



MEMORANDUM

Date: April 22, 2009

To: Chair, Vice Chair and Members
Pima County Bond Advisory Committee

From: C.H. Huckelberry
County Administrator

Re: November 2009 Sewer Revenue Bond Issue

Background

The capital needs of the wastewater system have been well documented. Significant capital investment must occur in the near term in order to essentially replace the 60-year old Roger Road Wastewater Treatment Facility and to make substantial modifications and upgrades to the Ina Road facility. These actions alone are expected to cost nearly \$512 million (2006 dollars). The Regional Wastewater Reclamation Department is undertaking a significant capital program, hence their request for \$565 million in revenue bond authorization. The Bond Advisory Committee has previously voted to endorse a November 2009 revenue bond election for this purpose. The Bond Advisory Committee subsequently voted to defer any General Obligation Bond issue until November 2010 and asked staff to prepare an appropriate analysis and report regarding the possibility of delaying the Wastewater Revenue Bond issue to this same date.

Primary Driver of Date for Revenue Bond Authorization

The primary driver of a revenue bond election is related to compliance with regulatory requirements of the Arizona Department of Environmental Quality wherein they have required effluent produced and discharged by the two large regional wastewater treatment facilities, Roger and Ina, to meet specific environmental performance criteria. The capital investments for replacement of the Roger Road facility and significant modification of the Ina Road facility will allow for this compliance. Presently, a good deal of preconstruction analysis and design activities are underway to meet these deadlines. This work requires funding. However, major capital construction requiring most capital financing will not begin until 2011.

Bridge Financing for Pre-Construction Activities

The Board recently authorized Certificates of Participation (COPS) in the amount of \$35 million. In this case, Certificates of Participation provide short-term borrowing to facilitate long-term capital investment and bridge the time difference between the need for funding and actual voter authorization of revenue bond funding. Attached is a list of projects financed with the Certificates of Participation. A very large amount of this financing is related to pre-construction and design activities related to the Roger and Ina Road facilities. Given

this bridge financing and improved capital improvement planning by the Regional Wastewater Reclamation Department, it is possible to postpone the November 2009 revenue bond election until November 2010, but no later. It is likely another \$75 million in COPS will be sold in 2010 to support the program pre-bond authorization.

Options if November 2010 Revenue Bond Authorization is Rejected by the Voters

In the pre-planning for the significant wastewater capital program that is now being undertaken, planning was conducted on an option to privately finance the necessary capital improvements. This option was rejected early in the planning process simply because it is more expensive than voter authorized bond financing. Private funding of these capital improvements, based on a recent analysis by our Finance and Risk Management Department, indicates private financing would probably increase the cost of borrowing by 2 to 2.5 percentage points. Given the potential initial borrowing of \$565 million, and the subsequent borrowing of \$310 million, the 15-year life of the bond financing assuming straight-line principal and interest repayment, the added cost to the ratepayer for rejecting voter authorized bond financing, and requiring private placement financing paying only a 2 percent premium above public tax-free financing would be in excess of \$130 million. The additional cost of privately financing just \$565 million would be in excess of \$85 million.

Another option would be to simply finance the capital expansion of both Roger and Ina through pay-as-you-go financing. Obviously, such would be the least expensive method of paying for the improvements. However, the rate increases in order to support such an action would be astronomical. Assuming 300,000 sewer connections in the region at the time of the intensive capital construction expenditure, the average monthly sewer user bill would increase from approximately \$30 per month to nearly \$80 per month.

Attached for your information is a memorandum from Deputy County Administrator John Bernal and Wastewater Reclamation Director Michael Gritzuk.

Recommendation

It is recommended the Bond Advisory Committee withdraw their previous authorization for a sewer revenue bond issue in November of 2009 and take appropriate action to request that the Board of Supervisors place on the ballot in the November 2010 election cycle a sewer revenue bond question totaling \$565 million.

CHH/jj

Attachment

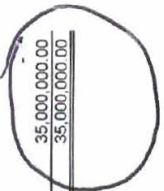
- c: The Honorable Chairman and Members, Pima County Board of Supervisors
John Bernal, Deputy County Administrator for Public Works
Michael Gritzuk, Regional Wastewater Reclamation Director
Tom Burke, Finance and Risk Management Director
Nicole Fyffe, Executive Assistant to the County Administrator

(Use of COPS)

