

Meeting: Engineering and Planning Subcommittee

Date: July 16, 2008

Attendees: Wes Jorgenson, City of Bellevue; Steve Moye, Coal Creek Utility District; Margaret Wiggins, Northshore Utility District; Arne Lind, Ronald Wastewater District; Cheryl Scheuerman, Skyway Water & Sewer District; Mark Buscher, King County; Erica Jacobs, King County; Sharman Herrin, King County; Debra Ross, King County; Carl Slack, King County; Dave Stark, King County; Steve Tolzman, King County; Laura Wharton, King County; Tamie Kellogg, MWPAAC Facilitator; Marc Errichetti, Springline Design; Cole Gainer, Triangle Associates; Bob Wheeler, Triangle Associates

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#### Committee Business:

- Mark Buscher suggested E&P schedule for the first Wednesday of September for substantive discussions on Reclaimed Water Comprehensive Plan. He also suggested that the E&P schedule the first meeting of the month for discussions on the subject.
- The committee requested a list of participant stakeholders for the development of the Reclaimed Water Comprehensive Plan.
- The committee also requested that project information be distributed prior to the meeting to ensure that the committee is prepared to discuss.

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

- The regional participation strategy is to work individually with stakeholders and then when certain milestones are reached, workshops will be schedule disseminate more information.
- Initial discussion questions have focused on what peoples' interests' area and potential uses for reclaimed water. The first workshop will be scheduled for October to discuss the results of those discussions.
- Brown & Caldwell has been selected and hired as the consultant team on the project. The majority of work will continue to be done by WTD and DNRP staff. The Scope of Work identifies specific tasks that require consultant technical assistance such as community involvement. Please be aware that the sum of the consultant work products does not equal a comprehensive plan.
- At the September meeting, Mark will present the planning process and articulate the objectives of RH2O comp plan. The plan itself will largely be shaped by input received by stakeholders.

#### RH2O Comp Plan Presentation Questions and Answers:

- You have staff set-up to work with Brown and Caldwell, how many people are dedicated to the RH2 project? The number of staff involved is 20 and not all at once. The total number of full time equivalents is 10-11 over the next two years.
- Do you have a list of stakeholders that you are envisioning? We sent letters to about 25 individuals; we contacted tribal, wastewater utilities, environmental groups, industry groups. We've also identified 30-40 other agencies that we will be meeting with.

- MWPAAC has identified key areas that we felt the comp plan needed to address. We are hoping that the county will incorporate those issues.
- The phase 1 scope is Brown & Caldwell and phase 2 hasn't been done. What is the total dollar value for Phase 1? The scope of work is \$700K, however – you will see that there are tasks and subtasks – Brown & Caldwell are being given Notices to Proceed at the task level. If we find that the consultant team doesn't need to do a task that we can do internally, we will. We have a dollar cap.

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

- Project selection will begin in early September followed by final design at the end of the year. The committee's recommendations will then be taken to full MWPAAC at September 24<sup>th</sup> meeting date.
- Development of unit costs considered the difficulty of rehabilitation in each of the project areas; focused on private property rehabilitation and use of pipe bursting.
- Over 50 scenario alternatives were evaluated including single basins, multiple basins and work in multiple project areas.
- The most promising basins for rehabilitation include BEL031, ISS003, BLS002 and BLS2003. At this time, the Skyway rehabilitation does not appear cost-effective, despite high I/I allocation. Relative to other project areas, High I/I removal quantity is required to eliminate Bryn Mawr Tube Storage. Hydrograph characteristics, low storage volume and high property acquisition costs are factors.

