northwest hydraulic consultants inc.

16300 christensen road, suite 350
seattle, washington 98188-3418
(206) 241-6000 - phone
(206) 439-2420 - fax

sacramento
vancouver
edmonton
seattle

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Mr. Ray Hellwig
Regional Director
Northwest Regional Office
Washington State Department of Ecology
3190 - 160th Ave. SE
Bellevue, WA 98008-5452

Subject: 401 Certification for Seattle-Tacoma International Airport.

Dear Mr. Hellwig:

Further to our meeting yesterday afternoon, we would like to briefly summarize the main findings to date of our review of the August 2000 "Preliminary Comprehensive Stormwater Management Plan Seattle-Tacoma International Airport Master Plan Update Improvements" (SMP). Please note that we only received our copy of the four-volume SMP on Friday August 31 and to date have only made a very preliminary and incomplete review of these documents. Further review comments will be forthcoming.

We understand that Ecology will be making a preliminary determination today regarding the adequacy of the Port's submittals for making a decision on 401 Certification, and we are submitting these incomplete comments for your consideration in making that determination. Also, we would like to record our objections to both the delay in Ecology providing copies of the SMP to the Airport Communities Coalition and to the lack of adequate time for us and others to provide review comments.

Our preliminary comments to date are as follows:

1. **Anticipated impacts on base flows**

Volume 1: *Section 6.2.1 – Predicted Baseflow Impacts*
Volume 4: *Appendix F – Evaluation of Potential Base Flow Impacts*

There appear to be significant discrepancies or inconsistencies in the evaluation of the project's base flow impacts. It appears that the analysis presented in Appendix F does not rely on the same hydrologic model parameters as used elsewhere in the SMP. Most significantly, the base flow impact analysis appears to have relied on hydrologic model parameters for the fill embankment which are

of the HSPF model to actual fill embankment runoff data. We have attempted to repeat the analysis presented in Appendix F using the HSPF model and the calibrated model parameters for the fill embankment. This re-analysis indicates that the fill embankment produces groundwater plus interflow totaling about 44% of the average annual rainfall as opposed to the 63 6% presented in Appendix F. The analysis presented in Appendix F seems to us a circuitous approach to estimating base flow impacts when such impacts could be obtained directly from modeling results, assuming that the models do indeed accurately reflect hydrologic conditions. Accordingly, we have applied HSPF to directly model pre- and post-development runoff from STIA subbasins SDW1A and SDW1B and find that average groundwater inputs to Miller Creek from these two basins alone are predicted to be reduced by 0.10 cfs in July and 0.09 cfs in August. These figures (for just two sub-basins) are approximately twice the "conservative" values for total reductions in groundwater from all subbasins reported in the SMP.

Volume 1: *Section 6.2.1.3 – Acquisition of Water Rights on Miller Creek*
Volume 4: *Appendix G – Water Rights on Miller Creek*

The SMP concludes that acquisition of water rights on Miller Creek and elimination of those withdrawals will "be more than sufficient to mitigate baseflow impacts from MPU improvements". However, the estimates of current withdrawals which would be eliminated by acquisition of water rights appears to be quite speculative in that there are no data on actual water use. The estimate of what amounts to continuous use of 0.01 cfs by each of 9 domestic users (50% of 17 total domestic water rights) appears to far exceed normal domestic water use. The assumed 0.01 cfs per domestic withdrawal amounts to 6,460 gallons per day which appears to be far in excess of normal residential watering requirements in this region. Note that because of water quality concerns it is unlikely that any of these withdrawals were ever used as a potable water source.

In addition to overstating likely withdrawals, the SMP analysis of benefits to Miller Creek base flows only considers one side of the equation – i.e. elimination of withdrawals. It fails to address the admittedly uncertain but offsetting effects of irrigation return flows, reduced inputs of water due to elimination of septic systems, and elimination of use of potable city water for domestic watering of landscaping in the acquisition area. We fully recognize that elimination of failed septic systems is almost certainly, on balance, of net benefit to the stream system.

