures since fiscal year 1997/98 totaling \$1.062 billion.

Table 7. Capital Improvement Program Spending Trend (millions)

Fiscal Year	ROMP Total	Non-ROMP Total	Total
1997/98	\$ 0.0	\$ 6.8	\$ 6.8
1998/99	\$ 0.0	\$ 14.5	\$ 14.5
1999/00	\$ 0.0	\$ 26.0	\$ 26.0
2000/01	\$ 0.0	\$ 39.7	\$ 39.7
2001/02	\$ 0.0	\$ 37.4	\$ 37.4
2002/03	\$ 0.0	\$ 62.3	\$ 62.3
2003/04	\$ 0.0	\$ 28.7	\$ 28.7
2004/05	\$ 0.0	\$ 6.3	\$ 6.3
2005/06	\$ 0.0	\$ 16.3	\$ 16.3
2006/07	\$ 0.0	\$ 47.8	\$ 47.8
2007/08	\$ 2.2	\$ 64.3	\$ 66.5
2008/09	\$ 23.1	\$ 43.8	\$ 66.5
2009/10	\$ 43.7	\$ 16.4	\$ 60.1
2010/11	\$ 102.5	\$ 15.3	\$ 117.8
2011/12	\$ 194.0	\$ 14.3	\$ 208.3
2012/13	\$ 149.5	\$ 25.5	\$ 175.0
2013/14	\$ 45.3	\$ 36.4	\$ 81.6
Total	\$ 560.3	\$ 501.8	\$ 1,062.0

Table 8 shows the increase of the Department's total asset value, which has increased over 75 percent since ROMP.¹⁰

Table 8. Total Asset Value Trend

Fiscal Year	Net Value (millions)
2007/08	\$ 706.62
2008/09	\$ 765.64
2009/10	\$ 801.95
2010/11	\$ 899.15
2011/12	\$ 1,086.68
2012/13	\$ 1,203.98
2013/14	\$ 1,247.32

Table 9 outlines various details of the Capital Improvement Program by Supervisorial District.

Table 9. Capital Improvement Program by Supervisorial District

	District 1	District 2	District 3	District 4	District 5
Average Sewer Age (years)	30	44	34	28	48
Range of Sewer Ages	1942-2015	1900-2014	1916-2014	1923-2015	1908-2014
Total Manholes	21,935	10,804	10,256	18,653	11,464
Total Sewer Pipe (miles)	982	565	495	824	582
Five Year CIP (millions)	\$ 31.6	\$ 48.6	\$ 32.1	\$ 21.7	\$ 31.6
Five Year CIP (%)	20	30	20	13	17

Project Priority

Continuous Improvement and Process Mapping are at the heart of the Department's operational approach in order to measure process effectiveness and efficiency. The Capital Improvement Program is no exception. Attachment 2, *Selection Criteria Used for Prioritizing PCRWRD Capital Improvement Program Projects*, is a Department document outlining the methodology for prioritizing capital projects. Proposed projects' main features are assessed against a set scoring criterion and the results provide guidance for project priority and fiscal year placement.

The scoring criteria categories are:

1. Protection of Human Health, Safety, and Property Through System Rehabilitation and Capital Investment;
2. Regulatory or Contractually-Driven Improvements;
3. Improvements which Enhance System Security;
4. Improvements which Eliminate or Control Odors in the System;
5. Improvements which Accommodate Smart Growth and Economic Development;
and
6. Improvements which Reduce Long Term Department Costs.

Fiscal Year 2015/16 Requested Capital Improvement Program Budget

The Department is past the highest levels of construction activity for ROMP and will have much lower capital needs in upcoming years. CIP expenditures are estimated to be \$227.2¹¹ million through the end of fiscal year 2018/19¹². It is typical to find in the water and wastewater sector that it requires between two to four percent of the total asset value to sustain, replace, and rehabilitate existing infrastructure based on actual need through the National Association of Sewer Service Companies Organization assessment¹³. The Department's sustaining Capital Improvement Program for the next five years is requested at a level of approximately 2.5 percent or \$30 million per year based on an asset value of \$1.2 billion.

The requested five-year CIP budget is included in Attachment 3, *Draft Proposed FY 15/16 CIP Budget*.

Treatment

The requested five-year Treatment CIP budget through fiscal year 2018/19 is \$32.8 million: \$11.5 million funds final ROMP projects and approximately \$4.3 million is identified annually to sustain current treatment systems. Notable projects include:

- ▶ The Green Valley Water Reclamation Facility (WRF) Development Plan is a \$3.8 million project to relocate an existing Lift Station out of the Santa Cruz River flood plain. The scope also includes the conveyance and metering of effluent for recharge in the existing basins and will also add additional effluent recharge basin capacity to allow for future effluent recharge capacity for the County.
- ▶ As a settlement of claims arising from the Speedway interceptor collapse, the Southeast Houghton Area Recharge Project is an agreement between Pima County and the City of Tucson to mutually build a reclaimed water storage facility to benefit both entities. Each party will expend an estimated \$3 million.

The following Department projects had drastic reductions or were no longer needed due to cost saving measures:

- ▶ Original design plans for the Corona de Tucson Water Reclamation Facility UV Disinfection and Filtration Project stipulated filtration and UV disinfection at a capital cost of \$4 million. The associated O&M cost would have required increased energy to power the UV lamps and pumps for backwashing the filters. Instead, the Department has reevaluated this design and opted to move forward with a precast chlorine contact chamber for disinfection at a capital cost of \$1 million. This is a \$3 million capital savings that will also reduce operating costs.
- ▶ The biological membranes at the Randolph Park WRF reached the end of their useful life in 2014 and replacement would require a significant capital investment. After careful evaluation, the Department determined that, given current treatment demands and the availability of high-quality treatment capacity at the new Agua Nueva WRF, treatment operations at this facility were not financially or operationally prudent. On December 30, 2014, the Department closed the WRF saving approximately \$5 million in capital costs and over \$1 million annually in O&M costs.

¹¹ RWRD Draft Proposed FY 15/16 CIP Budget, March 31, 2015

¹² The Financial Plan projected capital projects at \$245.4 million based on the Department's December 2014 estimates.

¹³ www.nassco.com



Cost Cutting Strategy

Throughout the design and construction of the Tres Rios WRF there were concerns that the disinfection byproduct trihalomethane (THM) could pose a compliance issue for the Department. Original considerations contemplated filtration and UV disinfection but the cost for implementation of this disinfection strategy for both the Tres Rios and Agua Nueva WRFs was over \$70 million. Instead, the Department opted to utilize enhanced chlorination as the preferred method of disinfection at both facilities. The designs incorporated a chloramination step feed to prevent THM formation. This strategy is currently in effect at the Agua Nueva WRF but the spatial separation of the different chlorine contact basins at the Tres Rios WRF would have required significant infrastructure additions at a cost of approximately \$5 million. The Department chose a different option and began evaluating alternative methods for THM abatement. Using in-house staff resources and a novel use of a process byproduct, the Department has successfully reduced THM levels to acceptable compliance levels at the Tres Rios WRF with a full scale pilot demonstration. Full scale implementation is expected to be accomplished this year at a cost of less than \$0.5 million. This is a \$4.5 million cost savings that will also reduce operating costs by negating the need to procure and store liquid ammonia on site. There is also a safety aspect that was taken into consideration to minimize staff exposure to ammonia inhalation.



Conveyance Rehabilitation

The requested five-year Conveyance Rehabilitation CIP budget through fiscal year 2018/19 is \$105 million: \$33 million funds two major projects and \$72 million funds Job Order Contracts greater than \$100,000 to rehabilitate conveyance infrastructure.

The North Rillito Interceptor Rehabilitation (NRI) (\$19 million) and South Rillito Interceptor (SRI) Rehabilitation (\$14 million) are the first major conveyance rehabilitation projects after the ROMP Program completion. The NRI project will rehabilitate 10 miles of sewer pipe and evaluate approximately 60 manholes. The recently completed SRI rehabilitated approximately three miles of sewer pipe and 45 manholes.

Over the past several years, the Department has identified defects and obstructions in the conveyance infrastructure through the closed circuit television (CCTV) program. The severity and extent of those findings often result in several hundred feet of repairs. The current funding level for rehabilitation to the conveyance system is approximately \$14 million per year; a level the Department believes is a balance between the number of defects found in the system and the rate at which they are repaired to avoid impacting the community with unforeseen emergencies and resulting costs.

Conveyance Augmentation

The requested five-year Conveyance Augmentation CIP budget through fiscal year 2018/19 is \$63.9 million. Twenty million begins funding the Aerospace Corridor augmentation. Outside of the Aerospace Corridor project, \$44 million remains to augment other areas of the conveyance system for future growth.

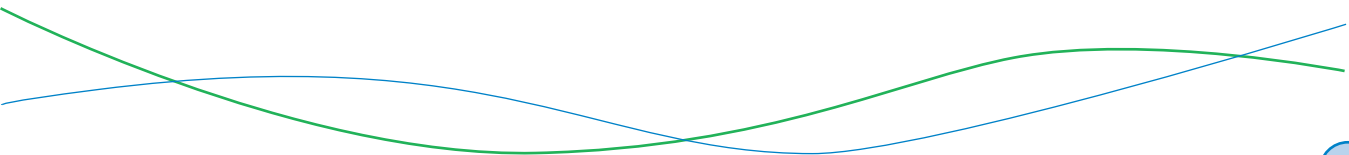
The Aerospace Corridor augmentation is a \$45 million project that will provide additional conveyance capacity for the anticipated future development in the Aerospace Corridor and development east of South Nogales Highway at East Hughes Access Road. This project will consist of the design and construction of an augmentation of the Old Nogales Highway Interceptor from Interstate 10 south to the intersection of South Nogales Highway and East Hughes Access Road. This project also consists of the design and construction of a new public sewer in conjunction with the Aerospace Corridor which may ultimately reach as far east as the area of Old Vail Connection Road and South Wilmot Road.

