

Sea-Tac Airport Third Runway 401 Permit Negotiations

FINAL DRAFT MEETING NOTES

October 13, 2000
9:00 – 4:00

These draft meeting notes have been prepared by Kate Snider, Floyd & Snider Inc. Please reply to Kate at (206) 292-2078, fax (206) 682-7867, kates@floyd-snider.com with comments on the accuracy of these notes by 1pm, Wednesday 10/18/00.

ATTENDEES

Ray Hellwig, Dept. of Ecology	David Masters, King County
Kevin Fitzpatrick, Dept. of Ecology	Mark Lampard, King County
Tom Luster, Dept. of Ecology	Paul Fendt, Parametrix
Erik Stockdale, Dept. of Ecology	Jim Kelley, Parametrix
Michael Cheyne, Port of Seattle	Rick Schaefer, Earth Tech
Elizabeth Leavitt, Port of Seattle (by phone)	Jim Dexter, Parametrix
Keith Smith, Port of Seattle	Kate Snider, Floyd & Snider Inc.
Kelly Whiting, King County	Rachel McCrea, Floyd & Snider Inc.

MEETING AGENDA OVERVIEW

- Natural Resource Mitigation Plan issues
- Status of Master List; comments on 10/10 draft notes
- Stormwater Master Plan task status report

DEFINITION OF TERMS USED IN THESE NOTES

Resolution (general): The use of variations of the term "resolution" are for the purposes of these negotiations and refer only to the work of these technical negotiations between the Port of Seattle and the Department of Ecology. The terms are not intended to imply that, through these negotiations only, any issue has reached "final" resolution. Final resolution is subject to Ecology's receipt and approval of necessary documentation, subsequent public review and comment, evaluation of public comment and the final permit decision.

Resolved: The term "resolved" is used in these notes to mean that subsequent discussion of the issue is not necessary in these negotiations. This term assumes that subsequent documentation submitted on these issues will be consistent with the meeting discussions, and be adequate for public review.

Resolution Pending Review of Additional Information: This phrase is used to indicate that a possible or likely solution to the issue was identified in the meeting. Additional information will be submitted for review, and further discussion in these meetings will determine whether the issue is "resolved".

Action Items Defined for Further Discussion: This phrase is used to indicate that the issue was discussed, and action items defined for the production of additional information or documentation. Following submittal of such additional information, the issue requires further discussion.

DOCUMENTATION OF NEGOTIATIONS: MASTER LIST OF ISSUES

Ecology and the Port have agreed to maintain a single "master list of issues" that is updated at each meeting during these negotiations. It has been agreed that individual participants in these negotiations will not maintain other lists of issues separate from this master list. The following summary table is used to document this master list of 401 Permit technical issues. Following an internal Ecology meeting on 10/17, all potential issues (except those new issues yet to be identified through public comment) will be defined and the list will be updated as necessary.

Definition of these issues and actions to resolve are included in meeting notes. Any comment on this master list of issues should be directed to Kate Snider at Floyd & Snider.

401 Technical Issues Requiring Resolution	RESOLVED	RESOLUTION PENDING REVIEW OF ADDITIONAL INFORMATION	ACTION ITEMS DEFINED FOR FURTHER DISCUSSION	NOT YET DISCUSSED
Administrative				
• Documentation, master list of issues	✓			
1. Stormwater Master Plan – Detention Sizing				
Key Issues Discussed 10/2				
• Basin Acreage Discrepancies	✓			
• Use of different Target Flow Regimes for different basins	✓			
• Permeability assumptions of Airport fill material	✓			
• Infiltration evaluation of existing pond locations	✓			
• Project effect on Base Flows		✓		
• Use and documentation of HSPF and KCRTS models		✓		
• North Employees Parking Lot		✓		
• SDW2 land use conditions	✓			
• SASA facility volumes		✓		
• SASA facility compliance with KC off-site flow restrictions		✓		
• SDS-7, SDS3-A, SDS-3, SDS-2, 5, 6 collection areas		✓		
• New information for Walker Creek calibration		✓		
• IWS model input consistency with SMP	✓			
• SDE-3 conditions	✓			
			AR 029010	

