

REGIONAL WASTEWATER RECLAMATION ADVISORY COMMITTEE

Transamerica Building
Pima Association of Governments' 5th Floor Conference Room
177 North Church Avenue

Thursday, June 17, 2010

REGULAR MEETING

Committee Members Present:

Chris Avery for Jeff Biggs	John Carlson	Rob Kulakofsky
Jim Barry	Mike Gritzuk	Armando Membriila (phone)
Sheila Bowen	Kendall Kroesen	Corey Smith

Committee Members Absent:

Brad DeSpain	Bill Katzel	Mark Stratton
Barbee Hanson	John Lynch	Ann Marie Wolf

Staff Present:

Diana St. John	Mary Hamilton	Melaney Seacat	Ron Meck
Eric Wieduwilt	Gregg Hitt	Lorraine Simon	
James DuBois	Mike Kostrzewski	Lilian Von Rago	
Laura Fairbanks	Jeff Prevatt	Charles Wesselhoff	

Others:

Dick Bayse	John Kmiec, COT	Linda Smith, COT	Claire Zucker, PAG
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I. CALL TO ORDER. Chair Sheila Bowen called the meeting of the Regional Wastewater Reclamation Advisory Committee (RWRAC) to order at 7:50 a.m.

II. CALL TO THE AUDIENCE. There were no comments from the audience.

III. APPROVAL OF MINUTES. The minutes of the May 20, 2010 meeting were approved unanimously (out of order).

IV. Committee/Sub Committee Reports

- A. Citizens' Water Advisory Committee (CWAC) Update.** Jim Barry gave the CWAC update. The last meeting was June 2, 2010. It was his last as a CWAC member. There was a report from the Conservation and Education sub-committee, and CWAC approved, their recommendation for the Conservation program next year, totaling \$1.3 million. Their estimated savings in 2011 is 67 million gallons of water, enough for 413 households.

Also, a presentation was given from the University of Arizona regarding tree rings. Tree ring research can be used to get a long picture of Colorado River water flows. The important thing they learned was that when the Colorado River Compact was signed, they thought the annual flow was 16.4 million acre feet, but the stream record back to the year 1490 it is somewhere between 14.5 and 15 million acre feet. The river has been known to be over allocated.

Finally, the proposed Tucson Water service area policy was discussed. There was a time when Tucson Water would give letters of commitment to developments regardless of location. As the joint water study progressed and the insecurity of water supply was discussed, former City Manager Mike Hein proposed an interim policy that they would not serve outside the obligated service area. This means that within the City boundary, Tucson Water is obligated to serve water customers. About 40 percent of customers are outside of the City. This interim policy was pending the outcome of the Water Study. At the June 2, 2010 CWAC meeting, staff recommended that the interim policy continue. There are areas, primarily in the southeast, that they would be willing to service subject to annexation. There are some places in the northwest area that would be taken on a case-by-case basis. The recommendation is to not extend service to the southwest side at this time. This will bring an additional 20,000 to 50,000 new customers. CWAC endorsed the recommendation. It will be reviewed annually.

V. Discussion

A. Old Items/Updates

- 1. Regional Optimization Master Plan Update.** Mike Gritzuk gave a PowerPoint presentation on Guaranteed Maximum Price Package 6 (GMP 6). Questions asked during the presentation were as follows.

Mr. Barry asked if a Construction Manager at Risk (CMAR) had already been selected and if the CMAR can bid

just on qualifications, not on price? Mr. Gritzuk said yes, the CMAR was selected during the design phase based on qualifications only.

John Carlson asked what was being done with the excavated dirt. Mr. Gritzuk said that it is being stockpiled on-site. All the excavated dirt, plus more, will be used to bring the laboratory facility site up to the 500-year flood plain level.

Mr. Carlson asked what the Bardenpho process will do. Mr. Gritzuk said that the process will allow RWRD to comply with the Department of Environmental Quality (DEQ) effluent quality requirement, substantial reduction of nutrients and ammonia, and will position RWRD for future regulations such as phosphorus reduction and possibly pharmaceuticals. Mr. Carlson said that he is glad that RWRD is looking at the future.

Mr. Carlson asked what kind of permitting needs to be done. Mr. Gritzuk said that, with DEQ, it is done with our design consultant. Many permits have been or are in the process of being obtained. These are construction-oriented permits.

2. **Financial Update.** Ron Meck, Finance and Risk Management, gave the financial update. Mr. Meck said that there has not been much change in the last month. Revenues were less than anticipated, however Mr. Gritzuk is controlling costs and is under budget. The Board of Supervisors adopted the budget, and RWRD's budget increases are limited to 3.4 percent of last year's actual expenditures.
3. **Pharmaceutical Update.** Ms. Bowen tabled the update.

