

CITY OF LONGVIEW
&
BEACON HILL WATER AND SEWER DISTRICT

CITIZENS ADVISORY COMMITTEE REPORT
(report from Ken Botero not to be interpreted as total committee report)

Greetings to Longview City Council members. First of all I would like to thank you for the opportunity to have served as a council representative on the Longview / Beacon Hill Water and Sewer District Citizens Advisory Committee .

Due to the outcry of several citizens that make up the water district, about the health, and cosmetic problems with the new Longview Water Treatment program, the City of Longview acquired the services of CH2MHILL, a consulting firm, to provide a Water Supply review.

The saga begins with our summer water demands being exceeded at our Fishers Lane water treatment plant and our increased water supply, that would be needed for the future growth of our area, was a concern for all the citizens being supplied by the Fishers Lane facility. With the eruption of Mt. St. Helen's in 1980 we found that the Cowlitz River Sediment was increasing and had been causing problem. The vintage Fisher Lane Water Treatment plant was failing as the sediment level projections from Mt. St. Helen's for 2039 were reached in 2008. Sediment caused increased equipment wear.

Questions started coming into the city staff concerning what was to become a major concern involving our community water system . Several of those questions follow:

- A.) Why didn't we rebuild the Fisher's Lane water treatment plant ?
- a.) The Fisher's Lane water treatment plant was constructed in 1946. Despite capacity upgrades in 1960 and again in 1980, and a regulatory upgrade in 1998, the facility was aged and failing. Several concrete structures had deteriorated to the point that it was not practical to rebuild. The plant struggled to keep up with demand due to frequent mechanical and structural failures. Eleven filters failed over a period of ten years, including three catastrophic failures which were declared emergencies in order to expedite repair. If the existing water treatment plant were to have been rehabilitated, it would have been necessary to keep the plant in operation throughout construction. To do that, construction would have had to be phased to meet water demand year-round while constructing improvements. Three phases of construction were expected to require roughly nine years and \$52.6 million to complete, approximately \$18 million more than the cost of a new groundwater supply.

- B.) Why didn't we stay with the Cowlitz River ?
- b.) Volcanic debris continues to wash down the Toutle and Cowlitz Rivers from Mt. St. Helen's. In spring and winter, high turbidity caused by suspended sediment significantly reduced plant capacity. Turbid raw water significantly slows the treatment process in order to produce finished water less than 5 NTU to meet drinking water standards. (Turbidity in the river can exceed 2,000 Nephelometric Turbidity Units, NTU, during spring and winter storms.) In the summer, rising sand bars and low water levels threatened to leave the intake dry. In 1986, the U.S. Army Corps of Engineers constructed a dam on the Toutle River to capture sediment before it reached the Cowlitz River. By 1998, the dam was full and water began coming over the spillway, bringing silt, sand and sediment with it. In 2002, the Army Corps of Engineers projected the Cowlitz River bottom would raise 9-feet at the City's intake structure by 2034. But four years later, the river had already filled in roughly 12-feet at the mouth of the Cowlitz River. In 2005, the City of Longview constructed its own 8-foot sediment dam in front of the intake to keep it from being silted in but the dam was overtopped the next year. The Corps of Engineers dredged the lower Cowlitz, but funds are not available to dredge far enough upriver to reach the Fisher's Lane intake structure.
- C.) Why not move the water supply intake to a better location on the Cowlitz or Columbia Rivers ?
- c.) The problems in the Cowlitz River with moving sandbars and turbid waters are not specific to the location of the intake structure at River Mile 5.2. Moving the location of the intake structure to a wider or deeper section of a bend in the river that historically seems to stay scoured out does not address the larger problem of sediment transport. River training structures such as rock dike fields, submerged pile dikes and Iowa vanes have been suggested as a way to improve water flow but all of these would require extensive modeling evaluation and there is disagreement amongst river experts about whether or not they would work. Rock vanes installed in front of the intake structure in 2005 to promote flushing flows across the face of the intake were buried by sediment within the first year of operations. The Cowlitz River and the Columbia River are federally defined as navigable waterways and fall under the jurisdiction of the U.S. Army Corps of Engineers, Construction in or over the rivers, excavation or discharge of material into the rivers, or any work which affects the course, location, condition, or capacity of the rivers requires approval and permitting from multiple state and federal agencies. The permitting process to construct a new intake structure on the Cowlitz River or Columbia River is expected to be lengthy, difficult and expensive. And to further complicate the situation, NOAA Fisheries is adding Pacific Smelt to the list of Endangered Species in response to a recent petition from the Cowlitz Tribe urging smelt protection in the Columbia River and its tributaries. Salmon and steelhead fish are already listed as endangered species, making the process and conditions of any permit to construct and operate a new intake very complex, if it is possible at all. Finally, the cost of relocating the intake to a presumed better

