

SOUTH FORK WATER BOARD
MINUTES OF BOARD MEETING
November 13, 2008

Board Members Present: Alice Norris, Oregon City Mayor, Chair
Damon Mabee, Oregon City Commissioner
Jody Carson, West Linn Councilor (via conference call)
Norm King, West Linn Mayor, Vice-Chair
Daphne Wuest, Oregon City Commissioner

Board Members Absent: Scott Burgess, West Linn Councilor

Staff Present: John Collins, SFWB General Manager

Others Present: Laura A. Schroeder, SFWB Attorney

Regular Board Meeting

Pictures taken near the South Fork Water Plant were displayed before the Board as the meeting got underway.

(1) Call to Order

Chair Norris called the meeting of the South Fork Water Board to order at 6:02 p.m.

(2) Public Comments

Alice Richmond stated that, as the oldest resident in attendance, she had seen a lot of rain and understood its impact. The area had seen a lot of torrential rain during the last year or so and she was concerned about how high the water was in the displayed photos.

- She asked if the water had ever come over the culverts and if so, whether the water ever got contaminated.

John Collins, SFWB General Manager, replied that the water had risen considerably higher, about 25 ft. higher than the level shown in the pictures. He explained that the actual pumps, motors, and electrical equipment were placed well above the 100-year floodplain and that South Fork had been able to produce drinking water all the way through a 100-year event.

- His concern was the pumps and motors needed to bring the water to South Fork to treat and purify. If the water ever got higher than a comfortable level, a mechanism was in place to de-energize it, and evacuate the building; staff also had a process to go through after the water came down.

Ms. Norris responded that now if anyone else had a question, they could be assured the system was well managed and that any problems would be addressed.

(3) Consent Agenda - Approval of minutes of the July 10, 2008 Board Meeting.

Board Member Mabee moved to approve the Consent Agenda as presented. Vice-Chair King seconded the motion. MOTION CARRIED 4-0-1. Ayes: Mabee, Carson, Norris, King; Nays: None; Abstention: Wuest.

(4) Lead and Copper Issues – Lee Odell, CH2MHill

John Collins introduced CH2MHill Vice-President, Lee Odell, an engineer and water quality expert, who would give a PowerPoint presentation about lead and copper. He briefly explained that South Fork was working with CH2MHill to mitigate the risk of lead leaching from household plumbing, which Mr. Odell would discuss.

- He noted that a handout of the PowerPoint presentation would be made available to Board Member Carson.

Lee Odell, P.E., Vice President, CH2MHill, presented the Lead and Copper Rule via PowerPoint, distributed as a paper copy to the Board. His responses to questions and comments from the Board included the following:

- As mentioned, the lead was coming from plumbing in private homes.
 - * The Lead and Copper Rule was intended to look for problems and was not representative of the entire water system, or even normally what would be found in people's houses. The absolute worst water quality sample had to be taken and homes with the potential for the highest lead levels were reviewed first, therefore testing was being done in the historic district.
- Eight of the eleven high lead levels occurred in the Clairmont service area of Clackamas River Water (CRW), which historically had not seen higher levels. The highest lead levels were historically seen in West Linn, which only had two high level samples in August 2008.
- The first homes to be considered for testing are Tier 1 homes, which were built from 1983 to 1985, the last year that lead solder was used.
- He described the 3-D graph titled, "Lead Solubility" (Slide 10), noting that it was possible to see where higher lead solubility could be achieved.
 - * South Fork had been operating in the red circle indicated on the graph as were most plants in the Pacific Northwest as all were dealing with the same water source.
- He briefly reviewed the changes that could be made to the system's operation, concluding that dealing with lead and copper was a complicated matter.
- With regard to the August testing, the solubility graphs showed things were going in the right direction from a dissolve point of view.
- Essentially, the best way to operate the system was using a "steady as you go" approach.
 - * Seasonal fluctuations affect lead, which has more potential to leach into the water with high water temperatures.
- The current plan was to continue optimizing corrosion control with pH and alkalinity adjustments, to maintain chlorine levels high to ensure a good oxidation state in the system and to strategically monitor temperature, since these were the main components impacting the corrosion of lead in household plumbing.

Mr. Collins added that Staff felt comfortable that two of the eight CRW samples were compromised.

- In one case, the sample was skewed because the family acknowledged that they forgot to take their first draw in the morning and instead, took it from a utility sink that had gone

unused for more than two months by their own estimate. Though that sample was skewed, it still is the sample, unfortunately.

