

## REGIONAL WASTEWATER RECLAMATION ADVISORY COMMITTEE

Transamerica Building  
Pima Association of Governments' 5<sup>th</sup> Floor Conference Room  
177 North Church Avenue  
**Thursday, August 20, 2009**

### Committee Members Present:

Jim Barry	John Carlson	Barbee Hanson	Mark Stratton
Sheila Bowen	Marcelino Flores	Rob Kulakofsky	Ann Marie Wolf
Jeff Biggs	Mike Gritzuk	Corey Smith	

### Committee Members Absent:

Adam Bliven	Brad DeSpain	Bill Katzel	Armando Membrila
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### Staff Present:

Ed Curley	John Warner	Laura Fairbanks	Charles Wesselhoft
Diana Hofsdal	Eric Weiduwilt	Matt Matthewson	
Jackson Jenkins	Manabendra Changkakoti	Melaney Seacat	
Jeff Nichols	Sandra Current	Lilian Von Rago	

### Guests:

Tom Burke, Pima County Finance Director  
Melodee Loyer, Engineering Manager, City of Tucson  
Linda Smith, City of Tucson

- I. **CALL TO ORDER.** Chair Sheila Bowen called the meeting of the Regional Wastewater Reclamation Advisory Committee (RWRAC) to order at 7:49 a.m.
- II. **CALL TO THE AUDIENCE.** There were no comments from the audience.
- III. **APPROVAL OF MINUTES.** The Committee unanimously approved the minutes of the June 18, 2009 RWRAC meeting.
- IV. **COMMITTEE/SUBCOMMITTEE REPORTS**
  - A. **Citizens' Water Advisory Committee (CWAC) Update.** Jim Barry, CWAC Chair, advised that there was no CWAC meeting in July or August. The next meeting is scheduled for September. Financial planning will be the first order of business.
- V. **DISCUSSION.**

#### A. Old Items/Updates.

1. **Water Infrastructure, Supply and Planning Study.** Melaney Seacat, Coordinator, distributed the agenda for the next committee meeting. Two technical papers will be presented. The first paper, *Water as an Economic Resource*, was prepared by the Tucson Water Coalition with input by economists from the University of Arizona. This paper discusses how economic evaluation can provide baseline facts about associated costs and benefits of alternative uses of water that can lead to more informed and rational allocation of limited resources. The second paper, *The Cost of Growth*, was prepared by Tucson Water and Regional Wastewater Reclamation Department (RWRD) staff, and discusses financial mechanisms that ensure the cost of growth is captured in each utility's rates, charges and policies. This completes 10 of the 13 papers in Phase 2. The final three papers will be presented on September 17. The oversight committee will then produce a report followed by a two-week public comment period. The final committee meeting will be before Thanksgiving.
2. **Regional Optimization Master Plan (ROMP).** Mike Gritzuk, RWRD Director, provided an update on the current status of the ROMP.
  - **Plant Interconnect.** The project is under construction and on schedule. 4,200 feet of pipe have been installed, nearly completing the first mile of the five mile line. This project is partially funded by a \$10 million loan from Water Infrastructure Funding Authority (WIFA). \$2 million of that loan will be forgiven as part of the American Recovery and Reinvestment Act (ARRA) (stimulus funds).
  - **Ina Road WRF Upgrade/Expansion.** This project just crossed the 30% design threshold. All project design and features at this point are frozen. Now the detailed design process begins. The next threshold is the 60% design level and is expected to be reached in November.
    - RWRD will be moving forward with initial construction of solids handling facilities consisting of two digesters and a digester control building. This is necessary now due to the solids that will be transported from the water campus. RWRD has received a guaranteed maximum price proposal. That proposal is currently under review. The construction cost is approximately \$20 million.
    - RWRD will be aggressively looking at early packages of commodities – as steel, copper and concrete prices are now low – to lock in a low guaranteed max price. In addition, RWRD is developing a guaranteed maximum price for an earthwork package.