AVRA Valley BNRD 1.3

10.2 - I N A Rd - Mission View W/H 2 5.7M - Roger Road 3.5M

Center #	Project ID	Project Name	2008-09	2008 COPs	Difference	2009-10	Total
W700018	300023	Marana Colonia Project	(59,370.00)	59,370.00	-	-	-
W750020	3AVS01	WW Avra Valley WRF Security	12,259,799.00	(10,246,896.00)	2,012,903.00	64,000.00	2,286,103.00
	3CDT120	SS6.11 Avra Valley BNRD Expansion to 4 MGD	150,000.00	-	150,000.00	273,200.00	200,000.00
	3CDT180	Corona de Tucson WWTF-Sludge Storage Facility	28.00	-	59,125.00	50,000.00	59,125.00
	3CL583	Corona de Tucson WWTF 0.30 to 1.30 MGD Expansion	457,000.00	(1,416.00)	465,584.00	460,000.00	925,584.00
	3CON01	Capstan Lift Station	55,900.00	-	55,900.00	200,000.00	200,000.00
	3CON02	Region Wide Conveyance Odor Control System	200,000.00	-	200,000.00	200,000.00	305,900.00
	3CON03	RW Conveyance Vapor Treatment Unit Odor Control	200,000.00	-	200,000.00	200,000.00	400,000.00
	3CPS04	Region Wide Conveyance Odor Control	200,000.00	-	200,000.00	214,000.00	214,000.00
W708703	3CP804	Continental Ranch Regional Pump Station	-	-	-	214,000.00	214,000.00
W755090	3F5090	Ina Recycle Line Modifications	283,000.00	(114,322.00)	168,678.00	168,678.00	168,678.00
W708510	3GV511	Green Valley WWTF - Screens, Washer & Compactors	600,000.00	-	600,000.00	360,000.00	960,000.00
W750151	3GV586	Green Valley Recharge Monitoring System	2,402.00	-	2,402.00	2,402.00	2,402.00
W750150	3GVW85	Green Valley Flood Control Protection Wall	34,032.00	(19,032.00)	15,000.00	15,000.00	15,000.00
W750180	3IHX12	Ina Rd WRF Odor Control for Centrifuge	190,000.00	-	170,402.00	325,000.00	325,000.00
W755315	3IHX12	Ina Plate & Frame Heat Exchangers	62,126.00	(19,598.00)	10,444.00	170,402.00	170,402.00
W708115	3IRC15	Ina Road WPCF Ingress/Egress Roadways	94,000.00	(51,682.00)	94,000.00	94,000.00	10,444.00
W708116	3IRD16	Ina Rd WPCF Concrete Floor Replacements	900,000.00	-	900,000.00	3,100,000.00	94,000.00
W708107	3IRE07	Ina Rd WPCF Digester Gas Equipment Replacement	114,000.00	-	114,000.00	736,000.00	4,000,000.00
W708104	3IRG11	Ina Rd WPCF Enclosed Transfer Station Dewatering	50,000.00	-	50,000.00	1,450,000.00	850,000.00
W708105	3IRP05	Ina Rd WPCF Gravity Belt Thickeners for Biosolids	95,000.00	-	95,000.00	5,000.00	1,500,000.00
W708102	3IRR02	Ina Rd WPCF Lighting Improvements	325,000.00	-	325,000.00	325,000.00	100,000.00
W708103	3IRS01	Ina Rd WPCF Primary Sludge Gates	19,026.00	-	19,026.00	150,000.00	150,000.00
W708109	3IRS09	Ina Rd WPCF Relocate Final Effluent Samplers	150,000.00	-	150,000.00	539,500.00	350,000.00
W708112	3IRU13	Ina Rd WPCF SCADA Process Optimization	250,000.00	-	250,000.00	600,000.00	200,000.00
W755314	3ITS02	Ina Rd WPCF Upgrade of Blower Heat Exchanger	340,000.00	-	340,000.00	340,000.00	340,000.00
W746021	3JOC0A	Ina Road Telephone System	525,000.00	-	525,000.00	525,000.00	525,000.00
W746100	3MAR10	Ina Road WRF Washer Compactor Replacement	6,700,020.00	(2,023,325.00)	4,676,695.00	2,197,692.00	455,000.00
W750210	3MWSL01	SS6.02 Large Line Rehabilitation & Construction - JOC	150,000.00	-	150,000.00	50,000.00	5,226,695.00
	3MWSL01	SS6.10 Marana WWTP Expansion (1.0 mgd) (2004 Auth Phas	1,275,189.00	(73,895.00)	1,201,304.00	4,506,000.00	200,000.00
W750240	3PIT03	Mission View Wash	3,661.00	-	3,661.00	3,661.00	5,707,304.00
W760705	3RHE01	Prince Rd. & I-10 ADOT Sewer Modifications	754,982.00	-	754,982.00	100,000.00	100,000.00
W760706	3RIR05	Roger Rd WRF Heat Exchanger for Gas System	45,444.00	-	45,444.00	45,444.00	754,982.00
W760708	3RIR08	R07C ROMP Ina Rd WPCF BNRAS System Modification	10,000.00	-	10,000.00	10,000.00	810,426.00
	3RIR08	R07D Ina Rd WPCF Biosolids Facilities Improvements	10,000.00	-	10,000.00	10,000.00	10,000.00
	3RIR08	R07E Ina Rd WPCF Class A Biosolids Improvements	10,000.00	-	10,000.00	146,305.00	146,305.00
W760709	3RSC15	Roger Rd WRF Odor Control for Digesters	162,052.00	-	162,052.00	1,800,000.00	1,800,000.00
W760710	3RSC15	Randolph - Clean Screens with reclaim - Ina JOC	680,000.00	-	680,000.00	462,092.00	462,092.00
W760711	3RWC11	SS6.04 ROMP Plant Interconnect	162,052.00	-	162,052.00	300,000.00	300,000.00
W760712	3RWC12	ROMP SCADA	680,000.00	-	680,000.00	200,000.00	200,000.00
W760714	3RWC14	Roger Rd WRF Process Water	1,459,162.00	(595,877.00)	863,285.00	1,500,000.00	1,502,438.00
W760715	3RYP89	R07C ROMP 32 MGD Reclamation Campus	330,000.00	-	330,000.00	1,612,927.00	200,000.00
W746030	3SCP03	R07H Roger Rd WWTP Demolition	404,587.00	-	404,587.00	1,300,745.00	1,300,745.00
W746031	3SCP04	R07J ROMP Staff Facilities @ WRC	5,000.00	-	5,000.00	1,699.00	1,699.00
W755318	3SCP06	Richey Yard Field Operations Division Facility	5,000.00	(3,705.00)	1,295.00	195,000.00	150,000.00
W708601	3SPS01	SS6.03 Santa Cruz Interceptor, Prince to Franklin (2004 Auth	592,000.00	(35,452.00)	556,548.00	50,000.00	606,548.00
W755310	3W5080	Sabino Creek Pump Station	80,000.00	(34,769.00)	45,231.00	45,231.00	45,231.00
	3W5080	Sunrise Lift Station	29,759,090.00	(13,101,502.00)	16,657,588.00	20,868,778.00	37,526,366.00
	3W5080	Ina Scum Pumping System	13,462,198.00	-	16,296,892.00	18,703,108.00	8,659,265.00
	3W5080	Roger Road SCADA Upgrades	16,296,892.00	-	16,296,892.00	18,703,108.00	35,000,000.00
		Total	29,759,090.00	(13,101,502.00)	16,657,588.00	20,868,778.00	23,440,406.00
		2008 COPs	13,462,198.00	-	16,296,892.00	18,703,108.00	35,000,000.00
		2009 COPs	16,296,892.00	-	16,296,892.00	18,703,108.00	35,000,000.00





MEMORANDUM

Public Works Administration



DATE: April 13, 2009

TO: C.H. Huckelberry
County Administrator

FROM:  John M. Bernal
Deputy County Administrator

RE: **Bond Advisory Committee (BAC) Review of Regional Wastewater Reclamation Department (RWRD) Financing Needs**

At the March 20, 2009 BAC meeting, we committed ourselves to providing a report about the consequences of changing the revenue bond authorization election determination made by the Committee at a prior meeting. I understand that the original draft report from the RWRD that was furnished to the Finance and Risk Management Department is being substantially revised but I have not seen a new draft.

The RWRD has developed substantial information in support of the financial plans that have reflected significant capital investments for projects that are now being advanced, including the Regional Optimization Master Plan program. These financial plans have been reviewed and adopted by the Board of Supervisors based on our best estimates of anticipated financing actions, particularly revenue bond authorizations and sales. As we prepare our recommendation to the Bond Advisory Committee, I recommend that we take into account the data contained in the attached April 8, 2009 memorandum from the RWRD Director. As noted in this communication, the impact to sewer rate payers may be substantial depending upon the financing timetable that we pursue.

The primary assumption in all of this analysis is the unwavering commitment to meet the regulatory timeline that is contained in our permits. Failure to complete the required improvements under this timeline could present consequences that are not in the best interest of this region.

As further noted in this report, exploration of private financing opportunities, that could postpone the need for immediate cash for these projects, can be pursued however the increased financing costs are certainly a major consideration.

We are prepared to assist with preparation of the final response to the Bond Advisory Committee for their scheduled meeting of May 1, 2009.