In our opinion, there remains considerable uncertainty as to the effects of the project and the overall acquisition program on base flows. The SMP fails to consider all aspects of the acquisition program and fails to provide reasonable assurance that base flows will not be adversely affected by the MPU projects

2. Cumulative Impacts

Cumulative impact assessments should include all reasonably forseeable future projects, including projected commercial developments in the acquisition area. We note that future commercial development in the acquisition area is already anticipated to some extent in the preliminary identification and analyses of project water quality BMPs (SMP Volume 1, Table 7-8). However, no comparable analyses have been made of the water quantity impacts of future commercial developments in the acquisition area. This is of particular concern because of the difficulty of

anticipated future developments should be conducted now to provide a more complete picture of cumulative impacts.

3. Linkages between the SMP and other MPU plans

We understand that the revised SMP was provided to King County for review on 21 August and that Ecology received its copy several days after that. We also understand that the Port is continuing to submit documents containing new information. With the extremely short time available for review of individual documents, we are concerned that no detailed integrated review of all aspects of the proposed projects will be possible and that important linkages between the SMP and other aspects of the Port's planning will be overlooked.

The Natural Resource Mitigation Plan was produced before the new SMP was issued and presumably relied on information contained in the November 1999 version of the SMP. However, the new SMP results in a substantially different characterization of basin hydrology than reported in the November 1999 version of the SMP. Estimates of pre-development 100-year discharges on Miller Creek at SR-509, for example, are reported as 198 cfs in the Natural Resource Mitigation Plan (Table 6.1-2) but the latest SMP provides an estimate of the 100-year pre-project discharge of only 71 cfs (SMP Table A-8). Similarly, the amount of detention proposed has more than doubled from 42 acre-ft reported for Miller Creek in the Natural Resource Mitigation Plan (Table 6.1-7) to over 100 acre-ft in the new SMP. This change presumably results in increased footprints for detention ponds. Does this change wetland impacts and if so how will additional mitigation be provided? The existing Natural Resource Mitigation Plan is now inconsistent with the SMP and there has been wholly insufficient time to identify and understand the impacts of changes in the SMP on natural resource mitigation requirements.

4. Preservation of existing basin boundaries

The Governor's certificate requires that the existing condition basin boundaries be preserved. This condition is not met due to large-scale diversions of impervious area to the Industrial Wastewater System. Also, the basin boundary between Miller and Des Moines Creek is proposed to be changed in a way which is likely to have adverse impacts to the headwater reaches of Walker Creek, a major tributary to Miller Creek. Our comment here focuses on Walker Creek.

Review of various SMP documents shows that the boundaries for the Walker Creek catchment are proposed to be changed in a manner which will predictably have significant adverse impacts. At issue is the basin area presently draining to Wetlands 44a and 44b which are the existing-conditions headwaters of Walker Creek. In the future, this headwater area of the Walker Creek basin will be designated instead as basin SDS7 in the Des Moines Creek basin and runoff will be transferred from Walker Creek to Des Moines Creek. This proposed basin revision will eliminate all of Wetland 44b and its entire tributary basin area, and also the majority of the basin area presently tributary to Wetland 44a. This elimination of a sizeable portion of the Walker Creek headwater basin will in turn cause a significant reduction in the headwater streamflows for Walker Creek. Note that significant reductions in flows are reported for Walker Creek at SR-509 in Appendix A, Table A-8. However, in the time available, we have been unable to conclude whether the SMP-predicted reduction is accurate and whether it fully reflects the basin boundary change or other project effects.

We again request on behalf of the Airport Communities Coalition that, prior to regulatory certification or approval of the proposed 3rd runway project, there be a meaningful time period for public review and comment on the current SMP and related mitigation plan documents for this project.

Sincerely,

NORTHWEST HYDRAULIC CONSULTANTS, INC.

William A. Rozeboom, P.E.
Senior Engineer

K. Malcolm Leytham, Ph.D, P.E.
Principal

cc: Tom Luster, Department of Ecology
Kevin Fitzpatrick, Department of Ecology
Peter Eglick, Helsell Fetterman LLP, FAX (206) 340-0902
Kimberly Lockard, Airport Communities Coalition, FAX (206) 870-6540

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