Utility Relocations

The Capital Improvement Program also funds approximately \$2.5 million per year in utility relocations in support of Department of Transportation projects for various jurisdictions. These utility projects are managed by the city, county, or state Department of Transportation with funding for the utility relocation provided by the Department.

Capital Improvement Program Conclusion

The Department has added capacity to the treatment system through the ROMP Program and it is appropriate now to continue to invest in its rehabilitation program. A strong rehabilitation program reflects on the County's commitment to manage its assets in an efficient manner and this commitment has been shown to result in significant future savings. These savings can be measured in the form of one of the lowest Sanitary Sewer Overflow numbers in the nation. In order to continue to enjoy the current level of efficiency and service, Pima County needs to commit to invest the appropriate amount in the rehabilitation and augmentation of its wastewater infrastructure.



3.4.2 Regulatory-Driven Regional Optimization Master Plan

Background

The Department has completed all the mandated projects in the regulatory-driven Regional Optimization Master Plan (ROMP). This aggressive plan was the largest program ever delivered by Pima County to expand infrastructure to meet regulatory mandates.

Beginning in 2004, Arizona Department of Environmental Quality (ADEQ) assumed primacy of the National Pollutant Discharge Elimination System permits (NPDES) from the United States Environmental Protection Agency (EPA). The NPDES program became known as the Arizona Pollutant Discharge Elimination System (AZPDES) and dictates the quality of effluent discharged to the Santa Cruz River. These permits are based on standards established in the Clean Water Act and serve as the basis for wastewater treatment operating permits. While the Department had successfully postponed regulatory permit changes and other associated large capital costs at both the Ina Road and Roger Road WRFs, ADEQ refused to renew the permits unless the Department agreed to make essential process upgrades and improvements necessary for meeting ammonia removal. Pima County became the last utility in the state of Arizona to comply with this effluent quality improvement upgrade requirement. Postponement of these upgrades resulted in Pima County user fee rates that were substantially lower than the national average.

Thus, ROMP was developed after many years of negotiations with ADEQ. Had the Department refused to enter into amicable permit negotiations, EPA and ADEQ were ready to issue the Department a consent order or seek a court-enforced consent decree mandating these upgrades. Non-compliance could have resulted in penalties levied against Pima County of more than \$75,000/day.

The success of ROMP is directly related to the substantial efforts of many dedicated staff, elected officials, stakeholders, consultants, and contractors. The completed ROMP projects met original scope, goals and objectives, and were all completed ahead of schedule and within or below established budgets. With current projections, the Program is expected to expend \$573 million and has moved \$20-30 million into the general Capital Improvement Program for completion within the next few years. Table 10 details ROMP spending through Program completion.

Table 10. ROMP Spending (millions)

Fiscal Year	ROMP CIP Total
2007/08	\$ 2.21
2008/09	\$ 23.11
2009/10	\$ 43.66
2010/11	\$ 102.48
2011/12	\$ 193.98
2012/13	\$ 149.47
2013/14	\$ 45.27
2014/15 through Program completion	\$ 13.00
Total	\$ 573.00

With the entire regulatory-required infrastructure in operation, the ROMP projects and other recent expansions have positioned Pima County well for the future by ensuring the Department's effluent meets stringent state and federal requirements. In addition, it also provides for the wastewater capacity needs of the community for the next several decades. Had Pima County not acted to meet these standards, the Department could have faced steep fines, mandatory rates, additional oversight costs and mandates by regulatory agencies, and potentially triggering a growth moratorium for non-compliance. Instead, the capacity is now available to meet the community's needs through the year 2030 and likely beyond. With the current available capacity is able to accept approximately 160,000 new residential homes which equates to over \$650 million of connection fee revenue based on today's residential connection fee of \$4,066.

SCADA

A key element of the ROMP Program is the use of Supervisory Control and Data Acquisition (SCADA) systems. SCADA is a computerized system that provides automation at the water reclamation facilities, pump stations, and flow meters within the system. Upgrades at the Tres Rios WRF included significant improvements to the existing SCADA system, and new construction at Agua Nueva WRF included SCADA technology. A robust SCADA system permits efficient operations, automation, and process control to enhance management and day-to-day maintenance routines for improved equipment and system life-cycle performance. The new Operations Control Center (OCC) at the Tres Rios WRF contains SCADA system control hardware and software algorithms for plant automation as well as report generation and long-term data archiving. The SCADA system replaces manual collection of data and log books with electronic records. The new SCADA system allows the plants to be operated and maintained efficiently and effectively. It also provides monitoring of security conditions system wide as required by Homeland Security. The OCC SCADA system provides 24/7 centralized monitoring and control of the entire wastewater system, including treatment plants and pump stations.

Odor Control

In 2007, the Department completed the system-wide odor control master plan. The plan was developed to address system-wide prevailing odor issues in particularly at the then Roger Road WTF. The resulting odor control master plan installed state-of-the-art odor control systems at the Tres Rios and Agua Nueva WRFs and conveyance system. The odor control master plan also addressed odor control systems at all sub-regional treatment facilities and throughout the wastewater conveyance system. Today, the Department has a dedicated full-time odor control team, a 24/7 odor complaint line, an online complaint form, and continuous odor monitoring systems at the Tres Rios and Agua Nueva WRFs.

Department Laboratories

Regulatory compliance requirements have increased significantly over the years and new treatment processes have further increased laboratory demands. The Department's previous laboratory was located in several locations at the Ina Road WRF and was no longer sufficient for meeting current demands or future needs. Laboratory functions were scattered over multiple areas including temporary trailers and retrofitted buildings that were inadequate for the tasks. As a result, the Department often utilized private contract laboratory services for supplementing analyses. This unfortunate circumstance compounded the ability to meet regulatory obligations as samples often required overnight shipment to California, Florida, Colorado, and Texas for analysis. Two previous bond authorizations were approved for the

design and construction for an integrated laboratory facility; however, in both instances the funds were reallocated elsewhere to address the demands for increased treatment capacity to meet the greater needs of the community.

The ROMP Program addressed these inadequacies and sought to centralize all laboratory functions within one structure for more efficient operations and communications. The central laboratory complex also serves as the center for the Industrial Waste Control (IWC) program and a multi-purpose training center. The training center provides mandatory safety instruction and continuous wastewater technology training for new and existing staff. The central laboratory is located in the Water and Energy Sustainability Center (WESC) and provides regulatory testing, monitoring, reporting, and archiving of all discharge monitoring reports for Pima County's eight water reclamation facilities.

Increased Efficiency

The laboratory performs approximately 55,000 analyses each year and a 2010 cost of analysis audit evaluated contract laboratory pricing versus the cost of the Department performing the same analyses in-house. The conclusion of that audit determined an annual savings of well over \$1,000,000 annually would be realized by the Department self-performing analyses and reducing dependence on contract laboratory services. There are also many tangible benefits for self-performing analyses in house which include rapid turnaround which is critical for making process control changes in a timely manner. Many of the analyses performed have a one day turnaround for results whereas a contract lab typically charges a 300 percent premium for one day turnaround service. The Department's laboratory performs over 8,000 of these critical, time sensitive analyses annually. In addition, the centralized laboratory and IWC have realized staffing reductions as a result of the consolidation of services and improved analytical capabilities.

The Department's laboratory performs over 150 different analyses types and is licensed by the Arizona Department of Health Services for the 117 methods stipulated in its regulatory permits. The extensive capabilities of the laboratory section make it possible for the Department to perform multiple special studies in coordination with wastewater treatment staff thus reducing its dependence on both paid consultants and contract laboratories. Approximately 1,200 analyses were performed in 2014 for studies of THM abatement, struvite abatement, phosphorus recovery and for the Santa Cruz Living River assessment. In addition, the Department's laboratory serves a regional asset for southern Arizona as being the only laboratory certified for performing ambient air analyses for heavy metals. Current clients include Arizona Department of Environmental Quality, Pima County Department of Environmental Quality, and Maricopa County.

Partnerships

In 2011, the Department's laboratory was requested to join EPA's Emergency Laboratory Response Network (ERLN) which is designed for response to regional disasters such as hurricane Katrina. Given Pima County's proximity to earthquake prone California, the Palo Verde nuclear generating station in Phoenix, and to the border with Mexico, EPA sought out the Department's partnership in this program to serve as a regional service provider. Current membership associations include:

- ▶ Arizona Environmental Advisory Council
- ▶ Arizona Multi-Agency Advisory Laboratory Association

- ▶ EPA Water Lab Alliance
- ▶ EPA Emergency Response Laboratory Network
- ▶ National Laboratory Advisory Conference Institute
 - 1. Laboratory Accreditation Standard Committee
 - 2. Assessment Forum Committee
- ▶ Environmental Laboratory Advisory Board

Water and Energy Sustainable Technology Center

Market conditions at the time of the construction of the central laboratory were well below original budget amounts. The need for additional laboratory space already existed for a Whole Effluent Toxicity Testing lab, therefore plans for a laboratory expansion were developed with anticipation for increases in regulatory testing and complex future analyses. Savings realized through beneficial market conditions more than cover the costs associated with the construction of the laboratory expansion.