JMB:jgs

Attachment

Cc: Mike Gritzuk, Regional Wastewater Reclamation Department Director
Jeff Nichols, Regional Wastewater Reclamation Department Deputy Director
Tom Burke, Finance and Risk Management Department Director



MEMORANDUM

Date: March 23, 2009

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator 

Re: Bond Advisory Committee Meeting of March 20, 2009 and Decision to Pursue a Bond Authorization In 2010 as Opposed to 2009

The Bond Advisory Committee met on Friday and took action on a number of items, including the normal bond update and monitoring reports as well as amendments to the Bond Implementation Program that had become necessary.

In addition, the Bond Advisory Committee discussed the timing of a future bond election. It was the consensus of the Committee that a General Obligation bond authorization not be pursued in 2009, but instead 2010.

Further, the Bond Advisory Committee requested additional information regarding a sewer revenue bond issue that had previously been authorized by Committee action for 2009. It is possible that the information that will be provided by staff may result in the Committee rescinding their previous recommendation regarding holding a sewer revenue bond issue in November of 2009 and postponing such a revenue bond authorization until November of 2010.

CHH/jj

c: Martin Willett, Chief Deputy County Administrator
Hank Atha, Deputy County Administrator for Community and Economic Development
John Bernal, Deputy County Administrator for Public Works
Dennis Douglas, Deputy County Administrator for Health and Medical Services
Nicole Fyffe, Executive Assistant to the County Administrator

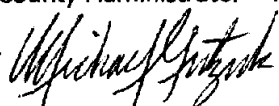


PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

MICHAEL GRITZUK, P.E.
DIRECTOR

PH: (520) 740-6500
FAX: (520) 620-0135

April 13, 2009

TO: John M. Bernal, P.E., Deputy County Administrator – Public Works
FROM: Michael Gritzuk, P.E., Director 
SUBJECT: Need to Proceed with ROMP Financial Plan

The Regional Optimization Master Plan (ROMP) was initiated to develop a program to comply with regulatory requirements to reduce nutrient levels in wastewater effluent discharged to the Santa Cruz River. Plans of how to comply with these regulatory requirements regarding wastewater treatment facility design and level of treatment were completed and incorporated into the ROMP. Capacity and systems condition assessments for Roger Road Wastewater Reclamation Facility (WRF), Ina Road WRF, and their respective conveyance systems were also undertaken to assure compliance with regulatory requirements and to assure overall long-term system reliability.

To meet new regulatory permit requirements, process modifications and changes are required to lower ammonia and total nitrogen discharge levels. Other relevant and pertinent issues include addressing odor control, safety, rehabilitation and upgrades of the existing facilities to be compliant with environmental, regulatory and building code requirements.

The first step in meeting the specific compliance requirements was the submission of Letters of Intent to the Arizona Department of Environmental Quality in January, 2007 describing the County's plan to comply with the requirements. Attachment 1 is the letter submitted in response to the requirement contained in Part VI *Special Condition, B (1) Ammonia Toxicity Variance Terms and Conditions* of the Roger Road WRF Arizona Pollution Discharge Elimination System (AZPDES) Permit No. AZ0020923. Attachment 2 is the letter written in response to the requirement contained in Part VI *Special Condition, B (1) Ammonia Toxicity Variance Terms and Conditions* of the Ina Road WRF AZPDES permit AZ0020001. The *Special Conditions* of the Roger Road WRF include:

1. Regional Wastewater Reclamation Department (RWRD) must complete the initial engineering study which will make a recommendation for upgrading (or replacing) the Roger Road WRF and submit to ADEQ a letter documenting the selected construction option by January 30, 2007
2. RWRD must award a contract for construction necessary to implement the selected option from Part V.B.1 by January 30, 2011
3. The necessary treatment improvements will be operational and producing effluent with non-toxic ammonia levels by January 30, 2015.

The *Special Conditions* of the Ina Road WRF include:

1. RWRD must complete the initial engineering study which will make a recommendation for upgrading the Ina Road WRF and submit a letter to ADEQ documenting the selected option by February 1, 2007

2. The 12.5 MGD expansion (first phase upgrade) at Ina Rod WRF must be completed and online (even if only in start-up mode) by December 31, 2006
3. RWRD must award a construction contract by December 31, 2010 for the second phase of upgrading the Ina Road WRF to achieve ammonia removal to non-toxic levels
4. The second phase construction at Ina Road WRF must be completed and the upgraded facility must be on-line and producing effluent with non-toxic ammonia levels by January 31, 2014

Each facility's permit currently includes a variance that allows the facility to continue to operate until new treatment trains are constructed. Each permit sets deadlines for the construction process. Construction contracts for the Ina Road facility must be let by December 31, 2010 and the upgraded facility must be operating by January 30, 2014. Similarly, the Water Reclamation Campus construction contracts must be let by January 30, 2011 and the upgraded facility must be in operation by January 30, 2015.

If any of the above deadlines are missed, the County could be subject to federal or state penalties for each day the deadline is exceeded. These penalties could range up to \$25,000 per day (Arizona) or \$37,500 per day (Federal) depending upon which agency enforces. There is also the possibility of enforcement by private citizens under the citizens' suit provisions of the Clean Water Act.

Since the variances lapse as of the operational deadlines of the permits, federal or state penalties could also be applied for failure to meet the effluent toxicity test and ammonia nitrogen limits contained in the permits. Penalties for each of these could be assessed on a daily basis in addition to the permit deadline penalties. For example, if neither the Roger Road nor the Ina Road facility met the operational deadline and the facilities continued to fail the toxicity test plus exceed the ammonia nitrogen limit, federal enforcement against the County could result in penalties of \$225,000 per day for each calendar day until the facilities come into compliance. There is also the possibility of criminal enforcement that would result in additional cash penalties as well as potential jail time for County officials.

If the County misses the deadlines, the enforcement authorities also have the option of seeking a consent order or consent decree requiring the County to come into compliance on a court-enforced deadline. The order would likely include additional stipulated penalties for failure to meet interim and final compliance deadlines. For example, the cities of Atlanta and San Diego have experienced such orders in recent years. Both have spent substantial extra money to come into compliance on expedited bases *plus* Atlanta paid millions in fines. The enforcement authorities also have the ability to seek a moratorium on new connections to the two reclamation facilities and thereby largely shut down growth in the metropolitan area until compliance is achieved. Attachments 3 and 4 are articles related to utilities who have violated their permits/decrees and the actions taken against them by regulatory agencies.