- It has been determined that the most cost-effective method to upgrade the Ina Road power plant is to replace it. The Procurement Department will be advertising for this project by approximately September 1.
- There is a second solar energy project at the Ina Road facility. It will be two megawatts and cover 15 acres. A contractor has been selected and the Procurement Department is proceeding with contract documents.
- **Water Campus Design-Build-Operate.** The selection committee has reviewed the qualification statements, completed scoring and a short list of recommended entities has been developed. The short list will go to the Board of Supervisors on September 1. If approved by the Board of Supervisors, it will go through the procurement process. The next procurement process step is to request technical proposals. The three entities on the short list will submit conceptual ideas based on the benchmarks we have established. As they are competing with each other, we expect innovative proposals. They were notified early in the procurement stage that the construction budget is \$240 million and told not to submit qualification statements if they can not come within or under budget.

In addition, we continue to pursue stimulus funding with the assistance of a consultant in Washington DC, the Pima County lobbyist and others.

John Carlson asked about the upgraded electric plant. Mr. Gritzuk said that the existing power plant went on-line in 1977. The generators are now outdated, not efficient and only marginally supported by the manufacturer. Also, the building needs upgrades to achieve code compliance.

Marcelino Flores asked if the firms submitting bids for the water campus will equally consider the operating costs and economic changes. Mr. Gritzuk said they will. This process includes the design, construction and operation of the facility. The contract term is 15 years, and is renewable for another five years. The winner will be chosen based on technical and construction and life-cycle cost scoring. 40% of the score is based on pricing.

Jackson Jenkins, Deputy Director, said there is a regulatory requirement to have 100% backup power. In the future, Tucson Electric Power will not be able to provide that backup capacity. As part of the energy recovery system we have to look at larger quantity of generating systems at the facilities.

Mr. Carlson asked why it will not be provided. Mr. Jenkins said that is due to local growth and development. Their system will be taxed and they can not have up to eight megawatts of energy waiting to be used if something happens to the grid. It is not economically feasible for them.

3. **System Wide Odor Control Program Update.** John Warner, Deputy Director, provided an update on the System Wide Odor Control Program. Mr. Warner distributed the second quarterly report for 2009. The system is working well. The slight increase during the second quarter on the chart of complaints can be attributed to the new website. They are getting more specific information on the odors. Overall, there are no large anomalies compared to the historical record. By the end of this year he anticipates new direction due to the effectiveness of new chemicals used in the conveyance system. There is an increased upfront cost, but there will be a long term payoff.

Mark Stratton asked if there any odor "spikes" that went above the 30 parts per billion limit or are the peak "hits" still less than the limit. Mr. Warner said that since monitoring has begun, they have not seen major spikes.

Mr. Barry asked if 64 complaints were considered a lot. Mr. Warner said that with a system as large as ours, serving a million people, 3,500 miles of sewer and over 70,000 manholes; historically we have received in excess of 100 to 200 calls. The temperature and fluctuating population (due to the University) both have an effect. 64 complaints is a good number. We would like to see it lower, but it does show that the system is effective. We will continue to seek opportunities to improve.

Mr. Gritzuk said that of the 64 complaints, half were about public systems and half were about private systems. RWRD is not responsible for all of the complaints. We don't own all of the odors in Pima County. We only own the odors from the public system. Pumping stations in private developments are owned by the developments and home owners associations. We get complaints about them as well. We do respond to those complaints and try to be of assistance to them, but it is the private entity's responsibility to control the odor.

Mr. Carlson asked what the law is in this regard. Mr. Warner said that the conveyance division has no enforcement authority. We do identify issues and report repetitive nuisances to the Arizona Department of Environmental Quality.

Mr. Flores said that expanding on the fact that a nuisance is not a health threat in reports may help with understanding the issues.

Mr. Gritzuk said that the nuisance or detectable level is 30 parts per billion. The average levels at all of the facilities are well below the nuisance level; the highest is less than half at the Roger Road WRF, which is most odorous of all the facilities. The efforts at Roger Road are only temporary. Not all of the primary basins were covered, resulting in only 90% of the odor being captured.

