

Meeting: Engineering and Planning Subcommittee

Date: September 3, 2008

Attendees: Arne Lind, Ronald Wastewater District; Art Wadekamper, Ronald Wastewater District, Steve Moye, Coal Creek Utility District; Scott Thomasson, City of Redmond, Walt Canter, Cedar River Water and Sewer District; Dennis Cheung, City of Issaquah; Mike Cusick, City of Tukwila; Pat Brodin, City of Tukwila; Joyce Nichols, City of Bellevue; Margaret Wiggins, Northshore Utility District; Bob Elwell, City of Auburn; Andrew Lee, Seattle Public Utilities; Cheryl Scheuerman, Skyway Water and Sewer District; Laura Wharton, King County; Maryann Petrocelli, King County; Erica Jacobs, King County; Steve Tolzman, King County; Tamie Kellogg, MWPAAC Facilitator; Jeff Lykken, Tetra Tech; Cole Gainer, Triangle Associates; Bob Wheeler; Triangle Associates; Matt Maring, Brown and Caldwell

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#### Committee Business:

- The committee may set aside time at the next meeting to go over input on Reclaimed Water Comprehensive Plan discussion questions.
- The committee agreed to combine the Bellevue and Issaquah I/I projects.
- The committee unanimously agreed to select the Skyway I/I Alternative 2 project, without Skyway Water and Sewer District cost sharing and furthering engineering and negotiations with Skyway regarding mains.
- The committee also agreed to the Initial I/I project team completing the Predesign Report and that they begin the Final Design.
- The committee decided that a letter will be prepared based on the committee's recommendation to be presented at the regular committee meeting.
- Information on how the CSI cost savings are calculated was requested.

#### Initial Infiltration and Inflow (I/I) Project Summary:

- I/I is not uniformly distributed across basins as assumed; and reduction targets are not achieved.
- I/I removal targets in basins are achieved; however, a lesser reduction rate at the location of the downstream CSI project is realized.
- Peak I/I rates over-estimated in a basin selected for implementation.
- Construction costs higher than anticipated due to rehabilitation difficulty.
- Construction cost escalation is higher than anticipated.
- Drainage issues arise on multiple private properties resulting from I/I removal that require resolution as part of the project; increasing project costs.

#### Initial I/I Project Questions and Answers:

- It was explained that the savings dollar amount was a gross amount and not a net savings and that costs were developed based on private property rehabilitation.
- The County recently updated its cost for CSI projects based on information from wastewater constructions projects, including storage, across the Northwest and Western United States. Inflation costs are updated every five years and

projected into the future; the inflation rate from construction costs over the past seven years has been good.

- Skyway will be replacing mainlines and manholes regardless of which alternative is chosen; this maximizes the opportunity at hand and the amount of I/I reduced for the money spent.
- During Final Design, illegal connections will be disconnected but their contribution to I/I will be extremely minor.
- The assumption that each side sewer has the same amount of I/I is an added risk even though the engineering team would focus on culprit properties rather than scatter rehabilitation efforts throughout chosen basins.
- Details on how the cost savings figures are derived can be distributed if requested; however, they are generally derived from models combining factors such as land acquisition, excavation, shoring, pipe length, etc.

#### Reclaimed Water (RH2O) Comprehensive Plan Summary:

We are doing this plan now, to figure out how we can best develop this plan. When we were looking at this plan there is time element to this – we want to be planning now to figure out what we need to implement and figure out when we need to do that. Come up with a plan now that guides how we make decisions in the future. We have existing Reclaimed Water policies in the adopted RWSP but as we develop a specific plan, we will be as part of this policy is reviewing those policies. We will come up with reviewed, revised and substantially changed policies. We are using existing policies to guide us but will not govern the policies. We want to identify alternatives that support operation of the regional wastewater system and we want to identify ways to better manage our treated effluent. We want to reduce reliance on Puget Sound discharge. Identify beneficial uses, environmental benefits and impacts, facilities, benefits and costs, and financing plan.

- Question: Reducing reliance on Puget Sound discharge. I understand that any water coming out of the plant is considered effluent but reducing reliance, we already have enough pipes going to the Sound to treat all of this. This isn't a capacity issue? Answer: It's not an issue of capacity. It's clean to a secondary standard.
- Question: This causes a pollution issue for the Sound? Answer: If we cleaned it to a higher standard, can it and should the effluent be used for a different use because it has been cleaned to a standard that could be a resource.
- Question: I can agree with what you just said but this statement says you shall. I'm questioning if that first objective is a real objective. If we want to reduce pollution then we can treat it to a higher standard and then discharge and it won't cause an issue. Clearly when we hear about LOTT, there had discharge issues. Answer: DOE and DNRP want us to reduce on reliance of discharge in Puget Sound.
- Question: I'm not quite sure what the objective is? Answer: It's both pollutants loading and not wanting to discharge into Puget Sound.
- Question: If we are worrying about pollution loading, then that's a treatment plant issue? Do we need to go to a different treatment plant design?

