

# 401 Permit Decision-Making Sea-Tac International Airport, Third Runway

## FINAL MEETING NOTES

### LOW FLOW ANALYSIS

July 24, 2001  
1:30 – 2:30

These meeting notes have been prepared by Kate Snider, Floyd & Snider Inc.

#### ATTENDEES

Ann Kenny, Dept. of Ecology  
Kelly Whiting, King County  
Keith Smith, Port of Seattle  
Paul Fendt, Parametrix  
Joe Brascher, Aquaterra  
Kate Snider, Floyd Snider McCarthy

#### MEETING SCOPE AND AGENDA

A conference call was held to discuss the Port's proposed modified approach to work within Walker Creek basin, as defined in the low flow submittal delivered to Ecology on July 23.

#### WALKER CREEK APPROACH MODIFICATIONS

- Port calculations determined that runoff from additional impervious areas should be directed to the reserve vaults in the Walker Creek Basin in order to confirm water availability in the worst water years. Two mechanisms are proposed to direct the additional water to the vaults:
  1. An impermeable cover will be constructed on pond F that allows water falling on the 2+ acre Pond F area to be channeled to Walker Creek vaults.
  2. Lining will be installed in selected filter strip areas adjacent to runways in the Walker Creek basin. This lining will allow runoff water from the runways to be treated with the filter strips and subsequently collected and directed to the Walker Creek vault.
- The goal of the above changes is to meet the requirements for water input to the Walker Creek vaults, while maintaining the assumptions on impermeable area used in the SMP. All filter strip areas will not be lined. Only those areas necessary to meet the defined goal will be lined.
- The lining of filter strips does not allow water from those selected filter strip areas to infiltrate to the embankment. Due to this change, the Port has decided to remove all embankment seepage effects from the post-project modeling in Walker Creek. Therefore, post-project modeling has been revised to remove the input of the embankment from the Walker Creek model. Due to this change, the projected post-

project impact to summer low stream flow has increased slightly from previous calculations that included embankment effects.

- The information described above is consistent with the narrative and back up material submitted to Ecology on July 23, 2001.

#### CLARIFICATIONS TO JULY 23 SUBMITTAL

Items discussed below include some items that need to be corrected from the July 23 submittal material, or provided for further clarification. These items will be submitted shortly in a supplemental letter from Keith Smith to Ann Kenny.

- The post-project 2006 model used in Walker Creek, that removed the embankment effects, was not included in the submittal. It is the same model as submitted previously, but with two input lines for the embankment inputs "starred out". This 2006 model will be submitted to Ecology and King County by email today.
- In Walker Creek packet, table labeled "Reserve Storage Vaults for Walker Creek" - area and contribution percent values will be updated to accurately reflect impervious area used in current modelling.
- Pg 4 of the narrative - 1<sup>st</sup> full paragraph, second sentence should be changed to state that recharge was calculated based on flat outwash grass, consistent with the Pacific Groundwater Group 6/25 memo.
- Pg 5 narrative re: non-contiguous groundwater contributions to Walker Creek - new impervious area should be listed as 69 acres, not 38. The effective impervious area is 59.34 acres, not 37.2. The modeling and back up are correct and consistent with these changes.
- On 7/9, Pacific Groundwater submitted an annotated Figure 1 re: effective lengths used for Slice modeling. This material should be included in the current submittal to Ecology.
- In the final low flow report, details should be provided re: feasibility of vault construction and discharge mechanisms. Ecology voiced concern over the lack of conceptual drawings to support the proposal and also restated concerns regarding lack of information regarding the feasibility of designing constant discharge gravity drain vaults.
- In the non-hydrologic effects discussion, the Walker Creek basin should not have a "DEEPFRAC" component. "DEEPFRAC" is applicable in Miller Creek basin.
- Non-hydrologic effects Estimated Recharge Quantity table - clarification should be provided about what calculations went into the calculations of the numbers on 1<sup>st</sup> page of the non-hydrologic packet. Reference should be added that the referred to spreadsheets are on the CD, with filename.
- Table G-2 (referred to from the SMP) should be provided or added on the CD.

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