

Infrastructure Advisory Committee (IAC) Meeting Summary	September 23, 2013 3:00- 5:00 City of Bend, Boyd Acres Training Room
Chair: Frank Turek	Note taker: Adele McAfee
Committee Members: Andy High (arrived at 3:40), Casey Roats (arrived at 3:25), Ray Auerbach, James Gattey, Tom Stutheit, Nancy Loveland COB Staff: Jeff England, Patrick Griffiths, Tom Hickmann	
Agenda item: IAC Business Established a quorum Additional members for the IAC Meeting Dates Approval of 8/12/13 and 6/24/13 minutes	Presenter: Frank Turek,
<p><u>Adding IAC Members</u> - In August a delegation of the IAC met with Councilors Barram and Capell to discuss the role of the IAC. One of the outcomes of the meeting was the addition of 2 members to the IAC. This will be done by amending Resolution 1.20.040 by ordinance and the appointment of two new members by council. Staff will advise the committee on the progress.</p> <p><u>Meeting Dates:</u> The committee agreed by consensus to meet on the second Monday of every month.</p> <p><u>Meeting Summaries:</u> Ms. Loveland moved that the minutes for 6-24-13 be corrected as noted and approved. Mr. Auerbach seconded. Mr. Turek abstained as he was not in attendance at the 6-24-13 meeting. Motion Passed</p> <p>Mr. Roats moved to approve the minutes for 8-12-13. Ms. Loveland second. Motion passed.</p>	
Agenda Item: Water Treatment Advisory Group Recommendation Review	Presenter: Frank Turek
<p>The Water Treatment Advisory Committee Recommendations (September 13, 2013) were handed out. A moment was taken for committee members to read.</p> <p>IAC Chair, Frank Turek asked Tom Hickmann to provide the committee with an overview of the Water Treatment Advisory Committee (WTAC) discussions along with Casey Roats and Ray Auerbach (who served on the WTAC committee).</p> <p>Mr. Hickmann stated the goal of the first meeting was to get WTAC members to a base level of understanding about the issues. The facilitators asked the group to do their own research using the internet. A series of meeting followed where the committee discussed different treatment options, and they had lengthy discussion about fire risks. At the last meeting the group narrowed down the treatment options to:</p> <ul style="list-style-type: none"> • Membrane • UV • UV with wells <p>Three WTAC committee member conducted independent analysis . These independent analysis looked at the issues from a different perspective then what had historically been done. Two</p>	

WTAC members felt the work done by the City's consultants were incorrect and modified the prior analysis with their own numbers which resulted in different results. This centered around two issues:

- Power cost
- The actual need for wells

Mr. Hickmann summarizing the conclusions that came out of the independent analysis: there is something in place already to deal with fires, and to this should be decided by costs and go with cheapest option.

He said there was a WTAC committee member that did a risk analysis to determine the actual risk of a fire. This analysis showed a 30% chance that the city would be under curtailment. Mr. Hickmann stated that WTAC member discussed risks and what would constitute an acceptable risk.

Mr. Hickmann stated the WTAC discussion centered on membrane treatment and looking at the cost differential between the treatment options. There was an agreement to a cost differential but no agreement on what it was. The WTAC committee discussed the level the city wants to prepare for a fire.

There was one WTAC committee member that believed there was a 10 million dollar differential. This member opted for the UV treatment option with enough new wells drilled at the Outback to replace the surface water source so the new wells would be ready in case of losing the surface water source.

The City's consultants did not agree with this analysis.

In answering a question from Casey Roats, Mr. Hickmann stated the city consultants think the differential may be in the 5 million dollar range or close to the same cost.

Mr. Gattey asked whose decision was it to hire a city consultant for this analysis. Mr. Hickmann said it was a council decision to hire MWH

Mr. Hickmann said other relevant WTAC discussion was the acceptance of the 10 million dollar differential. Sonia Andrews, City of Bend Finance Director presentation to the WTAC committee showed that rates have been raised enough to pay for the pipeline, intake, and 14 million dollar of some type of treatment option. For every 5% rate increase there is another 7 million dollar's worth of borrowing capital. According to Ms. Andrews, this represents approximately \$40 increase annually. There is not a design done on UV so there are unknown costs. Some WTAC members expressed their opinion that rate increases no matter how small negatively impacts some members of the community when it is compounded with other levies

WTAC facilitators called for a straw vote (two WTAC members were absent) the majority were voting for UV.