RWRD has complied with and intends to continue to comply with the *Special Conditions* contained in both of the AZPDES permits. RWRD has entered into a number of consulting, design and construction contracts in its efforts to maintain compliance. The contracts are summarized in the table below:

Consultant/ Contractor	Contract Date	Contracted Services	Dollars (Millions)	Status
Greely & Hansen, et al	February 2006	ROMP Program Study	\$2.2	Complete
Greely & Hansen/Parsons	January 2008	Program Management Services for ROMP CIP Implementation Project (contract includes two additional 3-year contract Renewals	\$4.5	On-going
Raftelis Financial Consultants	June 2007	Financial Advisor/Financial Plan	\$0.3	On-going
Hawkins, Delafield & Wood, LLP	March 2008	Project delivery methods, legal assistance	\$0.25	On-going
Brown & Caldwell	June 2007	Roger Road WRF to Ina Road WRF Plant Interconnect Gravity Sewer Design Project	\$2.3	Complete
Sundt/Kiewit Construction	April 2008	Construction Manager at Risk (CMAR) contract for the Roger Road WRF to Ina Road WRF Plant Interconnect. A Guaranteed Maximum Price (GMP) has been negotiated and authorized by the Board of Supervisors	\$25.2 (GMP)	On-going
CH2M Hill	February 2008	Ina Road WRF Upgrade and expansion design contract including construction services, commissioning	\$18.0	On-going
MWH Constructors	April 2008	Pre-construction design services and construction contract	\$2.0 (Pre-construction services) \$219 construction (budget)	On-going
Jacobs Field Services of North America, Inc.	November 200	Project Management Services for Ina Road WRF Upgrade and Expansion	\$12	On-going
EMA Services	November 200	Supervisory Control and Data Acquisition (SCADA) Master Plan	\$1.6	On-going

In addition to the consulting and contractual efforts noted above the RWRD continues consideration of the Design-Build-Operate procurement delivery process for the Water Reclamation Campus that will replace the current Roger Road WRF. On January 30, 2009, Pima County issued a Request for

Qualifications, soliciting Statements of Qualifications (SOQs) from interested firms to obtain permits for the design, construction, start-up and commissioning of a water reclamation facility and to operate and maintain the Facility (including all repair and replacement). Submission of the SOQs are due on May 1, 2009. Under the Design-Build-Operate (DBO) delivery method, a single entity will be procured and will be accountable to the County for the design, construction and operation of the facility. In addition to the treatment facilities to be located at the Water Reclamation Campus, the Campus will also include a central laboratory and staff facilities. The procurement method for these facilities has not yet been determined.

Also, a procurement process has not yet been determined for two processes at the Ina Road WRF site. The two processes are the production of electricity through the burning of methane produced as a by-product of the bio-solids process and the disposal of the bio-solids in an environmental safe manner.

Since the completion of the Regional Optimization Master Planning process in January 2007 the RWRD has completed two annual Financial Plans. Both Financial Plans have assumed a \$565 million bond authorization as the major funding source for delivering the ROMP as well as the balance of the RWRD's capital improvement program dealing with the repair, rehabilitation and increased capacity needs in the conveyance and treatment systems.

Both Financial Plans have included significant rate increases that have been authorized by the Board of Supervisors, to include the rate increases necessary for the RWRD to deliver the ROMP, the balance of the capital improvement program, and the on-going operation of the conveyance and treatment systems to protect the public health, safety, and the environment:

FY 2007/08 Financial Plan

- Increase Service Fee by 9% and 9.5% in January and July 2008, respectively
- Increase in Volumetric fee of 9% and 9.5% in January and July 2008, respectively
- Implement previously approved 6% increase to connection fees in January 2008 and implement a 9.5% increase in connection fees in July, 2008.

FY 2008/09 Financial Plan

- Increase the Service Fee by \$1.50 in March, 2009
- Increase the Volumetric Fee by 12.75% (\$1.71) in March, 2009
- Increase the Volumetric Fee by 12.75% (\$1.93) in July, 2009
- Increase the Service Fee by \$1.50 in January, 2010
- Increase the Volumetric Fee by 12.75% (\$2.18) in January, 2010

Prior to the increase in the Service and Volumetric Fee in January 2010 the RWRD is required to return to the Board of Supervisors and provide an update on the economic conditions within Pima County and the modifications to the Department's Sewer Outreach Subsidy Program and whether the Program has been more successful in assisting those customers in need for assistance.

As was mentioned previously, both the FY 2007/08 and FY 2008/09 Financial Plans have assumed a Sewer Revenue Bond Authorization of \$565 million. The FY 2007/08 Financial Plan assumed a 2008 Sewer Revenue Bond Authorization and when that did not occur there was upward pressure on sewer user fee increases. This pressure was the result of the necessity to raise approximately \$19.1 million in System Development Funds (cash) in lieu of having access to a 2008 Sewer Revenue Bond Authorization.

While the use of Sewer Revenue Bonds is not the least costly method to finance the Department's Capital Improvement Program (CIP) in general, and its ROMP Program in particular, there are advantages of funding capital projects with Sewer Revenue Bonds. The advantages are:

- Intergenerational equity – those who will benefit from the improvements will assist in paying for them
- Increased customer base to dampen the impact per customer when paid over time
- Debt service expenditures are not subject to the expenditure limitation
- Give the County the ability to work with the Water Infrastructure Finance Authority of Arizona (WIFA) to receive a discounted interest rate on debt issuances (approximately 0.5% to 1.0% decrease in interest cost), or principal forgiveness (grants). It should also be noted that WIFA currently enjoys a AAA bond rating

As was stated previously, the use of Sewer Revenue Bonds is not the least costly method to finance the Department's CIP. That least costly method would be "pay-as-you-go" (i.e., cash). While cash funding of the CIP and more particularly the ROMP would be the least costly in total dollars spent to deliver the program there are disadvantages to doing so. The disadvantages are:

- Current customers would be paying for improvements that would benefit future customers for 30 to 50 years (no intergenerational equity)
- Substantially smaller customer base to bear the cost of the capital improvements. Individual increases would be greater
- Sewer fee rate increases would need to be increased substantially higher than the already substantial increases our rate payers have seen
- Expenditures would be subject to the expenditure limitation and this might have a negative impact on other County programs, unless the County was able to secure financing through the use of Certificates of Participation (COPS), which are long-term debt and not subject to the expenditure limitation. It should be noted that COPS increase the cost of the program by the amount of interest paid on the debt. Also, the interest rate on COPS may be higher than that on Sewer Revenue Bonds and WIFA loans

A third option for funding a portion of the Department's CIP would be the use of private financing. While there are a number of ways in which private financing could be utilized to fund portions of the RWRD's capital program, the most viable option would involve the delivery of certain projects using the Design-Build-Finance-Operate (DBFO) approach. As was stated previously, the RWRD continues consideration of the Design-Build-Operate procurement delivery process for the Water Reclamation Campus to be constructed in the vicinity of the current Roger Road WRF. It may also be possible to have the DBO contractor or some other private financial entity provide project financing for certain projects such that the RWRD would not incur capital costs for these projects until they are complete (turn-key). At that time the RWRD would be required to reimburse the contractor for the project costs and their costs associated with providing project financing. It should be noted that while private financing such as this may assist in delaying a Sewer Revenue Bond authorization that there are disadvantages to its use. The disadvantages are:

- Increased cost of capital. Due to the taxable nature of corporate debt, long-term private financing would likely cost approximately 1.0% to 2.0% more in associated interest cost than tax-exempt sewer revenue bonds. The interest rate spread between short-term private project financing and tax-exempt short term debt would probably be even greater. While it is possible to eliminate this interest rate spread through the use of "private activity bonds" (PABs), the availability of PABs is subject to a volume cap that is generally used for other eligible projects such as public housing and solid waste facilities, leaving none available for water and sewer

projects. Additionally, in order to obtain corporate debt for a DBFO project, the contractor must take an equity stake in the project. The required equity investment varies by project, but is typically in the range of ten to fifteen percent. The return on equity expected by most contractors is in the range of twelve to fifteen percent, thereby making the difference between the cost of public financing and private financing even greater

- Expenditures would likely be subject to the expenditure limitation and this might have a negative impact on other County programs

There are also advantages to private financing and they include:

- Voter authorization may not be needed since the County would not incur debt
- Financing of project costs (design and build) would be born by the contractor and repaid through monthly payments over an extended period of time, allowing for a larger customer base to shoulder the cost over a longer period of time.