- Question: When we talked about this – when I think through objectives. One of our objectives is trying to figure out what problem we are trying to solve and then second identify the alternatives and then third identify the costs and the benefits and then fourth identify the plan.
- Comment: Its like we are trying to find the answers but we don't know that the problem is?
- Debra: When I think the objectives of the plan is to identify beneficial uses; when I look at these as objectives we need to explore these items, we need to figure out what the beneficial uses of providing reclaimed water for those uses and what would be those facilities.
- Wes: Are all around a very issue. For each objective you would go through that particular issue. A beneficial use still has to be around a problem issue.
- Scott: The developing the finance plan doesn't identify cost-effective financing plan.
- Stakeholder Involvement: individual meetings with stakeholders and then regional workshops to bring all stakeholders together. Specific to MWPAAC we will be meeting with the committee on a monthly basis. That allows you to provide information to this committee all the way through MWPAAC and then this allows the MWPAAC Chair to bring recommendations/comments to RWQC.
- Question: Will we cross paths with agriculture and recreational stakeholders?  
Answer: Yes, at the regional workshops, it will give you an opportunity to hear others perspectives. The workshops will be every 4-5 months. We are expecting that our first workshop will be toward October 20?
- The driver for our plan is a product. Our schedule will be adjusted based on circumstances. We don't want to start out with an open-ended schedule and if we find out that we can't do that in two years that's fine, we are going to make sure that there is adequate time. Scope of Work elements: carry out regional participation strategy. We want to review the regional drivers/objectives. We want to develop policy criteria to guide the review of the planning process.
- Regional Drivers: reduce reliance on Puget Sound as discharge site. We want to prepare for the future for potential water quality regulations and climate change impacts. We want to examine potential uses for reclaimed water as a resource. The development of policy criteria will help guide us in the planning evaluation process. The multiple criteria will be developed with stakeholder input and reviewed and approved by the King County Council.
- Question: Is it implied that RWQC is inside that bullet? Answer: Yes.
- It's been asked that if we are trying to look at other alternatives to achieving this that isn't reclaimed water then we will do that. The level of detail – we hope to identify what those potential sources are and we are not doing a hydrologic and cost in that. If we are considering something different then at that time we would consider going forward with additional analysis. We don't have the budget right now since these projects won't be implemented until the future to evaluate those alternatives.
- Comment: This won't be an expansion to the Reclaimed Water Program.  
Answer: Prior to implementing anything we would have to do additional analysis in order to evaluate those alternatives.

- Mark: The value of this plan – what we want to do and we are having – We want to try to come up with a regional reason to move forward with reclaimed water. Because there is a significant time line to this project – we want to consider other alternatives – there was an initial step to implementing – fully evaluate all of those alternatives so we could vet. If we were to go down this road, what it might be like.
- Debra: One of the things it's similar to is the conveyance treatment system. In this last round, amending those policies, we wanted to see if I/I work instead, field verification. It would be similar.
- I saw in the diagram there was a draft EIS and EIS and I assume would require some level of analysis? In the plan, the EIS doesn't focus on the financial aspects.
- Is it assumed that would be submitted in the EIS? Yes.
- Comment: You're developing a lot of sunken costs – that is my concern with regards to doing all of this work before you get down and do the feasibility analysis that we asked you.
- We need to have some idea of what the system will look like and what benefits could be achieved by doing this. We are trying to have something done – address the issue, lay out an approach to try that system.
- Arne: For a simpleminded person for myself. About 3-4 years ago, it was decided by the county to enter into reclaimed water contract with Willows Run, and then we did Brightwater and \$25. Is reclaimed water a done deal? Answer: No not exactly. We have a reclaimed water program in place at South Plant and West Point. We have process water going on. This plan is basically to figure out if we need to do anything more in this region.
- Answer: We have some on-going programs that haven't been as visible in the region. The plan is our attempt to be more transparent and solicit stakeholder input regionally. The if, how and when we might move forward with this.
- This group is simply one of many stakeholders; these are water purveyors, I understand this is really looking at the region and putting together a regional plan. Does the county then become a purveyor of this water and how does this work with individual purveyors? We have no preconceived notion to other than to work that out. The County Executive has said that we plan on being a wholesaler. At Willows Run, we were looking for regional customers, the intent and the County Executive has been clear on this that we are a wholesaler. The county would act and treat as a wholesaler.
- Realistic input to what every model that we uses. (Referring to the Economic Analysis). We want to talk to you about the unit costs so that we have agreement with you. We want to start this conversation in March 2009 on how we develop the values. We will also be doing a full. There might be other sources of revenue that will help fund reclaimed water. This will help answer the question of who should be paying for reclaimed water over time. How can we best make use of effluent as a resource? We are looking at how reclaimed water can influence stream flow. The consultants will be in a support role. I also want to point out that we are looking at energy and greenhouse gas emission impacts.

Wastewater utility is a significant user of energy. We have started this planning process in July.

- It almost seems like this is new but we've done a lot of work prior to this. What I'm hoping is that there are pearls of wisdom from that other work? We are not going to reinvent the wheel. This is our attempt to have a larger discussion on reclaimed water and we have previously had more focused discussion on what we needed to do.