To take full benefit of economies of scale and current market conditions, the choice was made to construct the full expansion build-out at this time even though the Department only requires a portion of the overall space. To offset costs, the County has developed a tenant lease agreement with the University of Arizona Colleges of Engineering, and Agriculture and Life Sciences. This lease agreement has been negotiated and agreed to by the Arizona Board of Regents and the Pima County Board of Supervisors. The use of the expanded water resource laboratory by the University of Arizona is for a period not to exceed 10 years, at which time it is anticipated the Department will expand into the facility. The current expansion is known as the Water and Energy Sustainable Technology (WEST) Center and tenant improvement costs and operating expenses will be paid by the University of Arizona.

The purpose of co-locating the University of Arizona at this facility represents a vision for creating a technology cluster for developing and validating innovative technologies to solve environmental challenges and spur sustainable economic development and job creation through commercialization, by:

- ▶ Attracting the best and brightest scientists and entrepreneurs to Pima County;
- ▶ Becoming a world leader in research and production of high quality water;
- ▶ Development of practical and affordable application of new technologies;
- ▶ Promoting economic development through the creation and attraction of jobs and investment opportunities; and
- ▶ Accelerate commercialization, product, and business launch.

Water and its reuse will be one of the more important research activities for Pima County's future in the arid Southwest. The WEST Center will be the epicenter for research, education, outreach, and industrial partnerships in North America. The WEST Center is a unique public-private partnership that aims to establish the region as a global leader in sustainable, environmental technology, and research innovation, with a constant emphasis on water quality.

This public-private partnership serves to build and maintain a vibrant, technology-driven economy that influences positive change in the protection of human health and the environment. The WEST Center will provide a geographic concentration of interconnected firms, suppliers, and supporting institutions organized to promote economic growth and technological innovation. Research will focus on contaminants of emerging concern such as pharmaceuticals and disinfection byproducts and will provide opportunities to determine how the Department might adjust its treatment processes to remove these likely future, regulated contaminants.

4. OPERATION & MAINTENANCE EXPENDITURES

Introduction

Operation and Maintenance (O&M) expenditures include the cost of operating and maintaining wastewater collection, treatment, and disposal facilities as well as the costs of providing technical services such as laboratory services and other administrative costs of the wastewater system including customer service and billing. These costs are a normal obligation of the system, and are met from operating revenues as they are incurred.

In a memorandum dated March 16, 2015, *Budget Control Measures for the Remainder of Fiscal Year 2014/15*, C.H. Huckelberry, County Administrator, directed fiscal year 2015/16 budgets for all County Departments and agencies be reduced by two percent. Those reduced budget numbers are used when referencing the fiscal year 2015/16 in this report.

Background

The Department's O&M actual expenditures have ranged from a high of \$78.5 million in fiscal year 2007/08 to a low of \$69.9 million in fiscal year 2009/10 and are expected to be approximately \$82 million at the end of the current fiscal year.

In fiscal year 2007/08, the Department had some unplanned sewer infrastructure relocations related to City of Tucson activities. There was also a concerted CCTV effort targeted at ensuring all major interceptors were inspected so that any highly suspect or imminent failure of our system could be identified and repaired before a failure occurred. These activities increased our costs during this time frame. Our CCTV effort is now balanced over a ten year repeating cycle therefore costs for this program are more consistent.

In fiscal year 2009/10, in the midst of the economic downturn, the County Administrator issued budget control measures for the remainder of the fiscal year. The directive was taken very seriously and the Department ended fiscal year 2009/10 at \$69.9 million or almost \$10 million less than the approved budget. This was a challenging endeavor which forced the Department to forgo a fair amount of standard maintenance and scheduled rehabilitation projects. The belief was this setback would be brief and the Department would return to acceptable and prudent budget levels in order to maintain the utility in good order.

Today's O&M spending is more stable and controlled than in past years due to the SCADA system and the related preventative maintenance work order program that have recently been implemented.

Fiscal Year 2015/16 O&M Budget Request

The fiscal year 2015/16 Department O&M budget request is \$84,661,178¹⁴. This is \$2,592,243 less than the O&M budget of \$87,253,421 identified in the 2015 Financial Plan and a \$768,822, or 0.9 percent increase from fiscal year 2014/15 adopted budget. This budget request reflects careful and difficult decisions in an effort to limit expenditure growth, budget only for necessities, and fulfill budgeted performance commitments without exceeding budget targets.

Because of a concerted effort to cut costs and improve processes, the Department was able to absorb much of the following policy changes totaling over \$3.2 million and still put forth a requested budget with less than a one percent increase from the fiscal year 2014/15 adopted budget.

¹⁴ Revised FY 15/16 Requested as of March 25, 2015

- ▶ The net increase of Information Technology Department-related services of \$1,475,268 for hardware, software, and server space due to the change in policy to lease hardware, upgrade software, and allocate ITD costs for providing servers to the Department, formerly provided at no cost by ITD and funded with the General Fund.
- ▶ A change in policy to no longer allow the budgeting of unfilled employee positions; therefore, the Department was not able to budget a two percent vacancy savings, or \$645,000. The actual staff vacancy rate has been approximately five percent for most of the current fiscal year, and is currently at eight percent.

Nine budget items represent 83 percent of the requested fiscal year 2015/16 budget and are described in detail in Section 4.1 – Section 4.9. The remainder of the requested budget is comprised of approximately 105 other budget items totaling \$14.6 million.

The Department has adopted more efficient operational practices and has had many successes in efficiencies and other cost cutting measures over the past several years. Use of continual improvement approaches, asset management, and performance benchmarking are examples of how the Department is optimizing management approaches to provide better information for daily and long-term decision-making. Coupled with operational initiatives such as energy efficiency, green power generation, reclaimed water reuse, and resource recovery, the Department is well-placed to continue the role as environmental stewards, delivering high levels of service, and ensuring efficiency in costs and operational sustainability.

4.1 Personnel Services

The most significant portion of O&M expenditures relates to personnel services¹⁵, which at \$33,820,399 next fiscal year, represents 40 percent of total O&M expenditures, which is well below the industry standard. By comparison, the National Association of Clean Water Agencies recently reported that personnel costs for a comparable utility represent approximately 47 percent of total O&M expenditures in 2013¹⁶, at which time the Department's personnel costs comprised 43 percent of total O&M expenditures¹⁷. This is partially due to the transfer of 26 employees to ITD, Finance and HR in 2009, whose costs are now included in County overhead and the closure of the Roger Road WRF and replacement with the Agua Nueva WRF which is privately operated.

Because many personnel costs can be external and beyond the Department's control, the Department has taken proactive approaches such as continuous improvement efforts and improved efficiencies in the utility to control personnel costs.

- ▶ The largest budget item in this category is Salaries and Wages. The requested fiscal year 2015/16 budget for Salaries and Wages is \$23,018,536¹⁸. Since fiscal year 2008/09, the Department's adopted Salaries and Wages budget has dropped 12.6 percent¹⁹. Total full time equivalents have decreased from a high in 2009 of 599 to a requested total of 468 in fiscal year 2015/16. This is a drop in 131 positions despite the significant expansions and increased complexities in the system's treatment processes.
- ▶ With the average Department employee cost (total personnel services including wages, benefits, etc.) for fiscal year 2015/16 at \$72,266, the Department sees a reduction in personnel services of approximately \$1.1 million for the 15 previous Pima County employees now working at the Agua Nueva WRF.
- ▶ Salary increases have included:
 - One percent effective July 3, 2011
 - One percent effective June 30, 2013
 - Two percent effective December 29, 2013
 - \$0.50 per hour increase effective September 7, 2014

15 Personnel Services includes Salary and Wages, Overtime, On Call Pay, Shift Differential, Temporary Help, Holiday Worked, Special Assignment, Vacancy Savings, FICA and Medicare, Unemployment, Health Insurance Premiums, Workers Compensation, Life Insurance, Employer Paid Benefits and Subsidies, ASRS, Dental Insurance Premiums, and Budgeted Benefits.

16 Opportunities and Challenges in Clean Water Utility Financing and Management, Financial Survey Highlights, February 2015

17 \$32,496,254 total personnel costs in a \$75,481,088 Adopted Budget

18 Revised FY 15/16 Requested as of March 25, 2015

19 \$26,338,974 fiscal year 2008/09 adopted budget for salaries and wages, \$23,018,536 is the requested fiscal year 2015/16 salaries and wages budget.

Table I I below indicates the total personnel services costs per year since fiscal year 2007/08, as well as the yearly percentage change.

Table I I. Personnel Services Costs

Fiscal Year	FTEs*	Wages (millions)	Benefits and Other (millions)	Total Personnel Services (millions)	Annual Percentage Change
2007/08	584	\$ 23.85	\$ 9.11	\$ 32.96	
2008/09	599	\$ 25.04	\$ 8.25	\$ 33.29	1.0
2009/10	580	\$ 23.75	\$ 9.08	\$ 32.83	-1.4
2010/11	520	\$ 22.92	\$ 9.03	\$ 31.95	-2.7
2011/12	512	\$ 22.94	\$ 9.39	\$ 32.33	1.2
2012/13	506	\$ 22.35	\$ 10.15	\$ 32.50	0.5
2013/14	495	\$ 22.40	\$ 10.34	\$ 32.74	0.7
2014/15 Period 7 Projected	475	\$ 22.55	\$ 10.37	\$ 32.92	0.5
2015/16 Requested	468	\$ 23.02	\$ 10.80	\$ 33.82	2.7
Percent Change from 2008 to 2016 2.7					

Overall, Department personnel costs have increased 2.7 percent in nine years²⁰. This small increase is evidence of the Department's continued efforts to right-size the utility by looking at alternative approaches, new ideas, Department needs, and allocating resources appropriately. Because the Department has a strong strategic focus, hiring managers have a clear vision of where the utility is headed and are able to make more effective hiring decisions now and in the future.