As previously noted, there was increased pressure for greater sewer user fees realized by not moving forward with a 2008 Sewer Revenue Bond Authorization. If it is decided to not move forward with a 2009 Sewer Revenue Bond Authorization there will be upward pressure to increase sewer user fees in January 2010 above the rates recommended in the FY 2008/09 Financial Plan. The recommended rate increases for January 2010 as approved by the Board of Supervisors, subject to certain conditions, are an increase in the Service Fee of \$1.50/month (to \$11.82/month) and an increase in the Volumetric Fee of 12.75%. If a sewer revenue bond authorization is delayed until November 2010 the increase to the Service Fee in January 2010 would need to be increased to \$13.32/month and the increase to the Volumetric Fee would need to be 29.0% in July 2009 and 44.5% in January 2010. Under this scenario a "typical customer" (8 ccf's of water use) bill would rise to \$41.57 after the January 2010 increase, or 43% higher than the current plan. Without increases of this magnitude, RWRD would not have the funds necessary to complete the projects necessary to maintain compliance with regulatory requirements.

Attachment 5 is a line graph that demonstrates a Comparison of Rate Adjustments Under Various Bond Authorization Options, to include the current plan, modification of the current plan to one in which a sewer revenue bond authorization is not sought until a later year (i.e., 2010 or 2012) and a total "pay-as-you-go" program (i.e., no sewer revenue bond authorization). As can be seen, the current financial plan allows for the most graduated rate increases of any of the alternatives while waiting until 2012 for a sewer revenue bond authorization and the "pay-as-you-go" option lead to the steepest increase in rates. The latter two options need to generate significantly more revenue in a shorter period of time to cover the cash requirements of the capital program, and the ROMP in particular.

In closing, the management of the RWRD understands that due to economic conditions beyond our control the timing of a 2009 Bond Authorization may not be the most advantageous. The significant rate increases adopted by the Board of Supervisors in February 2009 also came at an inopportune time, but were necessary for RWRD to maintain regulatory compliance with AZPDES permits. A 2009 Bond Authorization would allow the RWRD to continue to maintain compliance with their AZPDES permits and as noted above, dampen rate increases to the extent possible given the size of the CIP and in particular the ROMP Program.

MG:mo

Attachments

cc: Jeff Nichols, Deputy Director – Administrative & Financial Services



PIMA COUNTY
WASTEWATER MANAGEMENT DEPARTMENT
 201 NORTH STONE AVENUE
 TUCSON, ARIZONA 85701-1207

MICHAEL GRITZUK, P.E.
 DIRECTOR

PH: (520) 74C-6500
 FAX: (520) 62C-0135

January 26, 2007

Joan Card
 Water Quality Division Director
 Arizona Department of Environmental Quality
 1110 W. Washington
 Phoenix, AZ 85007

RE: Roger Road Wastewater Treatment Facility (WWTF) AZPDES Permit No. AZ0020923

Dear Ms. Card:

This letter is written in response to the requirement contained in Part VI *Special Conditions*, B(1) *Ammonia Toxicity Variance Terms and Conditions* of the Pima County Roger Road Wastewater Treatment Facility AZPDES permit AZ0020923 issued on March 2, 2006 which requires modifying the Roger Road facility to remove nitrogen ammonia to below toxic levels.

The Pima County Wastewater Management Department (PCWMD) retained the services of Greeley and Hansen Engineers to perform a comprehensive evaluation of the long range planning goals for our Department that we have termed the Regional Optimization Master Plan or ROMP. The purpose of the ROMP study was to perform a holistic evaluation of current treatment plant conditions and continued viability in relation to current and anticipated community needs and regulatory requirements. A key topic addressed in ROMP was the development of a plan to comply with the AZPDES permit requirement and also included odor control, pathogen reduction and improvements in the quality of Biosolids production.

As the results of the ROMP study have the potential to impact numerous stakeholders within Pima County, not just PCWMD, a comprehensive stakeholder panel was solicited for participation. Participants included a scientific peer review panel consisting of Tucson Water, Town of Marana, Town of Oro Valley, Metropolitan Water District, the Pima County Board of Supervisors appointed Wastewater Advisory Committee, Pima Association of Governments, Raftelis Financial Consultants, Brown and Caldwell Engineering, Malcolm Pirnie Engineering, Black and Veatch Engineering, and Pima County Natural Resources Parks and Recreation Department. Evaluation criteria consisted of the following:

- Evaluate and recommend facility operations needed to meet current and anticipated future regulatory requirements
- Evaluate and recommend facility operations needed to meet the anticipated capacity demand through 2030
- Evaluate and recommend facility changes to assure reliable and effective future operability
- Evaluate and recommend facility operations to meet the needs of the Tucson Water reclaimed water system
- Evaluate and recommend facility operations to minimize financial impacts on Department ratepayers
- Evaluate and recommend facility operations to meet community needs

This evaluation of the facility configuration concluded with the following recommendations:

- **Roger Road WWTF** - Construct a new 32 MGD water reclamation treatment plant with a 5-stage Bardenpho treatment process adjacent to the existing Roger Road WWTP and decommission the existing facility
- All Biosolids generated in the new water reclamation facility will be conveyed to and processed at a Regional Biosolids Facility to be located at the Ina Road WPCF.
- **Plant Interconnect** – Construct a new plant interconnect pipeline between the new water reclamation treatment facility and the existing Ina Road WPCF.
- Expand the existing 37.5 MGD Ina Road WWTP to a capacity of 50 MGD.
- All facilities will be designed to meet the capacity needs to 2030.

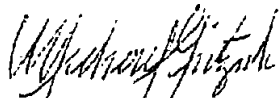
When implemented, these recommendations are intended to achieve the AZPDES permit required reduction of ammonia to below toxic levels at the effluent discharge point of the new facility by the year 2015 as indicated in the permit.

The above ROMP plan was presented to the Pima County Board of Supervisors (BOS) on January 16, 2007 at which time the Board approved the plan and authorized the submission of this letter to you.