- In another homes where the sample was high, recirculation pumps had recently been installed to save energy.
 - * Homeowners that used recirculating pumps built during this time period may want to considering change their plumbing, because they might be putting their health at risk
- Staff had requested a resampling and that sample locations be changed. The family in the first skewed sample promised to take one from the kitchen sink, and Staff was still working on the recirculating sample.
- He confirmed that the water leading to the home in CRW was coming through Oregon City's system, but emphasized that no lead existed in South Fork's water source. The pipes being discussed regarded issues in the homes.
- He clarified that heat was responsible for setting off the lead stability, as well as the fact that the water was being recirculated.

Vice-Chair King asked why water took a long period to settle down when it replaced itself every couple of days and what was actually settling.

Mr. Odell recalled research on Portland's lead and copper where pipe loop tests were done to study how scale forms of the inside of pipes. Those studies showed that it takes about six months for the scale to really come to a stable condition on the insides of a pipe and, that whenever pH changed, or alkalinity was added, a new scale condition occurred. Sometimes, that scale gets disrupted, and if lead solder or brass is present, lead was in that scale.

- * It was good for scale to form on the insides of pipes because a nice steady scale prevented metals from getting into the water.
- It takes a long time for things to come to a steady state with a new water quality condition when everything changes. CM2MHill normally recommended waiting six-months before doing any sampling after a ½-unit pH change, such as from 8 to 8.5.
- He explained that systematically raising pH and alkalinities in South Fork's system to reduce lead had triggered the water to settle.

Alice Norris asked if Oregon City had fewer problems with lead and copper than West Linn.

Mr. Odell stated that would be hard to determine, since fewer samples were taken in Oregon City.

Ms. Norris commented that it did not appear to be the same reading coming out from South Fork Water, but clearly the pipes or the reservoirs that collected the water.

- She stated that everyone had to do their part, either to pay or correct the situation. It seemed to her that this was not the same water from South Fork.
- She agreed not everyone should have to pay for problems found in one isolated area.

Mr. Collins stated that when South Fork tested its source, water, treated water, distribution systems and primary reservoirs, no lead was found in the drinking water.

- This situation came back to an individual home and a federal law mandated under a long-term enhanced surface water treatment rule, not a single city or source

- * If West Linn, CRW or Oregon City had miles of lead pipe in the ground, and repeatedly exceeded action levels, someone might have grounds to say one source was the issue, but that was not the case here.

Chair Norris stated that her chief concern was that the lack of investment in infrastructure would increase either regulation or lead and other levels in their water. She asked if there were any national statistics about water treatment plants being sued due to the affects of lead.

Mr. Odell assured that the regulations required South Fork to optimize corrosion control, not meet a lead level. Corrosion standards must be optimized as much as possible without causing problems or disinfecting byproducts.

Mr. Collins added that in most US cities or districts, the distribution staff advocates education. If South Fork demonstrated improvement optimized distribution, then it was an education process. The State requires South Fork to prove they are optimized, which was what South Fork was doing.

(5) **Clackamas River Water Providers – South Fork Conservation Update.**

John Collins introduced Clackamas River Water Providers (CRWP) Manager Kim Swan, South Fork's former environmental coordinator, and Christine Hollenbeck, responsible for implementing conservation programs. He explained that CRWP was formed through the South Fork Water Board. Participating entities included the cities of Oregon City, West Linn and Gladstone, as well as CRW and the Oak Lodge Water and Sunrise Water Districts.

Ms. Swan distributed goodie bags that included items from her Oregon City and West Linn tenure. She then briefly reviewed the annual report and updated the Board about the work being done by the Clackamas River Water Providers with the following additional comments:

- Conservation programs now administered by Ms. Hollenbeck were similar to those being implemented while she was at the South Fork Water Board. The programs focused on usage education and outreach, especially to schools. The report described these activities in detail and she envisioned doing more watershed-related programs together.
 - * She summarized the key watershed programs underway this year, noting that CRWP, Metro, and the Department of Environmental Quality (DEQ) were involved in a pesticide reduction campaign, and were considering a pesticide roundup day in Clackamas County with a one drop-off location sometime in April. She was also working on a special fact sheet to inform and educate pesticide applicators at Christmas tree farms and nurseries about being part of the solution.