²⁰ FY 2007/08 \$32.96. FY 2015/16 requested \$33.82.

* The reduction of FTEs since FY 2007/08 have included the following reductions: Roger Road closure 30, multi-skill program 16, powerhouse closure 11, Randolph closure 4, WESC layoff 3, FY 2009/10 consolidation 26, Department efficiencies and vacancies unfunded 41.

4.2 Non-Medical Professional Services

The second largest budget item for O&M expenditures is Non-Medical Professional Services at \$11,048,408²¹ in the fiscal year 2015/16 requested budget. This is approximately \$1 million less than the \$12.1 million identified in the 2015 Financial Plan.


Non-Medical Professional Services funds professional and technical services needed for the operation of the utility, for which the Department lacks the necessary expertise, and can demonstrate an economic benefit of contracting out rather than direct employment.

- ▶ The largest line item in Non-Medical Professional Services is the CH2M Hill contract to operate the Agua Nueva WRF at \$4.5 million. This contract covers many O&M expenses previously incurred at the now closed Roger Road WRF which had an O&M budget of \$4.5 - \$6.5 million annually.
- ▶ The Department continues to contract out sewer billing services at approximately \$4 million each year. In the early part of fiscal year 2014/15, the Department's billing contracts' costs increased an average of over 40 percent²² after having remained unchanged for eight years. In the Fall of 2014, the Department expressed interest in exploring the option of providing internal monthly customer sewer billing services. An assessment was done by the Finance and Risk Management Department and it was determined providing billing services in-house would not be cost effective for the County and the idea was not explored further.
- ▶ The final large component of Non-Medical Professional Services is the \$2 million annual contract with Hoffman Southwest Corporation (ProPipe) for CCTV services. CCTV inspection delivers high resolution video used in the assessment of structural, operational, exfiltration, and flow capacity issues within sanitary sewer pipelines and other infrastructure. Based on those assessments, supplemental maintenance, rehabilitation, or system augmentation activities are then programmed to address specific issues.



Cost Cutting Strategy

The Department has a regulatory deadline of December 2016 to conduct CCTV pipeline inspections of the entire system as dictated in the Capacity, Management, Operations, and Maintenance (CMOM) plan and as governed in Arizona Administrative Code (AAC) R 18-9-C305. In order to accomplish this goal, the Department chose to contract with Hoffman Southwest Corporation on an as-needed, funding-available basis rather than to saddle the O&M budget with in-house equipment, labor, and material commitments. Had the Department opted to grow its in-house capacity to a level capable of performing the volume of inspection necessary to meet the December 2016 deadline, program funding would substantially increase and lock the Department into costly equipment upgrades and staffing constraints. With the use of contracted inspection services, the Department is able to benefit from industry efficiencies, technological improvements, and market driven competition.



²¹ Revised FY 15/16 Requested as of March 25, 2015

²² Tucson Water \$0.84 increased to \$1.14 per account.

4.3 County Administrative Overhead

The third largest, single budget item is County Administrative Overhead at \$6,917,264 in the fiscal year 2015/16 requested budget, a decrease of \$377,397 from fiscal year 2014/15. Finance and Risk Management has prepared a separate analysis of County overhead. Most of the increase from prior years is the result of a change in the accounting method of reporting personnel costs of Finance, HR and ITD staff who provide services to the Regional Wastewater Reclamation Department. This accounting change shifted the cost previously reported as part of Personnel Services into County Overhead, having no impact to the total department budget. By comparison, the fiscal year 2015/16 Tucson Water Administrative Overhead budget is \$7.4 million in addition to a \$1.6 million Payment In-Lieu of Tax.

4.4 Energy Consumption

Energy is required for all stages in the wastewater conveyance and treatment processes to operate pump stations, in-plant pumps, aeration, solids handling equipment, odor control, and other devices 24 hours a day, seven days a week. Because the Department uses various forms of energy (commercial electricity, solar electricity, and commercial natural gas), it is important to look at the entire energy portfolio of costs when making evaluations of changes over time. Energy consumption is the fourth largest budget item in the fiscal year 2015/16 requested budget at \$5,790,826, which is a 24 percent reduction from 2007/08 actual expenditures.

A concerted effort and campaign for energy efficiency and energy management has offset the increased utility rates experienced throughout Pima County. The Department has further reduced energy costs through the use of more efficient and modern equipment as well as a SCADA control system with which to make real time energy use decisions. This has not come without a careful evaluation of the Department's energy portfolio to continue to improve energy efficiency and optimize energy costs.

The Department has been able to reduce energy costs over the past nine years even though commercial electric rates have increased considerably in recent years:

- ▶ Fourteen percent effective July 2013
- ▶ Four percent effective May 2014

Table 12 below indicates below the total energy costs per year since fiscal year 2007/08, as well as the annual percentage change.

Table 12. Energy Costs

Fiscal Year	Total Energy (millions) (Electricity + Natural Gas + Power Generating Facility)	Annual Percentage Change
2007/08	\$ 7.63	
2008/09	\$ 6.20*	-18.7
2009/10	\$ 6.42	3.5
2010/11	\$ 6.12	-4.7
2011/12	\$ 6.14	-1.0
2012/13	\$ 6.86**	11.7
2013/14	\$ 6.71	-2.2
2014/15 Period 7 Projected	\$ 6.56	-2.2
2015/16 Requested	\$ 5.79	-11.8
Percent Change from 2008 to 2016 -24		

* The Department wheeled natural gas and negotiated a standby discount with Tucson Electric Power at the Roger Road WRF which provided a reduction in energy use.

** The WESC building opened and there were inefficiencies in its construction which increased energy use.

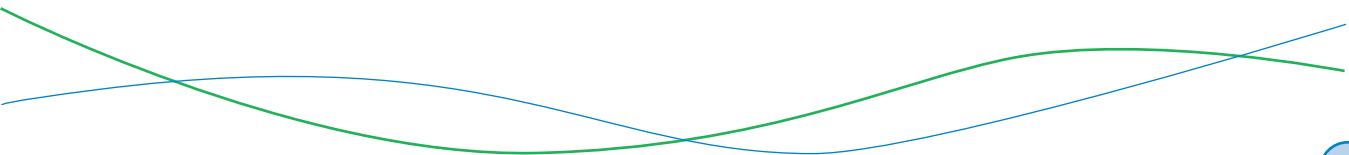
Cost Saving Measures

1. Prior to fiscal year 2014/15, the Department generated its own electricity at the Roger Road and Ina Road WRFs so the energy portfolio also included the Department's O&M costs associated with operating the power-generating facility at Ina Road WRF. The elimination of the O&M costs for the Power Plant saved the Department approximately \$1.2 million and the elimination of the cost for natural gas saved the Department approximately \$1.5 - \$3.0 million required by the Power Plant.
2. In July 2014, the Department participated in Tucson Electric Power's Commercial Energy Solutions program. The Department successfully received a \$352,000 rebate check due to energy efficiency and conservation efforts undertaken as part of the ROMP Program. The ROMP Program resulted in increased capacity and reduced energy while improving treatment quality of wastewater to exceed currently mandated guidelines. The Tres Rios & Agua Nueva WRFs save 3,519,970 kWh per year over a standard benchmark facility of similar size and function.
3. In February 2013, the Department entered into an agreement with Tucson Electric Power to be charged for electricity services at the Tres Rios WRF at the LLP-14 rate schedule. Internal analysis indicated that even further savings in electricity costs could be realized under the LLP-90 rate schedule. On August 5, 2014, the Department presented this contract to the Board of Supervisors for approval with an estimated annual savings of \$168,000. This item was approved and the Tres Rios WRF has saved over \$200,000 in the first eight months at the new LLP-90 rate schedule.
4. Thermal energy demands at the Tres Rios WRF are met by beneficially utilizing digester gas as fuel rather than purchasing fuel. Using this renewable fuel source saves the Department and ratepayers approximately \$180,000 per year. In addition, since the Department requires less than 15 percent of the biogas produced from the digesters, the remaining gas can be sold to produce an additional revenue stream which will further offset the overall energy costs at the Tres Rios WRF.
5. Two of the major sustainability goals set forth in Pima County's *2014 Sustainability Action Plan for County Operations* are:
 - a. Increase the portion of renewable energy consumed by County operation; and
 - b. Join communities throughout the world in confronting global climate change by identifying and implementing programs that will reduce the County's carbon footprint.

In fiscal year 2010/11, two, one-megawatt solar power facilities were installed near the Tres Rios and Agua Nueva WRFs. The electricity generated at these two solar facilities augments power used for the wastewater treatment processes. In fiscal year 2013/14, these two solar facilities generated 4,034,785 kWh of energy, enough to power approximately 400 homes. To date, the two Department solar facilities together saved over \$150,000 compared to commercial power. In addition, they are contributing to environmental savings of air pollutants.