B. New Items

1. **Alternatives to Effluent Disposal: Farmland Delivery.** James DuBois gave a PowerPoint presentation on farmland delivery as an alternative to effluent disposal. Questions asked during the presentation were as follows.

Mr. Barry asked if 19,000 acre feet of effluent are enough to maintain the habitat along the Santa Cruz River, as there would be strong opposition to diverting all of the effluent from the River. Mr. Dubois said not on the entire present length of it.

Corey Smith asked if the Conservation Effluent Pool feeds the Santa Cruz River. Mr. Dubois said that the City of Tucson and Pima County are currently working on the Conservation Effluent Pool Agreement including how much will be dedicated to riparian restoration projects. Mr. Barry said that the Secretary of the Interior is not using any of the Southern Arizona Water Rights Settlement Act (SWRSA) 28,000 acre feet. The Santa Cruz effluent-dependant stream is there because all of the effluent is not being diverted. The question to the environmental groups and the joint Water Study was that there was a purpose to protect that effluent-dependant stream, meaning that 100 percent of the effluent cannot be diverted.

Mr. Smith asked if there were any legal requirements that dictate the minimum effluent. Mr. Dubois said no, there isn't. One of the actions by the Water Study was to identify a Santa Cruz River Management Plan. This identifies how much water and where water needs to be in the Santa Cruz River. These are the resources that are shared by SWARSA, the CEP, the City of Tucson and Pima County.

Mr. Smith said that, in regards to the slide in the presentation, to start with the 70,000 acre feet bucket and add a bucket labeled "Santa Cruz." It will then show what is really left. If RWRD is considering a delivery or conveyance system, the cost of delivering that level of water doesn't work. Mr. DuBois said that there are a lot of things calling for the effluent. One thing that is recognized is that multiple needs for effluent can be met in many ways: you can maintain the flow in the Santa Cruz River and still receive recharge credits as we do with the managed facility operating there.

Mr. Carlson said that nitrogen is good for crops. Why is it impractical to not use nitrogen-laden water on crops? Mr. Dubois said that it is not impractical to use nitrogen on crops. Other aspects of permitting require that nitrogen be removed. Jeff Prevatt said that there is a provision in the reuse rules for consumptive ratings. Calculations must be done to show the plants being grown and the number of acres involved has the consumptive ability to use all the nitrogen so there is zero potential of excess nitrogen getting into the ground water.

Kendall Kroesen said the farmland requirement for irrigation water will be declining as farmland areas are developed with residential and commercial. Mr. DuBois agreed, stating demand varies with the cotton prices and other agricultural economics. It's not a dependable demand.

Mr. Barry asked if, as much flow as possible was diverted to agricultural uses, would effluent's value to the agricultural community be diminished with the nitrogen removed. Mr. DuBois said that is difficult to answer. When farmers receive effluent or any source of water they are supposed to measure the nitrogen in that water and adjust their fertilizer appropriately.

2. **Election of Officers.** The Elections Committee recommended Sheila Bowen as Chair and Mark Stratton as Vice-Chair. The Committee voted unanimously to accept the officers as recommended.

VI. FUTURE AGENDA ITEMS. Mr. Smith suggested a more comprehensive Committee assessment of effluent disposal. As RWRD facilities move towards class A effluent, the pact [agreement] negotiation will be back on the table. A working committee should be established to look at the options and involve additional constituents in those discussions to come up with a set of options.

Mr. Barry said he agrees. The use of effluent was one of the unresolved issues in the joint Water Study. This is will be a large issue in the future and this Committee should weigh in on the topic.

Mr. Smith said that with possibly losing the Central Arizona Project allocation, toilet-to-tap issues, the desire for effluent and the cost of conveyance, we need to have a well informed Committee.

Mr. Carlson said that this study should be presented to the Board of Supervisors and it is the Committees charge to tell them.

Ms. Bowen, Mr. Barry, Mr. Kroesen and Mr. Kulakofsky volunteered to form a sub-committee regarding effluent.

Ms. Bowen said that there have been some comments on the frequency of the meetings, such as bi-monthly meetings. She asked for feedback. Mr. Carlson said that the Chair should be empowered to cancel a meeting ad hoc. Ms. Bowen said that she is hesitant to implement a flexible schedule as attendance suffers. Mr. Kroesen said that seems to be the system now, as the July meeting is being cancelled. Mr. Barry said that monthly meetings are sufficient for now. Members concurred.

VII. CALL TO THE AUDIENCE. Mr. Dick Bayse addressed the Committee.

Mr. Barry requested a verbatim transcript be prepared of Mr. Bayse's comments. He also requested the transcript be sent to Mr. Bayse so that he could edit and return it, along with any further comments he may have. [The unofficial transcript is attached].

