



PIMA COUNTY

WASTEWATER RECLAMATION

REGIONAL WASTEWATER RECLAMATION ADVISORY COMMITTEE

Water & Energy Sustainability Center
2955 W. Calle Agua Nueva
Radon Conference Room

MEETING MINUTES

Thursday, May 21, 2015

COMMITTEE MEMBERS PRESENT:

Ann Marie Wolf	Bob Iannarino	Matt Matthewson
Bill Katzel	Kendall Kroesen	Jackson Jenkins
Armando Membriila	Rob Kulakofsky	Mark Stratton
John Lynch	Sheila Bowen	Alan Forrest

COMMITTEE MEMBERS ABSENT:

Barbee Hanson	Amber Smith	Mark Taylor
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- A. CALL TO ORDER.** Ann Marie Wolf, Chair, called the meeting of the Regional Wastewater Reclamation Advisory Committee (RWRAC) to order at 8:01 a.m. Jody Watkins took the roll call and a quorum was present.
- B. PLEDGE OF ALLEGIANCE.**
- C. CALL TO THE AUDIENCE.** There were no comments from the audience.
- D. SAFETY SHARE.** Mark Stratton reminded everyone that the month of May is Motorcycle Awareness month. Many people ride their motorcycles to commute to work and for fun and adventure. Drivers need to look twice and be aware when they are in an intersection or pulling out of their driveway. Most accidents occur from left turning vehicles.
- E. APPROVAL OF MINUTES.**
Meeting Minutes of the Regular Meeting, April 16, 2015.
- ACTION:** Armando Membriila made a motion to approve the minutes of the Regular Meeting of April 16 2015. Rob Kulakofsky seconded the motion. Motion passed unanimously.
- F. COMMITTEE/SUBCOMMITTEE REPORTS.**
- 1. CITIZENS' WATER ADVISORY COMMITTEE (CWAC) UPDATE.** Alan Forrest, Director, City of Tucson Water Department, stated that the Tucson Water (TW) rate increase was approved on May 19, 2015 by Mayor and Council. Overall it is a 7.3 percent revenue increase that's spread out over all different customer classes. The biggest change in rates is the block rate structure for the residential block. The 1st block was 1-10 ccf, which has been reduced to 1-7 ccf as GPCDs and average usage are declining. Mr.

Forrest mentioned that he was leaving Tucson Water on June 12th and would be working for CH2M HILL. He thanked everyone for the opportunity to be part of the Committee. Ms. Wolf thanked Mr. Forrest for his participation and appreciated his input.

2. **RWRAC FINANCIAL SUB-COMMITTEE UPDATE.** John Lynch, Chair, RWRAC Financial Sub-Committee stated that the Financial Sub-Committee met on May 6, 2015. Relative to the revised proposal of the recommendation to the Board of Supervisors (BOS) on the rate increase, the main focus was on three areas. One was the “in-house services”, allocation to Pima County Wastewater and the support services, mainly IT and Finance, and the equitability to all County departments. Mr. Lynch stated that Tom Burke, Finance Director, indicated that the process being used was equitable for all departments. The second area was any questions from the Sub-Committee regarding the response to the BOS questions. The third area was the Capital Improvement Program (CIP) and the impacts of the revised rate increase. Mr. Lynch identified that the contingency costs historically were projected higher than needed; lowering the amount of contingency costs and the rate increase should not affect the CIP projects negatively. Mr. Lynch stated that the Committee was confident in the proposed rate increase. Sheila Bowen, Sub-Committee Member, pointed out that the Project Managers had done an excellent job in controlling costs and reducing contingencies.

G. DISCUSSION/ACTION.

1. DIRECTOR'S UPDATE.

a. **OPERATIONAL UPDATE.** Jackson Jenkins, Director, Regional Wastewater Reclamation Department (RWRD), stated that one of the biggest issues operationally was in the Treatment Division and the handling of the solids from the treatment process. Mr. Jenkins identified that Agua Nueva had lots of material initially due to the screen size, which was a little larger than the Tres Rios screen size. Both the primary waste stream that includes fats, oils and grease and the normal waste stream were comingled and going to Tres Rios. Staff was constantly working on unplugging the lines and tools and equipment were breaking down due to the consistency of the solids. In order to correct these issues, numerous pieces of equipment had to be replaced and processes were changed. The Department will continue working with CH2MHILL for a permanent change in the process.

b. **USER FEE RATE INCREASE.** Mr. Jenkins stated the User Fee rate increase was postponed to the August 17, 2015 Board of Supervisors meeting. A Supervisor requested the Department entertain and evaluate changes to the User Connection Fee at the same time. A three percent rate increase for the User Connection Fee is being proposed.