Additionally, it should be noted that while the preliminary cost estimate for these improvements (Ina and Roger Road upgrades) is approximately \$501,000,000 based upon 2006 unit cost estimates, this figure is expected to increase as cost estimates are further refined during the completion of the ROMP and due to cost escalations during the years of implementation of the ROMP. These projected costs far exceed the Department's funding ability through current system revenues. Several bond packages are necessary to fund these desired improvements. For these reasons, Pima County Board of Supervisors must also authorize an increase in revenues sufficient to pay for this effort.

We will keep you updated on the progress of this project as more information becomes available and welcome your comments to this plan. Please feel free to contact me at (520) 740-6500 if you have any questions.

Sincerely,



Michael Gritzuk, P.E.
Director

MG:mo

- c: The Honorable Chair and Members of the Pima County Board of Supervisors
C.H. Huckelberry, County Administrator
John M. Bernal, P.E., Deputy County Administrator – Public Works
Susan Keith, Director- ADEQ Southern Regional Office
Paul M. Bennett, P.E., Deputy Director – Planning & Engineering
Mike Bunch, Deputy Director – Conveyance & Development Services
Jackson Jenkins, Deputy Director – Treatment
Jeff Nichols, C.P.A., Controller
Andrew Richardson, Principal, Greeley & Hanson
Jerry Bish, P.E., Greeley & Hanson



PIMA COUNTY
WASTEWATER MANAGEMENT DEPARTMENT
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207
January 26, 2007

MICHAEL GRITZUK, P.E.
DIRECTOR

PH: (520) 740-6500
FAX: (520) 620-0135

Joan Card
Water Quality Division Director
Arizona Department of Environmental Quality
1110 W. Washington
Phoenix, AZ 85007

RE: Ina Road Water Pollution Control Facility (WPCF) AZPDES Permit No. AZ0020001

Dear Ms. Card:

This letter is written in response to the requirement contained in Part VI *Special Conditions, B (1) Ammonia Toxicity Variance Terms and Conditions* of the Pima County Ina Road Wastewater Treatment facility AZPDES permit AZ0020001 issued on January 2, 2006 to modify the Ina Road facility to remove nitrogen ammonia below toxic levels.

The Pima County Wastewater Management Department (PCWMD) retained the services of Greeley and Hansen Engineers to perform a comprehensive evaluation of the long range planning goals for our Department that we have termed the Regional Optimization Master Plan or ROMP. The purpose of the ROMP study was to perform a holistic evaluation of current treatment plant conditions and continued viability in relation to current and anticipated community needs and regulatory requirements. A key topic addressed in the ROMP was the development of a plan to comply with the AZPDES permit requirement and also included odor control, pathogen reduction and improvements in the quality of biosolids production.

As the results of the ROMP study have the potential to impact numerous stakeholders within Pima County, not just PCWMD, a comprehensive stakeholder panel was solicited for participation. Participants included a peer review panel consisting of Tucson Water, Town of Marana, Town of Oro Valley, Metro Water, the Pima County Board of Supervisors appointed Wastewater Advisory Committee, Pima Association of Governments, Raftelis Financial Consultants, Brown and Caldwell Engineering, Malcolm Pirnie Engineering, Black and Veatch Engineering, and Pima County Natural Resources Parks and Recreation Department. Evaluation criteria consisted of the following:

- Evaluate and recommend facility operations needed to meet current and anticipated future regulatory requirements
- Evaluate and recommend facility operations needed to meet the anticipated capacity demand through 2030
- Evaluate and recommend facility changes to assure reliable and effective future operability
- Evaluate and recommend facility operations to meet the needs of the Tucson Water reclaimed water system
- Evaluate and recommend facility operations to minimize financial impacts on Department ratepayers
- Evaluate and recommend facility operations to meet community needs

This evaluation of the facility configuration has been and consists of the following recommendations:

- **Ina Road WPCF** - Conversion of the existing High Purity Oxygen treatment train to a five stage Bardenpho treatment process capable of reducing nutrient concentration to levels required by the AZPDES permit at a treatment capacity of 50 MGD.
- Improvements will also include the development of a Regional Biosolids Treatment Facility at the Ina Road facility. Roger Road biosolids will also be treated and processed at the Regional Biosolids Facility located at the Ina Road WPCF.

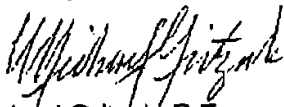
When implemented, these recommendations are intended to achieve the AZPDES permit required reduction of ammonia to below toxic levels at the Ina Road effluent discharge point by year 2014, as indicated in the permit.

The above ROMP plan was presented to the Pima County Board of Supervisors (BOS) on January 16, 2007, at which time the Board approved the plan and authorized the submission of this letter to you.

Additionally, it should be noted that while the preliminary cost estimate for these improvements (Ina and Roger Road upgrades) is approximately \$501,000,000 based upon 2006 unit cost estimates, this figure is expected to increase as cost estimates are further refined during the completion of the study and due to cost escalations during the years of implementation of the ROMP. These projected costs far exceed the Department's funding ability through current system revenues. Several bond packages are necessary to fund these desired improvements. For these reasons, Pima County will need to request and receive voter approval as design efforts are initiated. Similarly, the Pima County BOS must also authorize an increase in revenues sufficient to fund this effort.

We will keep you updated on the progress of this project as more information becomes available and welcome your comments on this plan. Please feel free to contact me at (520) 740-6500 if you have any questions.

Sincerely,



Michael Gritzuk, P.E.
Director

MG:mo

c: The Honorable Chair and Members of the Pima County Board of Supervisors
C.H. Huckelberry, County Administrator
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Atlanta Business Chronicle - October 23, 2006
atlanta/stories/2006/10/23/story11.html



Friday, October 20, 2006

City racks up sewer fines amid \$4B cleanup

Atlanta Business Chronicle - by [Ryan Mahoney](#) Staff Writer

State and federal authorities have fined the city of Atlanta \$183,000 through September -- more than the previous four years combined -- for allowing too much bacteria and chlorine in local streams.

The 36 separate incidents violate one of two consent decrees Atlanta signed in the late 1990s with the U.S. Environmental Protection Agency and the Georgia Environmental Protection Division to fix its aging sewer system. The city is spending an estimated \$4 billion on the overhaul.

The consent decree in question calls for Atlanta to split its combined stormwater and wastewater flows into separate lines to reduce overflows during heavy storms.

Although the penalties assessed under it this year are the highest since the retrofit got rolling, they pale in comparison to the roughly \$20 million in fines Atlanta paid out during the 1990s, when overflows were commonplace.

Violations under the other consent decree -- which covers most of the rest of the system, where stormwater and wastewater are already separate -- have remained fairly stable since major construction got under way and should show a marked decrease in 2006, according to Sally Mills, deputy commissioner of the city's watershed management department.