6. The Department recently worked with the Arizona Governor's Office of Energy Policy and joined Energy Star, which is a U.S. Environmental Protection Agency voluntary program that helps businesses and individuals save money and protect the climate through superior energy efficiency. The Department is currently working to link monthly utility bills directly to Energy Star and expects initial analysis in the next six months.
7. In January 2015, the Department joined the U.S. Department of Energy's, Better Buildings, Better Plants Program. The Department's commitment to reducing its energy intensity by 25 percent over 10 years establishes the utility as a leader in energy efficiency and helps advance the nation's progress toward a sustainable, clean-energy future. The U.S. Department of Energy was especially pleased with the Department's participation as one of the first Partners from the wastewater treatment sector.
8. On October 16, 2013, the Water Infrastructure Finance Authority of Arizona awarded a *Green Project* grant of \$35,000 to the Department to conduct facility energy audits. This green project aligns itself well with the Department's Strategic Plan and Pima County sustainability goals to increase energy efficiency throughout the organization.

Energy consumption continues to be a focal point for the Department. The decision to shut down the Power Plant for a simpler and safer electrical distribution system as well as to acquire less expensive energy has proven to be beneficial. Overall, energy costs have decreased over the past several years in spite of significant commercial electric energy cost increases. The Department is continuing to explore additional energy efficiencies by making process efficiency improvements and conducting comprehensive energy audits.



4.5 Chemical Usage

Chemicals for wastewater treatment and odor control comprise a significant proportion of the Department's operating costs and is the fifth largest budget item. The requested amount for fiscal year 2015/16 is \$4,156,222²³.

Wastewater Treatment

Struvite, chemically equivalent to magnesium ammonium phosphate hexahydrate, can create problems in process pipes, pumps, and other equipment due to crystal formation on critical surfaces. Control of struvite formation can be obtained by including ferric chloride during anaerobic digestion which comprises approximately \$500,000 of the Department's chemicals budget for wastewater treatment. Preventative steps have been taken by the Department to minimize struvite formation including proper pump size and design, pipe diameter and construction material, and pipe connection design.



Industry Comparison

In 2014, the Department's chemicals budget for wastewater treatment processes was \$2,071,412. This translates to an average chemical cost of \$110.74 per million gallons treated, which, by comparison, is in line with the average chemical cost of \$110 per million gallons treated in the industry*.



Odor Control

The fiscal year 2015/16 requested budget for Odor Control chemicals is \$1,498,100²⁴. In the last several years, the Department's System-Wide Odor Control initiative has been to provide odor and corrosion control by adding chemical feed stations to the upper reaches of the conveyance system. The motivation for this approach was dictated by the distribution of odor complaints, severe interceptor corrosion, and the cumulative benefits of controlling the aqueous chemistry from the originating sources.

Odor Control is being accomplished by raising the pH to ~ 8.3 by adding alkalinity with magnesium hydroxide. This non-toxic compound is often sold as a mineral supplement or as milk of magnesia for human consumption. This application of magnesium hydroxide, is several times more cost effective than other odor control chemistries when considering the number of miles and millions of gallons treated per dollar of chemical. In addition, there are collateral benefits to the treatment process and effluent water quality.

²³ Revised FY 15/16 Requested as of March 25, 2015

²⁴ Revised FY 15/16 Requested as of March 25, 2015

* www.nacwa.com

Table 13 below indicates the total chemical expenditures per year since fiscal year 2007/08 as well as the annual percent change.

Table 13. Chemical Expenditures

Fiscal Year	Chemical Expenditures (millions)	Annual Percentage Change
2007/08	\$ 3.74	
2008/09	\$ 4.18	11.8
2009/10	\$ 4.16	-0.5
2010/11	\$ 4.25	2.2
2011/12	\$ 4.55	7.1
2012/13	\$ 4.82	5.9
2013/14	\$ 3.91	-18.9
2014/15 Period 7 Projected	\$ 3.92	0.3
2015/16 Requested	\$ 4.16	6.1
Percent Change from 2008 to 2016 11.2		

4.6 Repair and Maintenance, Building Services

The Repair & Maintenance, Building Services budget item is the sixth largest budget item for the Department and covers the required repairs and preventative maintenance for the Department's buildings and infrastructure, generally for projects under \$100,000. The requested fiscal year 2015/16 budget is \$3,365,160 which is an almost 150 percent increase from fiscal year 2007/08.

Since the Speedway interceptor collapse, the Department has made a concerted effort to invest in the maintenance and rehabilitation of its aging infrastructure. As the conveyance system is assessed and damaged or obstructed pipes are discovered, a Job Order Contract is utilized to complete repairs and bring the infrastructure up to standards. The Department is renewing and extending the useful life of its assets with each repair. Repairs range from \$10,000 to \$100,000; however, the number of these small O&M repairs performed in a year is such that the aggregated amount runs into the millions. With the exception of the financially stressed years after the Speedway interceptor collapse, the Department's investment in the maintenance and rehabilitation of our infrastructure has steadily increased to reflect the condition of the conveyance system, as can be seen in the approximately 150 percent increase from fiscal year 2007/08.

The Department believes the current level of investment in maintenance and rehabilitation is a level that has struck a balance between the number of defects found in the system and the rate at which they are repaired to avoid impacting the community with unforeseen emergencies and resulting costs.

Table 14 below indicates the total Repair and Maintenance, Building Services expenditures per year since fiscal year 2007/08 and the annual percent change.

Table 14. R&M Building Services

Fiscal Year	R&M Building Services (millions)	Annual Percentage Change
2007/08	\$ 1.36	
2008/09	\$ 1.85	36.0
2009/10	\$ 1.85	0.0
2010/11	\$ 2.89	56.2
2011/12	\$ 2.96	2.4
2012/13	\$ 2.34	-20.9
2013/14	\$ 2.91	-24.4
2014/15 <small>Period 7 Projected</small>	\$ 3.43	17.9
2015/16 <small>Requested</small>	\$ 3.37	-1.7
Percent Change from 2008 to 2016 147.8		

4.7 Motor Pool

The seventh largest budget item is Motor Pool which covers fuel, repairs, and preventative maintenance for the Department's fleet of approximately 330 cars, trucks, and heavy equipment such as rodder trucks, combination trucks, vactor trucks, and other specialty vehicles.

As you can see from Table 15, this budget item has been variable over the years as gas prices fluctuate, the method the County bills changes, and with the Department's implementation of more stringent vehicle usage policies. The requested fiscal year 2015/16 budget is \$2,153,534.

Table 15. Motor Pool

Fiscal Year	Motor Pool (millions)	Annual Percentage Change
2007/08	\$ 1.81	
2008/09	\$ 2.10	16.0
2009/10	\$ 1.38	-34.3
2010/11	\$ 1.11	-19.6
2011/12	\$ 1.16	4.5
2012/13	\$ 1.80	55.2
2013/14	\$ 2.45	36.1
2014/15 Period 7 Projected	\$ 1.99	-18.8
2015/16 Requested	\$ 2.15	8.0
Percent Change from 2008 to 2016 18.9		

4.8 Repair and Maintenance, Machinery and Equipment Services

The eighth largest budget item is for the repair and maintenance services for the Department's machinery and equipment, such as overhead cranes, gators, alley rodgers, combination trucks, and forklifts. An on-site Fleet Services technician is also funded in this budget line item due to the Department's vast fleet of specialty equipment. Most equipment and machinery are on a regular schedule for preventative maintenance to ensure safety and a long life cycle.

As depicted in Table 16, this budget item has decreased from 2008 by 8.7 percent and has a requested fiscal year 2015/16 budget of \$1,781,295.

Table 16. R&M Machinery & Equipment Services

Fiscal Year	Total (millions)	Annual Percentage Change
2007/08	\$ 1.95	
2008/09	\$ 1.91	-2.1
2009/10	\$ 2.07	8.4
2010/11	\$ 2.08	0.5
2011/12	\$ 2.57	23.6
2012/13	\$ 2.44	-5.1
2013/14	\$ 2.14	-12.3
2014/15 Period 7 Projected	\$ 2.19	2.3
2015/16 Requested	\$ 1.78	-18.7
Percent Change from 2008 to 2016 -8.7		

4.9 Repair and Maintenance, Supplies

The ninth largest budget item is Supplies for Repairs and Maintenance. This budget item funds parts and supplies for preventative maintenance on equipment including electrical, plumbing, instrumentation, and support systems for the utility. As the Department has completed major facility upgrades and privatized the Agua Nueva WRF, there has been a steady decline in this category by almost 50 percent since fiscal year 2007/08.

As depicted in Table 17, this budget item has been steadily decreasing from a high in fiscal year 2007/08 of \$3,161,751 to a requested fiscal year 2015/16 budget of \$1,645,336.

Table 17. R&M Supplies

Fiscal Year	R&M Supplies (millions)	Annual Percentage Change
2007/08	\$ 3.16	
2008/09	\$ 2.80	-11.4
2009/10	\$ 2.66	-5.0
2010/11	\$ 2.58	-3.0
2011/12	\$ 2.68	3.9
2012/13	\$ 2.65	-1.1
2013/14	\$ 1.52	-42.6
2014/15 Period 7 Projected	\$ 1.92	26.3
2015/16 Requested	\$ 1.65	-14.1
Percent Change 2008 to 2016 -47.8		

4.10 Spending Cuts

In a memorandum dated March 16, 2015, *Budget Control Measures for the Remainder of Fiscal Year 2014/15*, C.H. Huckelberry, County Administrator, directed fiscal year 2015/16 budgets for all County Departments and agencies be reduced by two percent. The Department has submitted a decrement budget package with the required two percent reductions. The Table 18 below illustrates additional non-mandated services (spending not required through regulation) that will need to be considered for cuts or elimination if the rate increases are not approved.