c. **IMPACTS TO MANDATORY TRAINING DUE TO BUDGET CUTS.** Mr. Jenkins indicated that RWRD will continue to provide Safety, Leadership, and Technical in-house training. He stated that RWRD will continue assisting staff with professional hours that are mandatory in order to maintain their certification. Professional conferences and webinars are minimal, such as TriState, AZ Water and American Public Works Association (APWA) for networking. National conferences will be very limited; however, in-house training will be provided as much as possible. Ms. Bowen agreed with Mr. Jenkins and encouraged the Department to look for training opportunities and one-on-one with peers, which is also valuable.

d. **HIGH STRENGTH USER AUDIT.** Mr. Jenkins quantified there are approximately 265,000 user accounts, in which 13,000 are commercial high strength users. The Finance and Risk Management Department (FRMD) and RWRD did an audit of the 13,000 commercial users and the class codes. There are 16 high strength users that include, among others, car washes, restaurants, fast food, bakeries and paint shops. Historically those classifications produce a higher strength of sewage than traditional

residential sewage. Mr. Jeff Prevatt, RWRD Program Director, and Industrial Wastewater Control (IWC) staff, randomly selected high strength users and ran tests for strength of the sewage as well as for Total Suspended Solids (TSS) & Biochemical Oxygen Demand (BOD).

Mr. Jenkins stated that 300 out of the 13,000 were actually in the wrong classification. They were paying the commercial rate, which pays the same as residential, so they were not paying as a high strength user. About 200 of the 300, were actually paying more than they should have and about 85 were paying less than they should have. It is the responsibility of the business owner to fill out the paperwork appropriately, so they pay the correct amount. A business may begin as a dentist office and sold to a donut shop, so the business may not be paying the correct amount until an audit is conducted.

Mr. Jenkins identified there are discrepancies and corrections are being made once identified; however, there will be no refunds or collections for past charges. Some of the businesses (12-15) of the 80 are going to pay significantly higher amount, approximately \$300 - \$700 per month increase to put them in the correct classification. Commercial is a 1.0 factor and a restaurant is a much larger multiplier. Normal residential bill is \$40.81, one-third is the fixed service fee that everyone pays, the other 2/3 of it is variable; the average household uses 8ccf.

Mr. Kulakofsky asked if we could obtain information when a new business has to file for a Certificate of Occupancy (COO) and if that would help us identify what rate that a business should be charged. Mr. Jenkins stated that RWRD does not have a customer list. Tucson Water (TW) has those lists and there are different jurisdictions; therefore it is difficult to obtain that information. Mr. Alan Forrest stated that Tucson Water does not go out and do physical inspections and relies on the customer to fill out the paperwork appropriately. Water may be turned on for the construction portion; however, the paperwork, may not show the proper classification for occupancy. There are over 1,000 turn off/on per week, which makes it difficult to track. Mr. Prevatt mentioned that it was especially difficult when a mall is being constructed as it may take up to two years to have tenants, which could include a restaurant; therefore they end up in the wrong classification until an audit is conducted.

e. FLOW RATIO BETWEEN TRES RIOS AND AGUA NUEVA. Mr. Jenkins stated Randolph Park was shut down, which had two million gallons a day (MGD) flowing to both plants. Currently there are 32 MGD flowing to Tres Rios and 25 MGD to Agua Nueva. Seven months of the year (off peak) going to target for 24 MGD and in May (reclaim system demand) will go up to 26 MGD at Agua Nueva. June, July, August (heat wave) will go up to 28 MGD and then by September it will back down to 26 and back to 24 MGD depending on weather.

Tres Rios is the central regional biosolids processing plant. Mr. Jenkins identified all the solids go there, when you get the centrate, which is a high concentrated ammonia stream that goes back to the front of Tres Rios, so you have a heavier ammonia load at Tres Rios. In order for the biology and chemistry to work right, you need a certain carbon loading for all the processes to take place. The flow could be sensitive if you cut the flow back too much, you might carbon starve your plant and not perform the nitrification that's needed. Kendall Kroesen stated that the ratio is determined by several things, part is determined by amount of water you need to send to Agua Nueva and the amount of raw sewage that needs to come to Tres Rios, in order to balance that ammonia. Mr. Jenkins confirmed that the process and technical balancing changes constantly and there are also seasonal changes. RWRD is utilizing three bioreactors and have an eight hour maximum shut down; however, it is still a learning curve. Mr. Jenkins, stated that both Agua Nueva and Tres Rios can handle more if an emergency arose.

