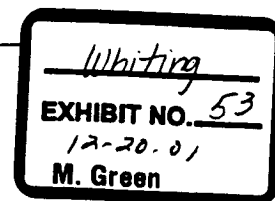


**Kenny, Ann**

**From:** Whiting, Kelly [Kelly.Whiting@METROK.COV]  
**Sent:** Thursday, October 25, 2001 4:55 PM  
**To:** Kenny, Ann; Hellwig, Raymond  
**Subject:** Pre Low Flow Meeting Briefing



Ann/Ray -

I got the pre-meeting briefing from Joe this AM. This was expected per Kate's latest e-mail message. Here is my take on what was discussed,

Hydrocomp (Norm Crawford) was hired to do an "independent" review. Their general finding was that they didn't like the approach used. For example,

They wanted the impervious area runoff (run-on onto filter strips) to be modeled in HSPF prior to generating input to embankment model. This was my comment. However, I doubt that it was documented in the sketchy facilitated meeting notes. The issue is discussed somewhat in my comments, and was definitely discussed in great detail during the facilitated meetings. Joe had provided information stating that the approach used was conservative, and that the filter strips could handle all of the run-on from the runways with hourly timesteps. Apparently, now when they look at it, 27% of the runoff from the runways is not able to infiltrate into the filter strips. This really sucks in that I raised all these issues, but the Port's consultants were unwilling to do it right, said it didn't matter, and got me to buy into the approach through the facilitated process.

The new runs were done using hourly timesteps. This has same history as above. I requested/expected they do it that way, but instead they ran it using daily timesteps. During review, I asked why and what difference it makes, and the response was that even with hourly timesteps the embankment would effectively handle all flows generated from both pervious and impervious surfaces. I don't understand why when it is analyzed now, there is 27% of the runway runoff that does not infiltrate.

Apparently when the embankment flows were reapplied to HSPF, there was an important "flag" that was left blank. I had reviewed and verified the scale factor used to convert the daily data into hourly data. However, the default for the flag was that HSPF would automatically divide daily data into hourly timesteps. This reportedly resulted in the factor of 24 being applied twice during the re-insertion of the embankment flows. This involves an HSPF default setting that the modeler (and myself) did not know would automatically apply scale factors. All the checks made to verify that mass balance had not been violated were done before HSPF mixed the embankment flows with the other hydrologic flows in the basin. Therefore, all appearances were that mass balance had been preserved. It is difficult to perform the mass balance check after the embankment flows have been added back in with the rest of the basin, which is where the problem reportedly occurred.

The new model was run with a wet up period. This was an issue which came up after the previous modeling work was completed. I support the use of a wet up period, due to the short period of record being used to assess embankment affects. Otherwise, HSPF spends a significant portion of the first year filling up the empty storages.

Hydrocomp indicated that water lost from the embankment toe drain should not be sent to active groundwater, but rather should be sent directly to stream. Reportedly they feel that sending the water lost through the till layer to active groundwater is overly attenuating flows. Currently, I do not buy into this approach. I requested a copy of the Hydrocomp report, but Joe doesn't know if one exists. He is getting his directions via Parametrix. Joe believes that there is a good chance that the impact will turn into a summer low-flow surplus under the revised modeling approach.

Apparently, Walker creek embankment discharges are going to be considered now. Just prior to submitting their current report, the Port chose to not include contributions from the embankment in the Walker Creek model. I assumed the reason for the removal was related to the apparent overestimation of Walker Creek embankment areas. Joe was not sure if the embankment area discrepancies have been resolved. Apparently,

this determination remains with the embankment model which is being rerun now.

I asked if my comments, and other relevant public comments, are being addressed in the revised work. Joe was not aware of anything being done to address any comments other than those by Hydrocomp. I would expect that the Hydrocomp comments will be provided to us at the meeting, but they probably won't.

I did not raise a lot of questions during this call. I just tried to understand what is being done (revised modeling is already partially complete). They apparently are not looking for our buyoff on their revised approach. I strongly feel that the Port should have had their independent review done before they made their "final" mitigation proposal. I strongly feel that there are important legal questions that need to be answered on reopening impact/mitigation issues after permit issuance. I strongly feel that the Port should be addressing all comments, not just those made by their hired "independent" reviewer. I strongly feel the Port should be prepared to make a presentation as to how all comments received on their current low flow proposal are being addressed in their proposed revised report prior to any formal submittal. These comments may raise additional questions as to how the Port's proposal fits within the ongoing permit process.

Sincerely,

-- Kelly.

**Kelly R. Whiting, P.E.**  
King County Department of Natural Resources  
Water and Land Resources Division  
Engineering Studies and Standards

Address: King Street Center  
201 S. Jackson St., Ste. 600  
Seattle, WA 98104-3855

Mail Stop: KSC-NR-0600  
PH: (206) 296-8327  
FX: (206) 296-0192  
EMAIL: [kelly.whiting@metrokc.gov](mailto:kelly.whiting@metrokc.gov)  
WEB: <http://dnr.metrokc.gov/wlr/dss/>

AR 017664