Table 18. Potential Spending Cuts to O&M Budget (dollars)

Odor Chemicals	\$ 1,498,100
Department Lay Offs/Transfers	\$ 600,000
Vector Control Contract	\$ 307,300
Reclaimed Water Subsidies for NRPR, KERF, RFCD, and DOT	\$ 242,016
House Connection Sewer Program Repairs in the Public Right-of-Way	\$ 199,000
Unit 1234, Sewer Outreach Subsidy Program	\$ 104,656
Consulting services for completion of ROMP related projects and reports	\$ 29,700
Unit 1213, Kino Environmental Restoration Project Support	\$ 25,974
TOTAL	\$3,006,746

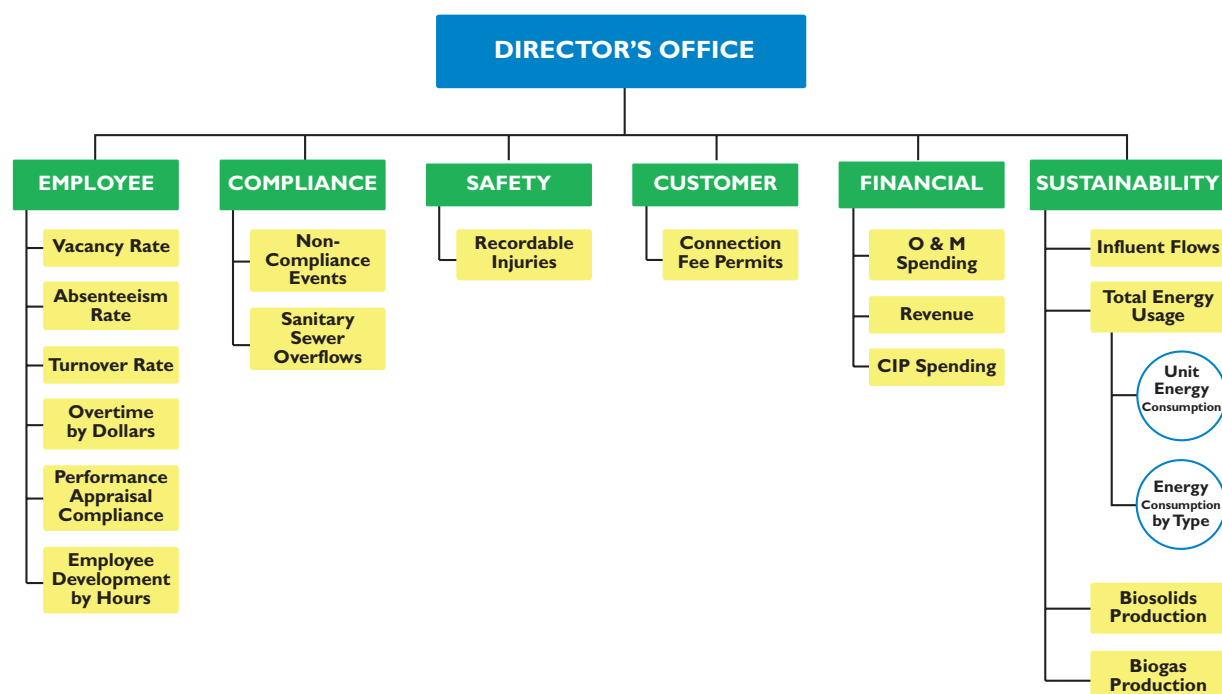
4.11 Key Performance Indicators

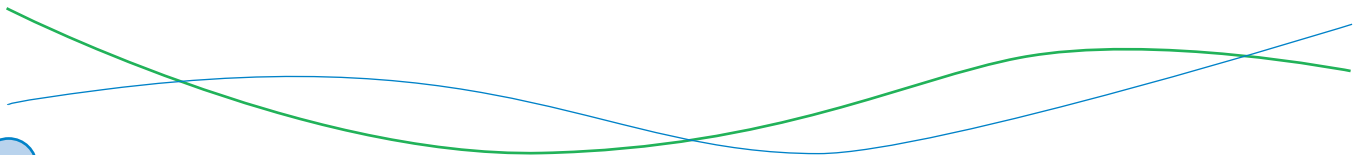
The discussion on operations and maintenance expenses would be incomplete if the Department's Key Performance Indicators initiative was not included. Each month the Department Director holds a business review meeting to evaluate the utility, align the expectations of the team, understand trends, and agree on proposed actions.

Monthly Key Performance Indicator Review meetings center on six areas of strategic focus:

- ▶ The Employee Pillar sets the strategic direction for creating a positive work environment where employees can thrive. Internal staff training, communications, knowledge management, employee development, and teamwork are facets of the Employee Pillar.
- ▶ The Compliance Pillar provides the strategic framework for achieving compliance with a complex array of regulatory requirements. Permitting, lab testing and analyses, and industrial wastewater control functions fall within the scope of this Pillar.
- ▶ The Safety Pillar establishes the Department-wide strategies, goals, and standards for becoming a zero-accident safety culture. Safety functions are also conducted within each Division of the Department in alignment with the Department-wide strategic objectives and standards.
- ▶ The Customer Pillar seeks to advance customer satisfaction internally and externally. Proactive public engagement, communications, and feedback are key strategies of this Pillar.
- ▶ The Financial Pillar ensures fiscal responsibility to the public and rate payers. It provides strategic guidance for budget planning and management.
- ▶ The Sustainability Pillar establishes Department-wide guidance for sustainability procedures and employee training on green workplace practices. Additionally, it provides strategic direction for major Department and County-wide programs, such as Energy Management, Water Resources Management, and Resource Recovery and Reuse.

Attachment 4 includes the March 24, 2015 Director's KPI Review PowerPoint.





5. SEWER USER FEES

Sewer User Fees, based on a rate per unit of consumption and a fixed service charge, are the primary revenue source for the operation and maintenance of the utility. Unlike the early days of the Clean Water Act when the Federal government made significant investments in the nation's water infrastructure, today's repairs, legacy replacement needs, and upgrades are almost entirely paid for by the Department's ratepayers.

Most utilities adjust their rates annually or biennially to ensure operational costs are adequately recovered. Increased costs of advanced treatment, reductions in water use, large legacy replacement costs, and increasing external costs have continually pushed customer user fees upwards.

5.1 Historical Sewer User Fee Increases

Sewer User Fees have increased 122% since July 2007. These increases were due to:

1. Pima County sewer rates were artificially low and could not maintain the needs of an aging system;
2. Finance the regulatory mandates of the ROMP program; and
3. Maintain revenue levels due to financial challenges and declining revenue described earlier in this report.

Table 19 outlines the rate increases and impacts to the average residential bill since July 2007.

Table 19. Historical Sewer User Fee Increases

Fiscal Year	Volumetric Fee (dollars)	Annual Percentage Change	Service Fee (dollars)	Annual Percentage Change	Impact on Average Residential Bill (dollars)	Average Residential Bill (dollars)
2007/08 July 2007 - December 2007	\$ 1.41		\$ 5.62			\$ 18.41
2007/08 January 2008 - June 2008	\$ 1.53	9.0	\$ 6.23	8.9	\$ 1.59	\$ 20.00
2008/09 July 2008 - March 2009	\$ 1.68	9.5	\$ 6.82	9.5	\$ 1.94	\$ 21.94
2008/09 April - June 2009	\$ 1.89	12.7	\$ 8.32	22.0	\$ 3.39	\$ 25.33
2009/10 July - December 2009	\$ 2.13	12.7	\$ 8.32	0.0	\$ 2.16	\$ 27.49
2009/10 January - June 2010	\$ 2.41	12.7	\$ 9.82	18.0	\$ 4.02	\$ 31.51
2010/11	\$ 2.65	10.0	\$ 10.46	6.5	\$ 2.80	\$ 34.31
2011/12*	\$ 2.91	10.0	\$ 11.14	6.5	\$ 0.11	\$ 34.42
2012/13	\$ 3.20	10.0	\$ 11.86	6.5	\$ 3.04	\$ 37.46
2013/14	\$ 3.52	10.0	\$ 12.63	6.5	\$ 3.33	\$ 40.81
2014/15	\$ 3.52	0.0	\$ 12.63	0.0	\$ 0.00	\$ 40.81
Percent Change from 2008 to 2016 121.6						


Even with the increases in sewer bills, Pima County's wastewater rates are well within the mid-range of the national average.

* Average volume now 8ccf as opposed to 9ccf in previous years.



Industry Comparison

Attachment 5 includes a 2013 Cost of Clean Water Index which shows the average national average sewer charge as \$435. By comparison, Pima County's average annual sewer charge was \$449 in 2013. The study also indicates the average charge will continue to outpace inflation and will exceed, on average, \$511 per year by 2016. Should a four percent increase be implemented for fiscal year 2015/16, the average Pima County bill would be \$509 annually.



5.2 Impact Analysis of Proposed Sewer User Fee Increases

Water usage records analysis indicates that an average residential customer generates approximately 5,984 gallons (8 CCFs) of wastewater per month. Using this average, Table 20 shows the impact of the proposed rate increases on the average residential bill.