2. CONNECTION FEE INCREASE AND PUBLIC MEETING LOGISTICS. Mr. Jenkins indicated that RWRD has been requested by the BOS to look at the Connection Fee increase; therefore a public meeting needs to be conducted, tentatively scheduled for June 18, 2015. The RWRAC can receive public input and make a recommendation to the BOS. Mr. Jenkins detailed that last year's revenue from connection fees was approximately \$13.5 million dollars and a three percent increase would increase the

revenue approximately \$400,000. Ninety percent of RWRD revenue is from user fee revenue. Fee increases are significant to the Financial Plan, because it will not be considered until August 17, 2015, the Department will lose a quarter of next year's user fee revenue, if the BOS approves it, which is about \$2.5 million dollars.

Adding the increase in connection fees, RWRD will pick up about \$300,000, which will help from the missing revenue. The BOS will be discussing the connection fees in August with or without RWRAC endorsement. Ms. Wolf asked if the Committee would receive a presentation from Finance or the RWRD on the details. Mr. Jenkins replied that in 2012 RWRD went through a connection fee rate study and transitioned to water meter size as opposed to fixture unit equivalents. Residential and commercial/industrial use was determined from the three years of Tucson Water data to determine the average volume for different meter sizes. Mr. Jenkins detailed how the rates were calculated.

If a 3% increase is approved, the \$16.02 cost of capacity factor will increase to \$16.50, and the average \$4,066 will increase to \$4,188 for new residential connection fee and proportionately for larger meters for commercial. There hasn't been a lot of change in capacity of the system and there has been no fee increase in over three years. It's safe to assume a one percent inflation increase each year, so a conservative value to increase connection fees by three percent is reasonable. Ms. Wolf reminded the committee that they are not voting on this today, only to decide whether they are having a public meeting to discuss the proposed sewer connection fee and that they have the opportunity for public input and a meeting following to discuss in detail whether they want to be for or against the proposed increase. Ms. Wolf stated that she would like to have a more formal presentation as a PowerPoint, so the Committee and the public can see the figures. Mr. Stratton asked if the Committee would have the information before the public meeting. Mr. Jenkins stated that the information would be mailed to the Committee the following week.

If the BOS approves the recommendation of the connection fee increase, it would go into effect thirty days after the meeting (October 1, 2015). Ms. Wolf asked the members if they could attend the public meeting, and confirmed there would be a quorum.

ACTION: Ms. Wolf asked the committee if they wish to proceed to have a public meeting, to be held on Thursday, June 18, 2015 at 8:30 AM and the RWARC meeting to immediate following at 9:30 AM. Mr. Kulakofsky made the motion, and Mr. Membrilla second the motion. Motion passed unanimously.

3. FINANCIAL UPDATE.

a) RWRD FISCAL YEAR 2014/15 BUDGET. Patrick McGee, Division Manager, Finance and Risk Management Department (FRMD), presented Period 9 forecast. Forecast for expenses are at \$82.6 million, which is \$1.2 million under the budget of \$83.8 million. Mostly due from freezing of expenses per Mr. Huckelberry's memo, savings from vacancies, and the Randolph WRF closure. On the revenue side, Finance is forecasting at \$181 million, which is slightly above the \$180 million budget, approximately \$201,000 over, which is partly due to the \$1.2 million Pascua Yaqui settlement, which they anticipate to receive. Mr. McGee indicated they are seeing a reduction in the sewer user fees coming in, so they are forecasting \$1 million under budget. The new Director of Finance and Risk Management will be Keith Dommer, who comes from the Auditor General's office, is tentatively scheduled to begin on June 8, 2015.

b) RWRD FISCAL YEAR 2015/16 BUDGET. The tentative budget was approved by the board on Tuesday, May 19, 2015, the current amount budgeted expenses is \$84.5 million, which is approximately 2% less than requested and is a 1% increase over the current fiscal year budget.

4. PLANNING & ENGINEERING UPDATE. Mr. Adam Bliven, Civil Engineering Manager, RWRD, provided a PowerPoint presentation on the South Houghton Area Recharge Project (SHARP). Mr. Bliven stated this was a joint program between Tucson Water and Pima County RWRD, it was an agreement to settle

some disputes related to the Speedway sinkhole and both agencies agreed to spend up to \$4 million each in putting in a recharge project to benefit the agencies and community, both ground water recharge and future reuse. There's a joint recharge operating group made up of three people from RWRD, Eric Wieduwilt, Jennifer Coyle and Jim DuBois and staff from Tucson Water. They meet to come up with agreements and cost sharing. One of the first agreements that they did was how to finance and how to proceed with planning this project. The agreement is in place and they've selected a site for the recharge project, which is located on Houghton road.