Mr. Flores said that it is hard to grasp where detectable level becomes a health impact. Mr. Gritzuk said that during development of the program health effects were an issue. We have had experts explain that we are far from a level considered a health hazard.

Mr. Barry asked about the "fence line" measurements and if people would be able to detect odor at that distance. Mr. Warner said that the majority would not, but there are some people with sensitivity to smell.

Mr. Jenkins said that the 30 parts per billion criteria is measured to the nearest occupied dwelling. We measure from our "fence line" to ensure and added measure of security.

4. **Financial Update.** Jeff Nichols, Division Manager, Finance and Risk Management, gave the financial update. The FY 2009/10 budget only has one month of actuals right now. Historically, the month of July has accruals for expenses in June. It is a very short month for expenditures. We are seeing a continuation of not meeting the straight line projection on connection fees. This will be monitored on a monthly basis and make adjustments as necessary.

The financial planning process is beginning for the 2009/10 financial plan. In February the Board of Supervisors directed RWRD to come back in December to report on:

- 1) a review of all economic data related to RWRD and connection fees to see if another rate increase would be viable, and
- 2) the sewer outreach subsidy program.

The specific issues with the sewer outreach subsidy program are 1) was it being properly utilized and 2) what improvements could be made. Significant improvements have been made in reaching the target audience. There is a link on the first page of the Pima County website, as well as the RWRD's webpage. Pima County Community Action Agency (PCCAA) administers the program, and they work with other agencies with similar programs. Brochures are located at those locations for distribution to their clients. Mr. Nichols will be working with PCCAA to get data. There is a concern that as much 20% of the population within the greater Tucson area is eligible but the level of participation is below 5%. Our contention is that a large part of this population is in rental units and there is no way to reach those people as their water and sewer bills are paid through their rent. That information is in the census data. We will be compiling this information and include it in the Board of Supervisor's package.

In addition, the Industrial Wastewater Control (IWC) program has done a very good job of cleaning up commercial systems. However, with more residential areas using ultra-low flow appliances and water capturing systems, the strength of the discharge is going up. Strength is a basic part of our rate structure. More information needs to be assessed to see if the increased strength needs to be taken into consideration in the financial model. The residential strength is the baseline from which commercial strength is factored into the rates. Raftalis, our financial consultant, has requested actual financial data from FY2008/09, data related to the FY2009/10 budget and data from billing for the financial planning process.

Mr. Stratton said that Metro Water has been tracking the reduction of use in residential water and has noted a 4% reduction in use in the single family sector. That may have an impact on what the user fee revenues are.

Jeff Biggs said that Tucson Water has noted the same.

Mr. Carlson asked if connection fees are set by the number of units in the house. Mr. Nichols said yes, by fixture unit equivalent. Mr. Carlson asked if incentives are being considered for infill as it must be cheaper on the system and, if not, could it be considered. Mr. Nichols said that there were no department incentives for infill projects.

Mr. Flores asked if a higher concentration of suspended solids would have a large impact given that type of conservation. Mr. Gritzuk said that there would be an impact as the sewerage would be stronger and there is a cost for solids treatment. There has been a rise in sewage strength. That is being addressed in the new design.

Mr. Jenkins said that there are two components in the treatment facility. A facility is designed based on both the flow and the strength of sewage. If the strength goes beyond what a facility is designed for, the facility capacity could be decreased.

Mr. Flores asked if it is a matter of catching up the rates. Mr. Nichols said that they need get more strength information from different customers in rate classes to generate new data so a sound decision can be made whether to factor in the increased strength in the financial model.

Mr. Smith asked how much Raftalis will be paid next year. Mr. Nichols did not know the exact amount as their contract is within the program management contract with Greeley Hanson. They are acting as a subcontractor to Greeley. Mr. Smith said that there was a big effort in the funding of ROMP last year and that he would expect that the 09/10 budget year would be a lot simpler to implement. If that's the case why continue to pay Raftalis at the same level when the workload will be lighter. Mr. Nichols agreed.