Linda Smith, City of Tucson, said that the Committee and Mr. Bayse have a lot of questions. There is much that people do not know and this should be relayed to Mr. Biggs [Director of Tucson Water]. She suggested that Mr. Biggs be asked for a presentation to get the information that the Committee needs.

VIII. ADJOURNMENT. The meeting was adjourned at 9:41 a.m.

Regional Wastewater Reclamation Advisory Committee

June 17, 2010 meeting
Final call to the audience.

Dick Bayse: I parked on the street so I'm gonna make this fast otherwise I'm gonna get a parking ticket. First of all, what bothered me at a public discussion was that was never studied –the idea of sending it to the farms. At that time, I mean there was a little bit of evaluation now but that's what we were told and the deal is that the current plan, we've been told as the public, is to bring that water up to a class 1 or A-1 standard to dump it all in the river.

Now maybe people have lots of claims on it but we don't know what they are unless it's toilet to tap. And putting in the river doesn't serve anybody any good other than cost us \$720 million plus, and it goes up to Pinal County and heads to the Colorado River as far as we know. So it doesn't give us a safe water yield at all, whereas if it went on the farms it would – we would automatically, and there's an article in the 15th of - in the Star about saying how I'm getting safe yield is 59 percent of that reclaimed water being reused in some way. I'd rather see it on farms than in our faucets, personally. And maybe that's just a prejudice of mine, but I don't care how much they purify it I just don't like the idea.

But also if it goes on the farms we can reclaim the costs by say charging the farmer, 75 percent of his pumping costs for that water so he's got an incentive to take it. It also has nitrogen in it as someone mentioned is fertilizer and it's only six percent, by the way, for 60 percent of the water according to the Ina Road plant from a person I talked to up there that seemed to have expertise in the matter. It's a pretty low nitrogen level.

And realize what I've just found out that the City takes its reclaimed water off the Roger Road plant which is at 30 percent nitrogen level and that's the water that goes onto our parks, in our golf courses and the U of A uses it on their Campbell Avenue farm, that's mostly - its just there's some grapes there and I think there's also just a some other stuff of that nature that's there but they use that water, so what's the problem?

Another thing was about the holding basin which is a problem to some degree. Course everyone knows about that huge gravel pit that's up there at the confluence of the Canada Del Oro, the Santa - Rillito, and the Santa Cruz, you can look at it up there on the map there. It's almost between the two plants, the Ina Road and the Roger Road plant. Doesn't look like it to be any problem to put that water in there as a hold- now he did - gentlemen did - mention it's down at the water table, true.

Well, all you have to do is just expand that pit a little, it's sort of like a bowl, take - get a couple of bulldozers and put ten feet of soil on top of it and you're at the same situation which for 60 years, this grade B effluent has gone down the Santa Cruz River. And I've been told a dozen years ago that the water table is within ten feet of the surface due to that many years of that water going down that River. So you're in the same condition there. So the problem seems to be averted as far as that goes. And if can hold about 15,000 acre feet, which I would guesstimate from some other things I've been involved in, that should pretty well do it for the wintertime as a holding tank.

And as far as delivering the water with pumps and so forth it's all downhill to the Marana farms from the Roger Road and Ina Road thing. The Ina Road would have to pump it a mile uphill, probably very little bit of uphill pump, to put it into that pit, because it's downstream from the - where the pit is. But from there it's all downstream to the farms. And, why that wasn't evaluated, I don't know. I just think that it's - there's no benefit to the citizens of purifying this water and then sending it down the river unless there is an underlying intent to feed it to us as a, as a, civilian product. So, I just don't think it's been completely evaluated properly.

And the distrib - as far as lettuce crops go, when it's cotton - and then I was told by the Agricult- the U of A Agricultural Department that almost all of the that stuff around Marana is cotton and or alfalfa that nature, which is acceptable for grade B water. And if there is some lettuce, well then they - the farmer can use his own pump at that - during that part of the season when he wants to put lettuce on there. It's an e-coli problem, which, and once it's dry you don't have the e-coli problem, I was told, so.

That's just a quick summary, and I can't give all of it here in the, in the short time that's - frame, but as I've said earlier at a previous one, 28,000 acre feet belong to the feds to give to the Indians. By god, if they own it and they dictate that we're to have class A-1 water, why aren't they paying 28 percent, or it's more than 28 percent, for this plant? Why are we paying for their benefit?

And then also, the 8,000 acre feet is what goes into our reclaimed system, so we're talking about 40,000 some acre feet actually of water that's available downriver to go to these farms, so you don't have to worry about the storage situation putting it in that gravel bank. That's a quick summary, but there's a lot more to discuss. I'll do it individually.