location on the Cowlitz River or to the Columbia River, together with rehabilitating the existing water treatment plant, was evaluated early on in the planning process and determined to be not cost effective. In order to avoid similar sedimentation problems at a new intake on the Cowlitz River, the intake would need to be located upstream of the confluence of the Toutle River. The distance from an intake structure at either location to the water treatment plant on Fisher's Lane and the need for a river crossing in order to route a raw water main back to the plant make the total project cost prohibitive. In 2007, the cost to install and intake structure upstream on the Cowlitz River and rehabilitate the existing water treatment plant was estimated at \$66 Million.

The study conducted for the Longview City Council in 2010 included a rehab of the existing Fisher's Lane Plant including, construction of the intake upstream on the Cowlitz River (\$56 million), convert to groundwater plant and develop Mint Farm aquifer (\$59 million), Construct intake further upstream on Cowlitz above Toutle, (\$66 million), construct intake on Columbia River (\$72 million), expand to 20 million gallons per day and rebuild existing intake, (\$45-\$53 million). Build new supply and plant. Construct 20 million gallons per day supply and membrane plant (\$36 million – 2008), construct intake on Columbia River 9\$52 million) construct 20 million gallons per day groundwater supply and manganese / iron removal plant (\$39 million – 2008). After lengthy discussions, workshops, and over 14,000 test the Longview City Council gave the go ahead to move the Longview Water Treatment operation to the Longview Mint Farm. (a copy of the test conducted is available from Jeff Cameron or Amy Fisher.)

On January 31, 2013 the new Mint Farm Water Treatment Facility came on line. At this time the City of Longview kept the Fisher's Lane Facility on line for a period of two months. Shortly after the new Mint Farm Facility came on line the city started receiving complaints, (about three months after start up). Several complaints stemmed from discolored water, chlorine taste and smell, white spotting, and concerns with health situations. The City of Longview began an intensive evaluation program to find solutions to the situation with a few reports that indicated that the reversal of the water flow had an affect on the 90 year old water mains in the targeted area, and started replacing most of those water mains. Staff also made several adjustments with chemicals and processes at the new Mint Farm Facility. To aide in the efforts of helping the citizens most affected by the situation the city also delivered water to the homes of those having concerns, provided a rate reduction for several citizens due to water situations, provided free shower privileges at our local YMCA, and provided residential support.

The vast majority of customers surveyed, (461 residential customers and 44 business customers) had at least one issue with their current water quality:

- Spots and residue 49%
- Taste 40%
- Color and Staining 29%

- Smell 22%
- Damaging appliances 18%

The City of Longview, after conducting several evaluations did declare an emergency and began replacing 10 blocks of water mains.

At this point it was suggested, and adopted by council, to hire the consultant firm of CH2MHILL to help with the evaluation process for the current situation concerning the citizens displeasure with the current water program. With the recommendation from CH@MHILL the Longview City Council and the Beacon Hill Water and Sewer District formed a Citizens Advisory Committee that met regularly over the course of seven months to discuss and investigate many areas of concern with the Longview Water System, consider options to improve the drinking water, and make recommendations to the Longview City Council and the Beacon Hill Sewer and Water District board of Commissioners. The committee is composed of 14 water customer members served by Longview or Beacon Hill Water and Sewer District with multiple interests and backgrounds, including residents from various neighborhoods, business owners, health care providers and environmental or engineering professionals, all to represent the community at large. There is also one liaison representative from Longview, and one liaison representative from the Beacon Hill Water & Sewer District.

The goal of the Customer Advisory Committee is to provide a recommendation for a sustainable, safe and satisfactory water supply for Longview/ Beacon Hill Water and Sewer District water customers. To accomplish this task the Citizens Advisory Committee will create an environment conducive to voicing multiple and diverse opinions and ideas. Review and comment on technical data and materials prepared by staff and consultants. Discuss community concerns and balance interests in order to establish evaluation criteria that will help to narrow possible solutions to improving Longview's water supply. Ensure the preferred alternative for improving Longview's Water Supply is consistent with and supportive of the project purpose and need, as well as the evaluation criteria established by the Citizens Advisory Committee, with input from the community and to promote public understanding of the Longview Water Improvement Alternatives.