The project site is located immediately adjacent to the popular mountain bike area: "Fantasy Island". Tucson Water has met with the Southern Arizona Mountain Bike Association (SAMBA) and working with them, so the trails will continue after this project and the mountain bicyclists are in favor of it. Design is currently 60% complete, the firm doing the design is CH2MHill along with HDR consultants. The access road is off Houghton which the public will be able to utilize along with Tucson Water staff for operation of the recharge basin. There are three operating basins. Basin one has a paved path around it, so it is ADA accessible. Basin two and three have a "dg" path around it. It will be accessible 24-hours a day, seven days a week. Surveillance cameras on site to deter vandalism due to being a remote site. Other features are a restroom, ramada and paved parking and access for buses for education of students regarding recharge of water in our area. Tucson Water is providing interpreting signs and kiosks.

Permit applications are on schedule and will take approximately one year for approval and the construction should be completed by summer 2016. Both Tucson Water and Pima County had originally agreed to \$4 million dollars each; however, the cost is closer to \$3 million dollars each. Mr. Stratton stated he only saw one recovery well and inquired if that was the only one. Mr. Forrest responded that there was no immediate plans for additional recovery wells; however, there may be more at a later date. The main goal is to get water into the ground, which is multi-beneficial. Mr. Bliven stated that restrooms are on a septic system, potable water and drinking fountains are available. Mr. Forrest stated that no new contracts were needed due to the decrease in expenses. The project is great for the community, bicyclists and bird enthusiasts. Hours of operation will be open sunrise to sunset.

- 5. Trihalomethane (THM).** Mr. Jeff Prevatt provided information on the THM project. RWRD has been doing disinfection by-product research for more than a decade and were therefore concerned that possible THM problems could arise as a result of the upgrades to Agua Nueva and Tres Rios WRFs. The effective nutrient removal process of the Bardenpho reactors greatly exacerbated THM formation in the final disinfection stage of treatment. As a result, a THM control system consisting of aqueous ammonia was installed at the smaller Agua Nueva WRF but a similar installation was postponed at Tres Rios due to the \$5 million cost and therefore the department chose to investigate alternative approaches for THM control.

First a spray aeration pilot was constructed at Tres Rios which proved effective but was limited to only 3 million gallons per day of flow. Therefore a second approach was developed taking advantage of the centrate waste and its high ammonia concentration. Through extensive bench testing and pilot demonstrations conducted by staff it was demonstrated that centrate added to the secondary clarifier at a rate of approximately 15 gallons per minute levels effectively reduced THM concentrations from over 140 parts per billion down to less than 20 parts per billion.

RWRD has presented this approach to both ADEQ and EPA Leadership Innovation Forum for Technology (LIFT) members and is currently developing hard engineered designs for final construction and implementation at a total cost of less than \$500,000.

- 6. COMMITTEE MEETING FREQUENCY:** Ms. Wolf stated it was suggested that the committee change from monthly to quarterly meetings. Ms. Wolf suggested that the Committee not meet the month of July and August. Ms. Bowen commented that the Committee needs to focus their discussions on the elements that they are charged with in the Ordinance. Discussion ensued and Committee recommended to change

the meetings to bi-monthly with the provision that the Committee would be able to meet on the off month if there was a need for an emergency or special meeting.

ACTION: Mr. Membrila made the motion and Mr. Kulakofsky second the motion. The RWRAC Financial Sub Committee will continue to meet as needed. Motion passed unanimously.

7. COMMITTEE MEMBER ATTENDANCE: Ms. Wolf addressed the Committee regarding member attendance and what process do they want after a member misses three consecutive meetings. Discussion ensued. The Committee recommended if a member misses three consecutive meetings the Chair will contact the member to let them know that their input is valuable to the meetings and the Committee would send a letter to the person who appointed them (i.e. Board of Supervisor) letting them know the member has been consistently absent.

ACTION: Mr. Membrila made the motion, Mr. Lynch second the motion. Motion passed unanimously.

8. COMMITTEE NOMINATIONS AND ELECTIONS OF OFFICERS: Mr. Membrila and Mr. Kulakofsky will speak with members to see who has an interest in becoming the next Chair or Vice Chair.

H. FUTURE AGENDA ITEMS: Ms. Wolf announced the future agenda items are: Nomination/Elections of Officers, Discussion and Vote on recommendation of proposed Sewer Connection Fee Increase and the Roger Road Repurposing.

I. CALL TO THE AUDIENCE: Mr. Jenkins extended thanks to Mr. Kendall Kroesen who is stepping down from the Committee.

J. TOUR OF THE WATER AND ENERGY SUSTAINABLE TECHNOLOGY (WEST) CENTER: Mr. Prevatt gave a tour of the WEST Center, 2959 W. Calle Agua Nueva immediately following the meeting.

ACTION: Mr. Stratton made a motion to adjourn the meeting. Mr. Lynch seconded the motion. Motion passed unanimously.

K. ADJOURNMENT. The meeting was adjourned at 9:56 a.m.