Key comments, questions and discussion points regarding the conservation program included:

- A pesticide roundup in the fall was suggested for those who had bought pesticides for the summer growing season.
- Though CRWP was reaping the results of educating children, the adult component should not be excluded because as bill payers, adults would be more motivated to make changes.
- What indicators showed that the programs were working, so the Board could determine how much money to spend and where?
 - * Water systems revenues were dipping a bit, which might be one indicator; however, it was difficult to get solid numbers with so many variables to consider.

- * Education and outreach programs were practically impossible to evaluate, other than anecdotally. It is easier to evaluate a program's effectiveness by comparing before and after water consumption when a low flow toilet is installed, for instance.
 - A pilot program involving multiple jurisdictions would be introduced in January that would provide rebate incentives for both indoor/outdoor components. For example, customers would get a \$100 rebate check from CRWP for having low flow toilets.
 - CRWP was considering rain barrel giveaways to help promote conservation but had developed a rainwater harvesting calculator to show how much water could be captured and used to irrigate landscaping. The calculator was available on CRW's website.
- Further discussion was needed about all utilities being built for peak usage, which was old-fashioned. South Fork needed to get off peak to save money and not have to size for peak usage. The Board was really talking about motivating change.
 - * South Fork's new reservoir with the extra two million gallons of water would allow 20% to 30% of South Fork's operation hours off peak during the day.
 - * Rates were also part of the solution. Most people were apathetic because water was cheap. Unlike South Fork's cities, most other cities had tiered rates.
 - * The City of Reno awarded commercial and homeowner's for converting lawns to a "zeroscape" surface, meaning no water costs. CRWP could educate on how letting a lawn go through its natural cycle results in a healthier lawn.
- Funds for the program's incentives, like rebates for low-flow faucets and toilets, came from a line item in CRWP's conservation program budget. The pilot rebate program would test to see how well the rebates would work.
 - * Focus groups in West Linn were used to determine how much paperwork should be required and what incentives should be offered. A combination of toilet and indoor/outdoor irrigation rebates would be offered for the first year or two. South Fork was big enough to have an incentive program to meet the rebate requirements of the Financial Contribution Plan.
 - * Going from a standalone conservation program to a joint effort by five different entities that included cities, districts, and authorities for resource management conservation translated to an estimated savings of \$55,000 per year, \$10,000 of which had already been rolled over into the budget to support the rebate program in the future. Operating a water management conservation plan at this level had its advantages and had been a huge success.
- Quantitative results and focus goals were needed.
 - * Obtaining quantified results could be addressed when the Master Plan was revisited. The Capital Improvement Program would be reviewed and System Development Charges (SDC) would be based on the amount of water required to run a home, providing a snapshot of how many gallons of water a household uses per month as well as the average water use per household in West Linn, for instance. Variations in water usage would also be known.
 - Since Ms. Swan had initiated the conservation program, SDC rates had gone down every time the Master Plan was reviewed, which demonstrated that the conservation program was working.
 - Educating citizens about how to retrofit existing toilets to avoid having to buy all new fixtures was also part of the water conservation program's efforts and was presented at the last community meeting.

- Rainwater gardens and alternatives to existing landscaping are discussed with those wanting to make changes; however Oregon City residents had to check with the City before doing any type of downspout disconnect, etc. because of the topography of land in the area. Interested parties are informed about how to access information about different water alternatives.
- * A couple workshops were conducted last year in the tri-county area that included rain barrel and rain garden presentations and many people attended. People were very interested in water conservation and wanted information on what could be done in and outside of their homes. Sustainability was definitely a popular concept.

(6) Business from the Manager
(a) Apprenticeship Program

John Collins briefly reviewed the proposed Apprenticeship Program and responded to questions and comments from the Board as follows:

- He clarified that apprentices would have to contribute to PERS after 600 hours of work, not six calendar months; the correction would be made to the final document.
- Partnering with some educational organization for health care could be discussed, but providing health insurance would obviously raise the apprenticeship program's expenses quite a bit.
 - * South Fork could raise the health insurance issue with Clackamas Community College (CCC), which offered basic skills classes for operators as well as a two-year degree program. He would research whether that school's health program was available for part-time students and report back to the Board. He knew the insurance issue was important, but it would be tough to resolve.
- Several programs complementary to the apprenticeship program were available at CCC and Portland Community College, and Cal State Sacramento offered a lot of innovative training on the Internet.
 - * He was not certain an apprentice's schedule would align with CCC's, for instance, but several other opportunities were available.
- Setting high standards, evaluating apprentices, and maintaining a regime of excellence would create a win-win situation. The apprenticeship program would create an environment for participants to be employable in two years and South Fork hoped to guarantee employment, whether at South Fork or at another water treatment plant. As the program became established, hopefully other water treatment facilities would want to recruit candidates from South Fork's program.
- He clarified that a committed candidate could earn one year of post high school education by attending classes in an accredited program at night or online while working at South Fork. South Fork would pay the tuition in addition to \$15/hour for working full-time at South Fork.
 - * Participants would be evaluated quarterly and would be out of a job if they did not perform to standards set by South Fork. The program was also dependant on the budget and whether the Board wanted the program to continue.
- South Fork would provide apprentices a good place to work, and those wanting to make the most of it would have a very good career. A person could work 40 hours a week at \$15 an hour, not go to school and finish their two years.
- He believed offering \$15/hour and an opportunity to receive one year of paid post high school education would facilitate recruiting high quality candidates.

- * Monster and Portland Recruiter websites were inexpensive places to market the program, which might also offer a second chance for people in the current economy.
- * Having worked with CCC for 10 years developing water works schools and being on the scholarship committee, he noted that a water treatment operator was a tough occupation, and it was losing appeal. CCC offers a joint program in water and waste water, which paid more. Career advancement in waste water was greater, but with a higher turnover rate, so South Fork was also competing with those jobs for people retraining in that field.

The Board supported the apprenticeship program, but requested a revised proposal that contained more specific budget numbers about apprentice pay, PERS contributions, tuition, lab fees, books, etc. as well as options to offer health care insurance.

(b) Reservoir Construction Update

John Collins provided a progress report, noting that the new reservoir was within budget and ahead of schedule, though the contract allowed the contractors to go through May.

- The estimated savings of \$95,000 was attributed to good engineering and great contractors and, if still available after the project's completion, about \$35,000 would be used to repave and update the parking lot with the Board's approval.
 - * Because the contractor must repair any disturbed parking lot area, South Fork could obtain greater savings by having the contractor's crew also do the additional parking lot improvements.

(c) RFP for Master Plan Update

John Collins reviewed the desired tasks to be achieved and the new information to be incorporated through the Master Plan updates.

- An environmental statement was included that reflected how the Board felt about moving forward.
 - * He noted that a micro-hydraulic system might be available to capture energy being wasted by pumping water up to the plant. Operator Bill Gee had developed a system that reduced internal lighting energy within the plant by about 72%, which had been documented to prove South Fork was reducing energy consumption.
- A solar evaluation was also incorporated to account for using solar energy on the property, and prepare for any unknown future uses, tree growth, etc.
- The RFPs would go out in a couple weeks, so Board members should respond with any questions or comments within the next two weeks.

(7) Business from the Board

Vice-Chair King believed it would be useful for Board members to subscribe to the monthly American Water Works Association (AWWA) trade magazine and suggested getting one subscription to share among the Board's members then exchanging copies between Oregon City and West Linn.

Ms. Schroeder stated that she received an electronic summary of the AWWA journal, which Mr. Collins could forward to the Board's members.

Vice-Chair King reported attending the Tualatin Valley Irrigation District “Connect the Drops” event and noted they had a demonstration garden that included low water use plants. He asked if rain gardens could be set up in the new area next to the building.

Mr. Collins responded that security would be an issue, but public access could be addressed by controlling the gates.

- He noted that block rates could fund the garden and educate people about reducing water usage. While the block rate's purpose was to encourage people to conserve water, there would always be people who were unconcerned about their water usage and therefore paid premium rates, which could be applied to the greater good, whether through greater rebate or conservation programs, or a demonstration garden.

Vice-Chair King suggested it did not have to be additional revenue, but perhaps a redistribution of the cost to reward people that save water.

(8) Adjourn Meeting of the South Fork Water Board

The November 13, 2008 meeting of the South Fork Water Board adjourned at 8:23 p.m.

(9) Executive Session –Adjourn regular meeting and convene Executive Session.

- (A) To consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed pursuant to ORS 192.660 (2)(h).

Respectfully Submitted,

By Paula Pinyerd, ABC Transcription Svcs, Inc.
for John Collins, SFWB General Manager