The series of meetings scheduled for the Citizens Advisory Committee to review and discuss water supply options began on January 13, 2015 and ran through June 9, 2015.

The following is a listing of those chosen to serve on the Citizens Advisory Committee:

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| William Beltz | Business Owner | CVG Neighborhood |
| Mark Bergeson | Educator | N. 50 th . Neighborhood |
| Orranda Chamberlin | Resident | Lone Oak Neighborhood |
| Raymond Colwell | Chemist | Columbia Heights |
| Philip Dennis | Scientist & Accountant | Coal Creek Neighborhood |

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| Dave Hooper | Environmental Scientist | Robbins Addition Neigh. |
| Rich Kirkpatrick | Health Care Professional | Cascade Way Neighbor. |
| Alissa Lee | Food Service Industry | West Beacon Hill |
| David Patrick McCoy | Business Owner | Old West Side Neighbor. |
| Amber Olson | Undergraduate Student | Willow Grove |
| Stephanie Owens | Resident | New West Side Longview |
| Dave Quinn | Electrical Engineer | Coal Creek Neighborhood |
| Vincent Scalesse | Mechanical Engineer | Olympic Neighborhood |
| Preston Worth | Business Owner | City View Neighborhood |
| Bonnie Declus | Beacon Hill Water and Sewer District Board Liaison | |
| Ken Botero | Longview City Council Liaison | |

The following are the summaries of the seven Citizen Advisory Committee meetings:

January 13, 2015

The CAC reviewed the study background and timeline; discussed the proposed public involvement and feedback process and reviewed the protocols.

- CAC members expressed a desire for this study to more successfully include and reflect public opinion than previous processes. The group discussed how a values-based evaluation framework approach can help with this.
- CAC members voiced support for a face-to-face workshop between the CAC, Longview City Council, and BHWSD Board to discuss the final recommendation.

- CAC and audience members participated in a visioning exercise.

Meeting 1 Summary: Longview Drinking Water Improvement Study Customer Advisory Committee | Page 1 of 7

- Aspirations included high-quality drinking water, an effective CAC with high credibility and trust, successful community education and involvement, and positive outcomes for the community. Community involvement and satisfaction was identified as equally important to other outcomes.
- The next CAC meeting will be held on January 31 and will include a tour of the Fisher's Lane and Mint Farm water treatment plants.

January 31, 2015

- The CAC approved the meeting minutes of meeting #1 with no changes.
- The CAC viewed a presentation of the water supply treatment processes that are used at the Fishers Lane and Mint

Farm Treatment Plants; toured both the Fishers Lane Treatment Plant and the Mint Farm Treatment Plant; discussed the proposed public involvement plan; and reviewed and approved the protocols.

- The CAC will recommend stakeholders to interview – names due by February 6.
- The CAC revised the draft protocol to identify a quorum as a minimum of 8 CAC members with at least 1

BHWS member in attendance. For making major recommendations, a quorum must be present to move a recommendation forward. For routine decisions, a minimum of 5 members must be in attendance. The protocols were approved with this one change.

- The CAC brainstormed the following initial list of water supply solution options to add to the technical team’s list of options:
 - Keep current water source, but re-pipe distribution system problem areas
 - Re-reversing the flow
 - Do nothing
 - Treatment options to remove silica
 - Public outreach campaign
- The next CAC meeting will be held on February 24. The CAC will begin to discuss the various water supply options

being considered and the evaluation framework.

February 24, 2015

- The CAC approved the meeting #2 summary with no changes and the committee protocol document with proposed changes.
- The CAC reviewed the problem statement, evaluation criteria and initial list of supply options.
 - The problem statement was revised to: “Provide a recommendation for a sustainable, safe and satisfactory water supply for Longview/BHWS water customers”.
 - A aqueduct system will be added to the initial list of possible water supply improvement options.
 - “Indirect customer costs” will be added to the evaluation criteria.
- The next CAC meeting will be held on March 17 at 6:30 p.m. The CAC will continue their discussion on the evaluation criteria and consider public feedback.
- Before the next meeting, the community will have a chance to weigh in on the evaluation criteria through an online survey. The project team will also conduct stakeholder interviews.