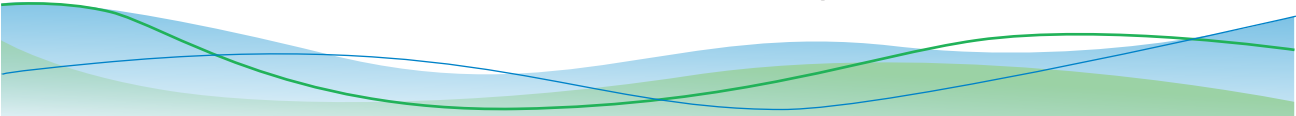
Table 20. Proposed Sewer User Fee Increases

Fiscal Year	Volumetric Fee (dollars)	Annual Percentage Change	Service Fee (dollars)	Annual Percentage Change	Impact on Average Residential Bill (dollars)	Average Residential Bill (dollars)
2014/15	\$ 3.52	0.0	\$ 12.636	0.0	\$ 0.00	\$ 40.81
2015/16	\$ 3.66	4.0	\$ 13.14	4.0	\$ 1.61	\$ 42.42
2016/17	\$ 3.81	4.0	\$ 13.66	4.0	\$ 1.72	\$ 44.14
2017/18	\$ 3.96	4.0	\$ 14.21	4.0	\$ 1.75	\$ 45.89



Industry Comparison

Tucson Water's Citizens' Water Advisory Committee is recommending five automatic annual rate increases of 7.3 percent beginning July 6 of 2015, 2016, 2017, 2018, and 2019. The City of Tucson Mayor and Council is currently scheduled to vote on the rate increase on May 19, 2015.

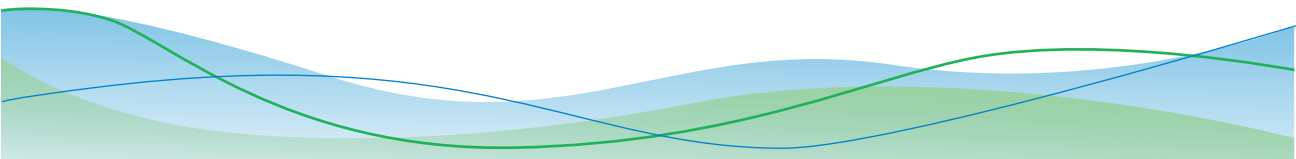




Industry Comparison

In a March 9, 2015, article in the Arizona Daily Star, “Sewer rate hikes up for vote,” the average monthly bill for a residential customer in Phoenix of \$20.17 was used in comparison to Pima County’s rates. Care should be taken in drawing conclusions from such a comparison as some factors including geographic location, demand, level of treatment, level of grant funding, age of system, sources of water costs, and rate-setting methodology can all impact the cost of providing services.

The City of Phoenix has many benefits that positively impact user rates when compared to Pima County:

1. The City of Phoenix is one of five cities that renewed a 40 year, \$1 billion agreement in April 2010 to sell most of their effluent to the Palo Verde Nuclear Generating Station. This long term agreement generates substantial revenue for the City of Phoenix which significantly subsidizes the user rate. Most of Pima County effluent belongs to the City of Tucson and is not available revenue source.
 2. The City of Phoenix is a combined water and sewer utility providing a substantial decrease in overhead expenses and billing costs due to shared costs.
 3. Due to the size of the City of Phoenix, the utility is able to reap cost advantages of better electric rates and other purchased commodities.
 4. The City of Phoenix only has two water reclamation facilities while Pima County has eight. The smaller facilities do not yield good economies of scale.
 5. Because of its smaller geographic area and more dense population, the City of Phoenix is able to have fewer miles of conveyance lines per gallon treated, thus having lower costs for conveyance. The City of Phoenix has 4,900 miles of conveyance infrastructure while Pima County has 3,500 miles which is only 1.4 times Pima County’s for a utility that treats three times the flow. Both the City of Phoenix and Pima County have 28 pump stations.
 6. The City of Phoenix has a greater growth rate than Pima County has experienced.
 7. Compared to the just completed infrastructure Pima County has, the City of Phoenix made many of their capital investments quite some time ago and will require replacement that will increase the cost to its rate payers.
- 

5.3 Community Outreach

The Department conducted an extensive outreach effort to engage ratepayers in a discussion about the proposed rate increases and to give the public the opportunity to provide meaningful input into the process. The goal was to ensure that ratepayers' concerns and input were considered in the development of the rates.

Over the course of six months, 11 public meetings were held to provide the public with the opportunity to review and provide comments on the draft 2015 Financial Plan. Presentations and discussions on the 2015 Financial Plan as well as a Call to the Audience occurred at each of the following public meetings.

 Financial Sub Committee, Regional Wastewater Reclamation Advisory Committee, 1:30 p.m.

 Regional Wastewater Reclamation Advisory Committee, 8:00 a.m.

SEPTEMBER 2014

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OCTOBER 2014

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	
26	27	28	29	30	31	

NOVEMBER 2014

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER 2014


SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			


JANUARY 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

 Regional Wastewater Reclamation Advisory Committee, 8:00 a.m.
(9:00 a.m. on February 19, 2015)

 Special Public Meeting, Regional Wastewater Reclamation Advisory Committee,
6:00 p.m. on January 29, 2015²⁵ and 8:00 a.m. on February 19, 2015²⁶

Media Outreach

- ▶ Notice of January 29, 2015 Special Public Meeting, *Arizona Daily Star*, January 18, 2015
- ▶ Press Release to local media, January 28, 2015
- ▶ Notice of Proposed Rate Increase to Existing Sewer User Fees on www.pima.gov and www.pima.gov/government/wastewaterreclamation, February 6, 2015
- ▶ Notice of February 19, 2015 Special Public Meeting, *Daily Territorial*, February 6, 2015
- ▶ Notice of February 19, 2015 Special Public Meeting, *Arizona Daily Star*, February 8, 2015
- ▶ Press Release to local media, February 12, 2015
- ▶ Pima County Facebook Page Announcement for February 19, 2015 Special Public Meeting, February 17, 2015
- ▶ Notice of March 10, 2015 Board of Supervisors Hearing, *Daily Territorial*, February 18, 2015
- ▶ KOLD News 13 at 12:00 p.m., February 19, 2015

²⁵ Special Public Meeting, Regional Wastewater Reclamation Advisory Committee Thursday, January 29, 2015, 6:00 p.m., Presentation, Discussion on the 2015 Financial Plan, and Call to the Audience
This special meeting was held in the north side of town at the Department's Water, Energy, and Sustainability Center which is easily accessible off Interstate 10. It was held in the evening hours to accommodate those working during the day. To further accommodate citizens, complimentary shuttle service was provided from downtown Tucson to the meeting location.

²⁶ Special Public Meeting, Regional Wastewater Reclamation Advisory Committee Thursday, February 19, 2015, 8:00 a.m., Call to the Audience and Committee Vote on the 2015 Financial Plan
This special public meeting was held in downtown Tucson at the County Administration Building. This building is located on the Sun Link and Sun Tran routes. For those driving to the meeting, parking was covered by the Department. This meeting was held in the morning hours to accommodate those who could not attend the previous special meeting which was held in the evening hours.

The following public feedback was received (all forms of communication were advertised):

- Emails – 2
- Letters – 0
- Phone Calls – 0
- In-person review of draft Pima County Code at Public Works Building, 8th Floor Front Desk – 0

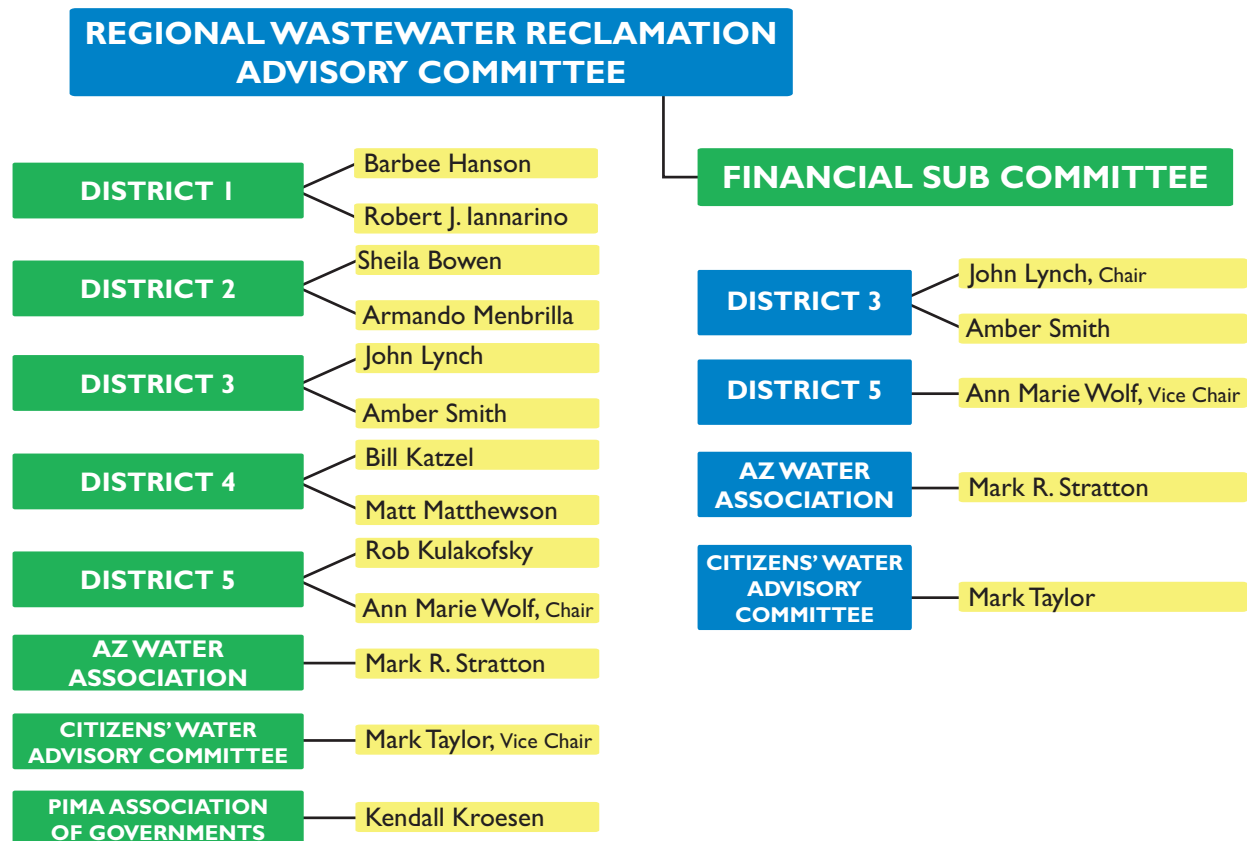
Although few individual ratepayers participated in the lengthy process of determining the rate recommendation, the members of the RWRAC who represent a broad base of the community were actively engaged over a period of six months. The RWRAC has thirteen members, with two members being appointed by each member of the Board of Supervisors, and a representative from the Citizens' Water Advisory Committee, the Pima Association of Governments' Environmental Planning Advisory Committee, and the Arizona Water Association.