Mr. Smith asked Mr. Nichols to provide the amount Raftalis was paid last year and what is targeted for this year at the next meeting. Mr. Nichols agreed.

Mr. Smith asked if we were contemplating a second [user fee] rate increase in February 2010. Mr. Nichols said that there was a rate increase in March 2009 and a rate increase in July 2009 and, if the board approves, another rate increase in January 2010. Mr. Smith asked the percentage. Mr. Nichols said that it was 12.75%. Mr. Smith asked if that would have to be put in place with only one month of actuals. Mr. Nichols said that he could not guess without looking at the data. Mr. Smith asked if that is the issue going before the Board of Supervisors in December. Mr. Nichols said that the way the motion was written stated that if the economic conditions are such that the connection fees are still down, then the rate increase would take effect on January 1, 2010. (NOTE: Actual motion wording reads as follows: "On consideration, it was moved by Supervisor Valadez to close the public hearing, approve the recommendations for the 2008/2009 Financial Plan, adopt Ordinance No. 2009-14, and select Scenario C with the following additions: A. To conduct a thorough review at the first Board of Supervisor's Meeting in December 2009, to determine where the County is in terms of economics and determine whether or not the connection fee was a more viable option at that point and, if the situation has not changed, Scenario C [12.75% user fee increase in January 2010] would remain in effect...")

Mr. Carlson said that the recommendation of this Committee that there be three increases.

Ms. Hanson asked if there have been changes made to the design standards. Mr. Weiduwilt said no there have not, however staff is completing an evaluation of low flow conditions in the system and have developed some design change considerations. Those are now in draft final form and will be presented to Mr. Gritzuk soon. In general, steeper sewers are required at the terminal ends of subdivisions. There are some areas that cannot be deeper because you could not connect to the existing sewers. They are trying to write a standard that has some flexibility but also has some limitations.

**5. Conveyance Operational Update.** John Warner, Deputy Director, provided an update on the Conveyance System with a PowerPoint presentation.

- The administration building at 3355 North Dodge Blvd. has been completed. They are now moving into Phase 2. All bids are in and are low: the target was \$650,000 and the lowest acceptable bid was \$455,000.
- There are 107 permanent, full time employees and 12 vacant positions of which 6 are non-funded.
- The last external International Organization for Standardization (ISO) audit was in 2008 showing eight minor non-conformances. There is another external audit scheduled for January 2010. Staff finished an internal audit showing no non-conformances. An example of a non-conformance would be something not spelled right on a process map.
- The conveyance system has currently almost 3,500 miles of pipe, 64,898 manholes, 8,570 cleanouts and 25 lift stations. Mr. Flores asked about the use of potable water for flushing. Mr. Warner said that the first site will be online in the next 30-60 days.
- In 1999 there were 245 sanitary sewer overflows (SSOs) per year. By the end of 2008 there were 65 SSOs. So far in 2009 there were 32. He attributes the remarkable improvement to staff.
- 2,499 miles of lines were serviced in 2008. In 2009 to date 1,445 miles have been serviced. Approximately 100,000 work orders are processed per year.
- In 2008, 260 miles of line were viewed with the closed circuit television (CCTV). To date in 2009, 153 miles have been viewed. The video is reviewed on-site, then brought back and reviewed again. The pipe is scored on a national rating scale. They are pursuing an outside contractor to assist with this. Mr. Flores asked if the data factored in the age of the system and the connection to the projected road project. Mr. Weiduwilt said they do try to coordinate rehabilitation with large road improvement projects.
- The safety rates in 2008 were 5.26. In there are 2.6 so far in 2009. The goal is zero: the key is employee education. Mr. Smith asked about the fractional index. Mr. Jackson said that for every reportable injury add 200,000 hours in the numerator, divided by actual number of man hours in the denominator.