A discussion of turbidity levels and membrane filtration UV treatment ensued among IAC members.

Mr. Auerbach stated that he felt the WTAC members were objecting to the costs. He added that the independent reviews and financial analysis that were done by WTAC committee members were considered with the same seriousness as the experts. He did not understand this. He stated that costs at a \$4.00 monthly increase should be put in perspective by comparing how much people spend on bottled water.

Mr. Roats stated he felt there was a fundamental disagreement in the WTAC committee if the surface water was going to be considered the primary source. He added that that several city councils and the 23 million dollar investment in the pipe tell us that if we are investing in this source this will be the primary source and we will supplement with wells. He felt the WTAC recommendation without a complete understanding how the current water system operates is meaningless. He felt that staff should have been more involved in the conversation because there was a lot of misinformation due to the "free-wheel" nature of the discussions.

Responding to a question from Mr. Turek, Patrick Griffiths, City of Bend, Water Resource Manager stated with the current city water rights include ground water mitigation all of those water rights have not been applied to well locations. He said a point that has been overlooked is that at a minimum 13,000 acre of volume that we do not have to pump.

Mr. Turek stated he had 30 years' experience dealing with wells and expressed his concerns regarding the "cone of depression" with the proposed additional wells drilled at the Outback Site.

Mr Hickmann reviewed the pros and cons of the treatment options: Membrane, UV with existing wells, UV, and UV with new wells.

The committee looked at the Nov 8, 2010 recommendation regarding treatment and was asked if the discussion had changed any IAC member mind.

The IAC meeting was asked to attend the Oct 2nd City Council meeting work session.

Casey Roats move to designate Nan Loveland and Ray Auerbach to be the IAC representatives at the Oct 2 City Council Work Session. Motion Seconded by Tom Stutheit. Motion passed unanimously.

The committee was polled:

Jim Gattey – "Follow the IAC 2010 recommendation".

Tom Stutheit – He is for Membrane because there is 100% chance of catching everything. "Coming from the airplane industry you don't want an engine that does not work 100% of the time or you will be somewhere you don't want to be". He likes the 2010 IAC Recommendation".

Nan Loveland "The upfront costs of the membrane are undoubtedly more however there are so many hidden costs with the UV. The other concerns are the sediment in the pipe, and having to flush on both of those systems. What would have to be built? and how to dispose the water that was used for flushing". These questions must be dealt with if UV Only, and the UV with additional wells are considered. She chooses membrane. She does not think UV is reliable.

Casey Roats – He thinks as we head into this century, a century in which all of our major canals will be either piped or lined, and as the most recent USGS update indicates, every time this happens there is less recharging of the aquifer. Additionally, he read that all the water levels are trending down. In the long term taking a chance of needing to run on just wells is not a good course of action. We will have a catastrophic fire given the fact in the last 100 years there has not been one and the ladder fuels are such (30ft high) and will get into serious ground issues. The decisions today have a big influence on how Bend postures itself for the next 100 years. He views UV with a high probability of being a stranded asset. He is in favor of membrane.

Ray Auerbach – He thinks the committee should stick with the original recommendation. He is 100% membrane. In reviewing the recommendation submitted by the WTAC he thinks the costs are close to the membrane filtration. The UV only option completely ignores the fire. He really has a question on the probability of building all those wells based on his experience.

Frank Turek – He thinks membrane only. His experience has shown him that reclaimed water treatment was progressing from UV to membrane because it gave a high quality product. His concern is in losing the exemption with the UV and a bigger concern is hexavalent chromium and fluoride in the water (naturally occurring). He saw with arsenic, people had to put treatment on every well head. When this is done you have a reverse osmosis you lose 15% of your well capacity and it costs almost as much to dispose of the water as it does to treat the 85%. Treatment costs will be in the million. He is with membranes.

Mr. Hickmann stated that with both UV option the City has been cautioned by the Oregon Health Authority that the City would need to consider they would lose their filtration exemption in the event of a fire.

Motion – Mr Stutheit moved that the committee maintains their recommendation for membrane; and directs staff to summarize the discussion, the committee's analysis and recommendation derived at this meeting. Seconded by Mr. Roats

Motion passed unanimous. (Mr. Roats voting for Mr. High via proxy vote.)

**Agenda Item: Update of the Bridge Creek
Pipeline Replacement Project**

Presenter: Tom Hickmann P. E.

Mr. Hickmann gave the IAC members an update on the Environmental Assessment

Meeting adjourned at 5:35