The city was fined \$358,500 for 615 discharges and overflows under that agreement in 2005 (versus \$341,000 in 2004), Mills said, the last year for which figures are available. She attributed the anticipated drop-off in those violations to intensive cleaning and repair efforts, as well as several large capital projects aimed at increasing capacity.

Major incidents, such as the 500,000-plus gallons of raw sewage that were dumped into Nancy Creek and Peachtree Creek on two days in March 2005, are also down.

But the combined sewer decree penalties are through the roof.

So far this year, the tally is roughly nine times the four violations and \$21,000 in fines assessed in all of 2005. Most of the incidents have been at the city's North Avenue, Tanyard Creek and Clear Creek facilities, where up to 1,300 colonies of the bacteria that live on human and animal waste were observed per gallon of water.

The city uses chlorine to kill the bacteria, and the chlorinated water that re-enters the streams keeps on killing bacteria that enter further down through tributaries or runoff. But earlier this year, per the terms of the consent decree, Atlanta began dechlorinating the water that exits those three facilities.

That made the water safer for wildlife but removed its bacteria-killing power downstream, where the city takes its samples, leading to the spike in violations, according to Mills.

Atlanta in August petitioned the EPA and EPD to let it move the sampling points upstream in order to avoid including the added pollution. The regulators granted that request in an Oct. 10 letter; Mills said fines should return to previous levels.

The EPA and EPD are still deciding whether to let the city use a portion of the fines it paid under the old sampling methods as credit toward future violations.

The cost of the combined sewer decree program has also been disputed. The program is \$200 million under the city's original budget but \$200 million over much more recent estimates.

Sewer fines soaring

Atlanta has been fined more under its combined sewer decree program through September than in the past four years combined:

2006: \$183,000

2005: \$21,000

2004: \$14,000

2003: \$54,000

2002: \$80,500

Source: Staff research

Reach Mahoney at rmahoney@bizjournals.com.

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San Diego agrees to estimated \$1 billion for sewage system improvements and maintenance

Release date: 07/31/2007

Contact Information: EPA Contact: Wendy Chavez, 415/947-4248, Margot Perez-Sullivan, 415/947-4149 ENRD
Contact: 202/514-2007, TDD 202/514-1888

City of San Diego to repair, replace aging, damaged sewage pipes

(San Francisco, Calif. – 07/31/2007) The city of San Diego will spend approximately \$1 billion over the next six years to make improvements to its sewer system under a comprehensive settlement filed today by the Justice Department and the U.S. Environmental Protection Agency.

The consent decree filed in U.S. District Court for the Southern District of California by the United States, along with co-plaintiffs Surfrider Foundation and San Diego Baykeeper, is the third and final settlement that addresses current violations in the city's sewer system. Today's action requires the city to continue to undertake capital projects and perform operations and maintenance through 2013 to prevent future spills of raw sewage from San Diego's system.

"This settlement will ensure that the city of San Diego will continue upgrades and repairs of its sewer system in order to comply with the Clean Water Act," said Acting Assistant Attorney General Ronald J. Tenpas. "We are pleased that we have reached a resolution to these matters, and that the city has agreed to make the necessary improvements to reduce untreated sewer discharges."



San Diego, CA

"San Diego will spend over \$1 billion to improve its aging sewer system and prevent future spills of raw, untreated sewage into local streams, the ocean, and city streets," said Granta Nakayama, assistant administrator for Enforcement and Compliance Assurance. "This significant action creates a straightforward path to address sewer overflows and provides a safer recreational environment for the San Diego area."

"As with our previous consent decrees, the EPA and the city of San Diego will work together to ensure its sewage collection system meets our federal requirements, and protects precious coastal resources and surrounding communities," said Wayne Nastri, the EPA's administrator for the Pacific Southwest.

San Diego's Municipal Wastewater Collection System collects wastewater from approximately 1.2 million residents over 330 square miles. The system has an estimated 2,800 miles of sewer lines and 84 pumping stations.

In 2000, there was an average of one spill per day from San Diego's collection system. In 2002, the EPA issued an administrative order requiring the city of San Diego to address sewer collection system maintenance, repair and replacement issues. In June 2003 the Department of Justice filed a complaint on behalf of the EPA seeking a long term court-sanctioned resolution to the problems, joining environmental groups who had already filed a Clean Water Act citizens' lawsuit against the city, resulting in two partial consent decrees, issued in 2005 and 2006.

Since the EPA's 2002 enforcement action, San Diego has reduced the number of spills by more than 75 percent and has largely eliminated large volume spills that plagued the city. Today's action will result in further spill reductions and require the city to renew its aging sewer infrastructure.

According to the terms of the consent decree, the city will continue its enhanced:

inspection and maintenance programs in the city's wastewater collection system;

system-wide cleaning, root control, sewer pipe inspection, repair or replacement; and grease control blockage programs.

San Diego will also complete a number of capital projects to repair or replace the aging sewer system. Among the projects, the city is required to repair, replace or rehabilitate 250 miles of pipeline by 2013. It has already repaired or replaced 200 miles of pipeline under earlier settlements entered into in 2005 and 2006. The city will also upgrade and repair a number of pump stations in the system and secure all 5,800 manhole covers throughout the city. Further, the city will implement a program to educate residents of the Fats, Oils, and Grease Blockage Control Program, and conduct a sewer capacity assessment.

The state of California, although not a party to today's settlement, has penalized San Diego for past sewage spills. The California Regional Water Quality Control Board, San Diego region took three enforcement actions against San Diego for a combined total of \$6.2 million in penalties with \$4.1 million going toward local environmental improvement and monitoring projects.

The consent decree lodged today is subject to a 30-day public comment period and approval by the federal court. For more information on today's action and for a copy of the consent decree, visit:

<http://www.epa.gov/region09/water/npdes/compliance.html> and <http://www.epa.gov/region09/water/npdes/pdf/san-diego-sewage-consent-decree.pdf>