#### I/I Questions and Answers:

- What type of responses have you gotten from residents where you had previously completed a pilot project? It depends, some residents have had drainage issues, other were thankful for the work done. We are anecdotally trying to capture all responses. In the Skyway area there was a cluster of homes that had drainage issues; and I'm taking detailed notes of interactions with neighbors for lessons learned.
- What did you do about the drainage complaints? It's a natural effect; the majority of complaints were from residents' living in low areas. It was a private property issue but we worked with Roads to get modifications on storm drains and we had the contractor add French draining. Those costs were included in the I/I project and was done on a case by case basis.
- What was the bedding material? It's a piping issue that we encountered. Some were line with pea gravel and others just had clay pipes and no bedding, they just back filled. We have premonitoring results and we will do post monitoring.
- I'm not sure that pilot is very applicable to this? That was Skyway, Ronald did side sewers and laterals and they were at 75%.
- When we obtained those numbers was it based on flow monitoring at the conveyance system? Did we realize any conveyance savings? No, we were just checking within the basin areas.

- Did the water transfer somewhere else? Did we see a basin reduction? I suggest doing flow monitoring again to confirm results. We might have this information; it would just be a matter of pulling it.
- The allocation was 4.5 gpm, what was the final property gpad? Was that calculated? No, we looked at the remaining I/I based on a gpad.
- You saw that easy, medium and hard are different. Is it landscaping, length of landscaping that accounts for the increase? Topography, location of the mains, shared side sewers and overlay requirements.
- Costs have doubled or tripled, can you report if costs are lower? We plan to - these projects will be used to further develop the I/I program.
- Is any operation and maintenance cost included? No, we decided to look at total construction costs; it was the committee's decision not to include O&M.
- If we are looking at our 20-year goal, the level of protection is close to our goal – it wouldn't be a high priority? We are thinking it would be needed in 2014.
- What can it handle before it would overflow? If did a curve that identified our 20-year flow, this is the flow that the system can handle before it can get into overflow, you can look at each of the basins, how close to the 20-year goal can we achieve. We may find it's an 18 year - we want to attach these down here. We may even say – is 18 such a bad reoccurrence year, is there a better value environmentally? We are going to look at before we make any recommendations to the committee. Here is what the capacity of the system now and here's what we need to offset that. LW –the point you're making is a good one, the committee made a good one, it's required to do field verification – you may want to change the priority ranking of those projects.

#### Capital Project Prioritization Process Summary:

- The purpose of the prioritization process is to provide an objective decision making process that allocates limited resources to the most needed projects. Priorities are assigned based on organizational goals.
- All active projects are prioritized each year until they reach the Implementation Phase (when the construction contract has been signed). Cost has no bearing on how projects are ranked.
- Capital projects are grouped according to project categories (Major Capital, Asset Management and Planning) – so that only like projects compete against each other. A criterion was developed for each group according to project type.
- There are four steps for the prioritization process: 1. project managers complete project evaluation; 2. scoring panels evaluate projects; 3. generate project rankings; WTD management team review prioritization results.
- The project managers are required to evaluate their projects against these criteria. They select the criteria that they think applies and they try to think what the delay would cost. A scoring panel composed of three 6-person scoring panels, one team for each project category evaluate the projects. Panel members must agree with criterion best represents the panel.
- After each scoring session is held, a project control engineer enters the scores into a project management system that calculates a score for each project.

## Capital Project Prioritization Process Questions and Answers:

- Money was earmarked for each category? Yes, based on historical spending.
- What about Operations staff, do they have to go through the PM to go through this process? Yes. Staff would have to let them know their concerns.
- What do you do when a project covers two categories? They typically are considered major capital. Money is transferred from one group to another.
- The criterion doesn't seem to factor replacing older assets? It does provide credit for this type of example, where they are two projects.
- If you have a project that overlaps two categories, it should be funded by both sections? They do transfer money across to allocate for that.
- Comment: We do have costs; it has to do with cost benefit, how many customers will benefit from that. The one that benefits more has more value.
- How do you spend annually without someone evaluating the merits of what you are doing? By the time this project becomes considered – it's gone through all types of justification.
- Do you factor those elements (environmental benefits) in your projects? Yes. We compare for each alternative.
- Are there some guidelines for staff as to how they do this? Who would be a good contact for the environmental aspects? Dave White – he does the state/federal and he is economist by trade and he might be a good resource.