March 17, 2015

- The CAC reviewed the results of the community survey, discussed and began rating the values and evaluation criteria, and heard public comment.
 - “Impression of?” will be removed from in front of “purity and cleanliness” in the final Customer Perception criteria
 - Two criteria – effect on property values and potential future legal costs – will be added to the Cost category.
 - It was determined that the CAC would rate the full list of criteria individually prior to the next meeting. The

full results of the group's work will be presented at the meeting in April.

- The next CAC meeting will be held on April 14 at 6:30 p.m. The CAC will continue their discussion on the evaluation

criteria, hear the results of the stakeholder interviews and begin to evaluate groups of options if time allows.

April 14, 2015

- The CAC reviewed the outcomes from the stakeholder interviews and community survey, the individual Evaluation Criteria weighting exercise, the evaluation process, and heard public comment and discussed next steps.
- **The committee agreed by consensus to adopt the evaluation criteria and weightings and move forward to considering solutions.**
- The next CAC meeting will be held on May 19 at 6:30 p.m. The CAC will evaluate and narrow down the groups of water supply alternative options.
 - Before the next meeting, CAC members will receive a copy of the evaluation scoring sheet and consider how they would personally rate the groups of options against the evaluation criteria based on the definitions provided.

May 19, 2015

- The CAC worked in small groups to assign ratings to each of the six groups of water supply options based on the evaluation criteria. The committee as a whole discussed the results of the rating process and which groups of options should be eliminated from further consideration.
- The CAC unanimously decided to remove Group 4: Buy Water from or Collaborate with Another Entity; Group 5: End user treatment; and Group 6: Non-infrastructure options from further consideration.
- The groups of options that will remain for further consideration are: Group 1: Stay the Course, Group 2: Modify the Existing Well Source, and Group 3: Build New Surface Water Source.

June 9, 2015

- The CAC reviewed and discussed water supply options, heard public comment and discussed next steps.
- **The CAC selected two preferred groups of options to carry forward for public comment: New Surface Water Source (Cowlitz River) and Ranney Collector (Cowlitz River). Other options were removed from further consideration unless public sentiment strongly indicates otherwise.**
- A public open house would be held on June 30 and an online survey would also be distributed prior to the next CAC meeting. The next CAC meeting was tentatively scheduled for July 16.

July16, 2015

After months of study, Longview's water committee Thursday night landed firmly on riverbed Ranney wells in the Cowlitz River as a solution to the city's water woes. There was little resistance in choosing the recommendation after eight lengthy monthly meetings and a slew of public outreach that seemed to agree that any way back to the Cowlitz as a water source would be worth a rate hike.

The recommendation from the Citizens Advisory Committee to the Longview City Council and the Beacon Hill Water and Sewer District Board recommends that both entities move forward with a feasibility study to provide the citizens with a Ranney Well program in the Cowlitz River.

Personal Comments:

I thank all of you for allowing me to serve on this committee as your council liaison, it has been very educational and a rewarding experience. I would like to make a few comments at this time due to the situation that I was on the committee to LISTEN and REPORT back to council concerning discussion and evaluation provide by the consultant and the Advisory Committee.

Items that I felt would have been very informative for the committee:

1,) No discussion on a reverse osmosis system to eliminate the spotting and silica problems.

2.) In Longview we have a population, according to our 2000 census,(sorry but I couldn't locate the 2010 census on our WEB) 34,660 people living in Longview, 14,066 households, and 8,931 families residing in Longview. The median income for a household in the city is \$35,171, and the median income for a family is \$43,869.. Our per capita income for Longview is #18,559. 16% of the population and 12% of the families are below the poverty line. Out of the total people living in poverty 6.8% are 65 or older.

We have recorded 548 complaints since the new system went on line. The figures above note the number of households, and families residing in Longview. ??? However, there are some citizens that may have a problem and did not participate in the survey which would make the final figures even larger.

I don't think the 12% of our poverty rated citizens would be able to afford the study, and I don't believe the remainder of the citizens really want to take the time for studies, and permitting as well as new construction. It is a great and meaningful offer of the majority of our citizens to pay extra for their water, but can we all afford the expense. I am concerned about the percentage of people with a problem as

compared to those who don't have a concern or problem. More studies and more money being spent most likely wont change anything. The old saying may be true here, " Nobody likes change other than a baby."

Once again thank you for this opportunity to serve on this committee, it has been very educational and worthwhile. My comment may seem out of line, but looking at the entire community, including Kelso, and Beacon Hill I believe we need to work with all citizens. Each of us have a commitment to provide the "Quality of Place" we are always talking about.

Very Gratefully

Ken Botero