**B. New Business**

- 1. Annual Report to the Board of Supervisors.** Ed Curley, Manager, Strategic Planning Division, provided copies of the 2007/08 Report to the members. He asked for input from the committee in the next few weeks for articles for the 2008/09 report that they felt were major accomplishments of the committee and to put their activities in perspective for the Board of Supervisors. Would like to have a draft for the September meeting.

Rob Kulakofsky said that he would like emphasis on things the committee voted and were active on.

Mr. Flores said that the energy projects and innovations in that process would be interesting.

Mr. Barry said that he would like the joint County/City Water Study to be included.

2. **Pandemic Preparation – Continuity of Operations Planning.** Matt Matthewson, Administrative Support Services Manager, provided an update on the pandemic preparations of Pima County RWRD with a PowerPoint presentation. Mr. Matthewson gave an overview of pandemic requirements for the avian flu and the swine flu. Mr. Gritzuk is a national leader in ensuring critical infrastructure in the water sector is ready and responsive to a pandemic threat. Mr. Gritzuk and John Bernal, Deputy Pima County Administrator, began some planning action. (NOTE: Chair Bowen left, Vice Chair Smith assumed the Chair.)

An emergency management consultant was hired, three phases of continuity planning were developed, starting with treatment and conveyance systems, and expanded into plant services, sub-regional facilities, treatment administration and laboratory. During phase one, we learned that our primary interdependency was with County Fleet Services. Phase three has expanded to the Director's Office, the Planning, Engineering and Capitol Improvements Division and the Compliance and Regulatory Affairs Office. Hopefully, this plan will go from a Public Works pandemic planning tool to a County all-hazards planning tool. The assumptions made during this study are consistent with national strategy. A pandemic response team was formed, and systems are being developed so that we are ready for both the avian flu and the swine flu, including continuing to emphasize proper hygiene (cough into your sleeve, washing hands frequently), "Wipe Down Wednesday," which involves wiping door handles, telephones and any place the public come into contact (doorknobs, counters) with sanitary wipes, and continue to procure sanitary wipes for staff. They do not anticipate an increased risk to operators because of the wastewater stream carrying the virus.

The focus is on prevention, coordination and communication. They will strongly encourage people to be vaccinated and to practice social distancing (stay home when ill, stay out of "sneeze range"), focus on education, and be sure the sick leave policies are established.

Mr. Carlson said that one article he read said that the vaccination may not be effective and that production is behind. Mr. Matthewson said that the projection is that some vaccine will be available in October.

Mr. Flores asked to what extent the disease location monitoring is and what the best management practices are. Mr. Matthewson said that we are in touch with the Center for Disease Control (CDC). The CDC is monitoring the disease, where it is, whether it mutates and if the symptoms are changing. Mr. Flores asked to what extent the county become involved in declaring a state of emergency or action at the regional level. Mr. Matthewson said that is why we need to coordinate with both the Health Department and the Department of Emergency Management and follow their lead. The swine flu is not expected to reach that level, however the avian flu is.

Mr. Biggs said that, during the development of the City of Tucson Continuity of Operations Planning, this can also be used for a natural disaster. Mr. Matthewson said that is why they are pushing to have the plan used as an all-hazards plan, as there are features that can be adopted.

- VI. **FUTURE AGENDA ITEMS.** System Wide Odor Control Update; Biosolids; Connection Fee Analysis; FY 2009/10 Financial Plan; ROMP Update; and Water Study Update.

Mr. Kulakofsky would like to see a presentation on Biosolids. Mr. Jackson asked for clarification. Mr. Kulakofsky said as regulations are getting stricter in the future, he would like to see where we are at and what we are doing as far as looking towards the future, identify any problems, the chemical makeup of biosolids – chemicals and metals - as it includes both industrial and household waste, and problems that result.

- VII. **CALL TO THE AUDIENCE.** There were no comments from the audience.

- VIII. **ADJOURNMENT.** The meeting was adjourned at 9:35 a.m.