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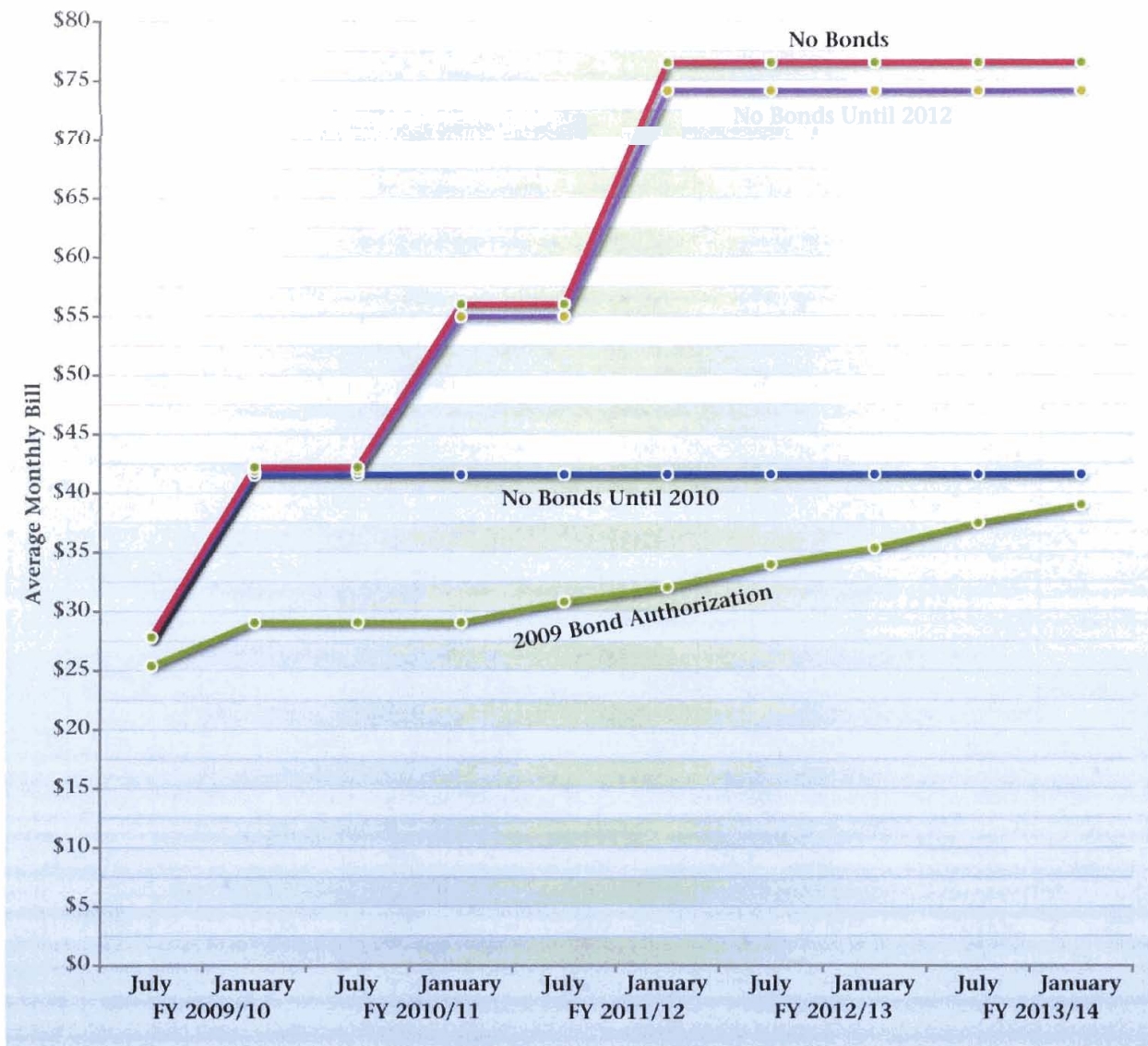
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Comparison of Rate Adjustments under Various Bond Authorization Options



Rate Adjustment Summary Under Various Bond Authorization Options.xls

Current Plan

	APPROVED		PRELIMINARY PROJECTIONS									
	FY 2009/2010		FY 2010/2011		FY 2011/2012		FY 2012/2013		FY 2013/2014			
	July	January	July	January	July	January	July	January	July	January		
Flat Service Charge	\$ 8.32	\$ 9.82	\$ 9.82	\$ 9.82	\$ 10.41	\$ 10.41	\$ 11.03	\$ 11.03	\$ 11.69	\$ 11.69		
% Increase	0.00%	18.00%	0.00%	0.00%	6.00%	0.00%	6.00%	0.00%	6.00%	0.00%		
Volumetric Rate	\$ 2.13	\$ 2.41	\$ 2.41	\$ 2.41	\$ 2.55	\$ 2.70	\$ 2.87	\$ 3.04	\$ 3.22	\$ 3.41		
% Increase	12.75%	12.75%	0.00%	0.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%		
Bill for 8ccf customer	\$ 25.39	\$ 29.07	\$ 29.07	\$ 29.07	\$ 30.81	\$ 32.03	\$ 33.96	\$ 35.33	\$ 37.45	\$ 39.00		

No Bonds Until 2010

	PRELIMINARY PROJECTIONS									
	FY 2009/2010		FY 2010/2011*		FY 2011/2012		FY 2012/2013		FY 2013/2014	
	July	January	July	January	July	January	July	January	July	January
Flat Service Charge	\$ 8.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32
% Increase	0.00%	60.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volumetric Rate	\$ 2.44	\$ 3.53	\$ 3.53	\$ 3.53	\$ 3.53	\$ 3.53	\$ 3.53	\$ 3.53	\$ 3.53	\$ 3.53
% Increase	29.00%	44.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bill for 8ccf customer	\$ 27.84	\$ 41.57	\$ 41.57	\$ 41.57	\$ 41.57	\$ 41.57	\$ 41.57	\$ 41.57	\$ 41.57	\$ 41.57

* Beginning in FY 2010/11 rates generate significant surplus revenue allowing for the possibility of a rate decrease.

No Bonds Until 2012

	PRELIMINARY PROJECTIONS									
	FY 2009/2010		FY 2010/2011		FY 2011/2012		FY 2012/2013*		FY 2013/2014	
	July	January	July	January	July	January	July	January	July	January
Flat Service Charge	\$ 8.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32
% Increase	0.00%	60.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volumetric Rate	\$ 2.44	\$ 3.57	\$ 3.57	\$ 5.21	\$ 5.21	\$ 7.80	\$ 7.80	\$ 7.80	\$ 7.80	\$ 7.80
% Increase	29.00%	48.00%	0.00%	48.00%	0.00%	48.00%	0.00%	0.00%	0.00%	0.00%
Bill for 8ccf customer	\$ 27.84	\$ 41.88	\$ 41.88	\$ 54.98	\$ 55.00	\$ 74.15	\$ 74.15	\$ 74.12	\$ 74.12	\$ 74.12

Beginning in FY 2012/13 rates generate significant surplus revenue allowing for the possibility of a rate decrease.

No Bonds

	PRELIMINARY PROJECTIONS									
	FY 2009/2010		FY 2010/2011		FY 2011/2012		FY 2012/2013*		FY 2013/2014	
	July	January	July	January	July	January	July	January	July	January
Flat Service Charge	\$ 8.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32	\$ 13.32
% Increase	0.00%	60.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volumetric Rate	\$ 2.44	\$ 3.61	\$ 3.61	\$ 5.34	\$ 5.34	\$ 7.90	\$ 7.90	\$ 7.90	\$ 7.90	\$ 7.90
% Increase	29.00%	48.00%	0.00%	48.00%	0.00%	48.00%	0.00%	0.00%	0.00%	0.00%
Bill for 8ccf customer	\$ 27.84	\$ 42.20	\$ 42.20	\$ 58.04	\$ 58.04	\$ 78.52	\$ 78.52	\$ 78.52	\$ 78.52	\$ 78.52

* Beginning in FY 2012/13 rates generate significant surplus revenue allowing for the possibility of a rate decrease.