5.4 Regional Wastewater Reclamation Advisory Committee Review

After thorough review and consideration of public input, the Finance Sub-Committee and the full Regional Wastewater Reclamation Advisory Committee voted on the rate increases outlined in the 2015 Financial Plan.

On December 10, 2014, the Finance Sub-Committee voted 4-1 in favor in recommending to the full committee the rate increases as outline in the 2015 Financial Plan.

On February 19, 2015, the full committee voted 8-3 in favor of recommending to the Pima County Board of Supervisors the approval of three automatic annual rate increases of 4.0 percent beginning July 1 of 2015, 2016, and 2017. Included in the motion was a request that the County consider broadening the eligibility requirements for low income users in order to make that assistance available to more individuals. The letter of recommendation from the Committee Chair is included in Attachment 6.



5.5 Sewer Outreach Subsidy Program

Background

Recognizing that rising sewer user fees impact customers in different ways, the Department was authorized by the Pima County Board of Supervisors in July 2007 to create the Sewer Outreach Subsidy Program (Program) to provide assistance to those customers that have difficulty in paying their bill. The Program is a tiered rate structure based on annual federal poverty level guidelines. Depending on income and household size, ratepayers may qualify for a 75 percent, 50 percent, or 25 percent discount on their monthly bill.

Outreach

The Pima County Community Action Agency (PCCAA) administers the Program on behalf of the Department and advertises the Program within a network of over 30 emergency services, Community Service Block Grant agencies, and affiliated community based organizations. The roster includes organizations such as:

- Arizona Housing & Prevention Services
- Arivaca Coordinating Council
- Chicanos Por La Causa
- Greater Littletown
- Interfaith Community Services
- Picture Rocks Community Center
- Primavera Foundation
- Project PPEP
- Salvation Army
- San Ignacio Yaqui Council
- St. Vincent de Paul
- Tucson Indian Center
- Tucson Urban League

PCCAA's applicant assessment includes screening for inclusion in all eligible programs; therefore, anyone in contact with PCCAA for assistance will automatically be considered for the Sewer Outreach Subsidy Program. PCCAA also receives referrals from an extensive network of community agencies and organizations that exist within the County, such as the Pima Council on Aging.

Further outreach includes informational bill inserts with the customer's monthly bill. Attachment 7 includes the Sewer Outreach Subsidy Program bill inserts that have been mailed since Program inception.

Program Participation

As of June 30, 2014, Program participation has grown 166 percent since June 30, 2008. Table 21 outlines the number of Program participants each fiscal year since the inception of the Program in 2007.

Table 21. Sewer Outreach Subsidy Program Participation

Fiscal Year	Program Participants*	Annual Percentage Change
2007/08	1,377	
2008/09	1,830	32.9
2009/10	1,808	-1.2
2010/11	2,450	35.5
2011/12	2,724	11.2
2012/13	3,220	18.2
2013/14	3,659	13.6
2014/15		

Financial Impacts

Department-funded operations and maintenance expenses for the Program are \$104,656 for fiscal year 2015/16. Table 22 outlines the fiscal year 2015/16 requested budget.

Table 22. Sewer Outreach Subsidy Program O&M Budget (dollars)

Item	Total
Salaries	\$ 62,500
Benefits	\$ 32,500
Leases and Rental	\$ 5,400
Telephone and Internet	\$ 2,156
Electricity	\$ 900
Office Supplies	\$ 600
Machinery and Equipment Services	\$ 400
Postage and Freight	\$ 100
Printing and Microfilming	\$ 100
Total	\$ 104,656

Reduced revenue to the Department for subsidies provided by the Program in fiscal year 2015/16 is approximately \$1.1 million. Table 23 outlines the subsidized costs for each Full Poverty Level (FPL) tier since Program inception in 2007.

Table 23. Sewer Outreach Subsidy Program Discounts (dollars)

Fiscal Year	Program Discounts*			
	75% at 100% FPL	50% at 125% FPL	25% at 150% FPL	Totals
2007/08	\$ 56,394	\$ 10,167	\$ 2,665	\$ 69,226
2008/09	\$ 170,465	\$ 30,914	\$ 8,856	\$ 210,235
2009/10	\$ 424,359	\$ 68,231	\$ 18,588	\$ 511,178
2010/11	\$ 667,147	\$ 81,696	\$ 16,640	\$ 765,483
2011/12	\$ 991,829	\$ 127,873	\$ 30,117	\$1,149,818
2012/13	\$ 906,879	\$ 146,241	\$ 41,172	\$1,094,292
2013/14	\$ 913,395	\$ 161,807	\$ 49,418	\$1,124,619
2014/15**	\$ 928,940	\$ 163,516	\$ 50,407	\$1,142,864

If there is an increase in the number of applicants to the Program, additional staffing may be required. Discussions will be ongoing between the Department and PCCAA as the Program expands and will include Program modifications or recommendations based any resulting constraints.

Program Expansion

The Program has expanded and improved since inception. Initially, the subsidy only applied to the volumetric portion of the sewer user fees. On March 20, 2010, the subsidy was expanded to also cover the service fee portion of the bill.

The Department is recommending a programmatic change to require a triennial recertification process for households on a fixed income, e.g., social security and/or pensions and over age 65, rather than the standard yearly recertification. This would require a change to the current ordinance and is scheduled for consideration at the April 14, 2015, Board of Supervisors meeting.

* Finance and Risk Management Customer Service

** Fiscal Year 2014/15 is projected on a straight line trend.

Future discussions will center on increasing program participation. It is not typical for renters to pay a water or wastewater bill; therefore, many federal poverty level households do not qualify for the discount. With the homeownership rate in Pima County at 62.7 percent, and 19.2 percent²⁷ of the population below poverty level, Program participation could be increased. Conversations with all applicable parties are ongoing regarding program expansion opportunities.

Industry Comparison

Table 24 provides details on Tucson Water's Low Income Subsidy Program as compared to Pima County's.

Table 24. Tucson Water/Pima County Wastewater Reclamation Comparison

	Tucson Water	Pima County Wastewater Reclamation
Total Number of Residential Customers	~ 225,000	253,000
Program Participants	~ 3,000	3,659
Percent of Customer Base	~ 1.3	1.4
Revenue Not Billed	~ \$ 500,000	\$ 1,142,864
Subsidy Available	50% for those at 100% poverty level	25%, 50%, or 75% for those at 150%, 125%, or 100% poverty level
Recertification	Annually	Triennial for those on a fixed income*, annually for others

²⁷ 2009-2013 quickfacts.census.gov, Retrieved March 30, 2013

* Pending Board of Supervisors Approval

6. Conclusion

The Department has faced many significant capital improvement, operational, and financial challenges over the past decade. These challenges have been overcome by applying careful expenditure controls to both O&M and capital projects and by establishing best practices in energy management, safety, and environmental compliance.

The Department has adopted more efficient operational practices and other cost cutting measures over the past several years. Use of continual improvement approaches, asset management, and performance benchmarking are examples of how the Department is optimizing management approaches to provide better information for daily and long-term decision-making. Coupled with operational initiatives such as energy efficiency, green power generation, reclaimed water reuse, and resource recovery, the Department is focused on containing costs of utility operations.

Enhancing infrastructure, optimizing plant performance to meet clean water goals, all while ensuring that public funds are effectively and efficiently spent, will continue to be a daily balancing act for the Department. The Department continues to work diligently to provide high quality services to ratepayers and optimize management and performance, despite increasing cost pressures and regulatory obligations. Inflationary cost pressure, increasing mandates, and growing community needs present common challenges for the Department to balance in prioritizing both short and long-term water quality investments, services, and rates.