401 Technical Issues Requiring Resolution	RESOLVED	RESOLUTION PENDING REVIEW OF ADDITIONAL INFORMATION	ACTION ITEMS DEFINED FOR FURTHER DISCUSSION	NOT YET DISCUSSED
Add'l Issues Discussed 10/6				
• IWS Pump station overflow modeling		✓		
• IWS Pump station land use values	✓			
• IWS Pump station routing of water quality design storm		✓		
• IWS Lagoon capacities	✓			
• Modeling of potential IWS Lagoon overflow		✓		
• Filter Strip BMPs	✓			
• IWS treatment performance	✓			
• SDN1-OFF	✓			
• SDN-6 Cargo	✓			
• SDW1B impacts to Wetland 39B	✓			
• Des Moines Creek Basin Plan consistency	✓			
• All items in the 9/14/00 King County comment letter not specifically listed above	✓			
2. Flow augmentation for Des Moines Creek		✓		
3. Potential South Access Road impacts to Tyee Pond		✓		
4. Borrow Site #3 hydrology		✓		
5. HPA / 401 issuance relationship	✓			
Add'l Issues Raised by Ecology on 10/10				
• Potential impacts of SR 509 Interchange		✓		
• Potential aquitard breaches in Walker Creek basin		✓		
• Runway De-Icing / Dissolved Oxygen study		✓		
• Compliance with Kludt settlement	✓			
• Contaminated soil stockpile facility	✓			
• Structural feasibility of proposed big vaults	✓			
• NEPA /SEPA revision timing	✓			
Natural Resources Mitigation Plan (Issues raised by Ecology on 10/10, discussed 10/13)				
• NRMP consistency with SMP	✓			
• Maintenance of wetland 18, 37, 39B hydrology	✓			

AR 029011

401 Technical Issues Requiring Resolution	RESOLVED	RESOLUTION PENDING REVIEW OF ADDITIONAL INFORMATION	ACTION ITEMS DEFINED FOR FURTHER DISCUSSION	NOT YET DISCUSSED
• NRMP incorporation of technical responses to previously identified issues		✓		
• S. Access Road/Tyee Pond Impacts		✓		
• Vacca Farm floodplain habitat design elements	✓			
• Stormwater pond cross sections	✓			
• Performance standards	✓			
• Documentation of indirect impacts	✓			
• Wetland delineation west of Miller Creek	✓			
• Documentation of Miller Creek buffer	✓			
• Fencing/signage for buffers/mitigation areas	✓			
• Restrictive Covenant for Auburn mitigation site	✓			
• Buffer planting in area of potential RDF	✓			
• Wetland impact analysis of IWS expansion	✓			
• Source of irrigation water for mitigation areas	✓			
• Mitigation Fund	✓			
NPDES Major Modification	✓			

NATURAL RESOURCES MITIGATION PLAN (NRMP)

Issues discussed include items documented by Erik Stockdale in an Ecology Internal Memo dated October 9, 2000, and additional items identified by T. Luster.

In summary, it was determined that technical issues related to the NRMP have been negotiated and resolved previously between the Port and Ecology. It was agreed that a revised NRMP will be developed that will: 1) update all information to be consistent with technical decisions that have been made; 2) include material prepared in response to public comments; 3) confirm consistency with the SMP; 4) add additional detail to drawings as requested below. It was determined that the Port could proceed with development of the revised NRMP, to be completed mid-November. Ecology final review of the NRMP can proceed concurrent with public comment.

AR 029012

Issue: NRMP consistency with the SMP

RESOLVED: Once the SMP is finalized, the NRMP will be revised if necessary to be consistent. Detention pond sizing and/or depths could potentially be changed during completion of the SMP. NRMP review following SMP completion must confirm that ponds still fit within impact footprints. Port will ensure that documents submitted to Ecology and the Corps are consistent. Ecology will coordinate with the Corps regarding technical consistency within and among all documents produced for public comment, including the SMP and NRMP.

Issue: Maintenance of wetland hydrology (e.g. 18, 37, 39B)

RESOLVED: Parametrix will clarify in the NRMP and in the Wetland Functional Assessment & Impact Analysis (impact assessment) how the seepage swale at the base of the embankment will be routed and discharged maintain wetland hydrology. Existing SMP and NRMP figures showing the swale will be clarified and notes added. Drawings used in multiple deliverables should be consistent.

Issue: Technical details included in response to comments letters and addenda need to be included in NRMP revision.

RESOLUTION PENDING REVIEW: Parametrix has previously provided technical information to Ecology responding to comments received from A. Azous, however, the Port has not received feedback from Ecology on those materials. Parametrix requested a brief meeting with E. Stockdale to discuss the response to comments documents before that material is incorporated into the NRMP revision. Ecology will confirm whether such a meeting is necessary. However, all agreed that the Port may incorporate that material into the NRMP. Implementation Addenda will also be incorporated into the revised NRMP.

Issue: S. Access Road/Tyee Pond Impacts

RESOLUTION PENDING REVIEW: This issue relates to the South Access Road/Tyee Pond issue discussed initially at 10/10 meeting (updated below in these notes). Any Tyee Pond/east Des Moines Creek buffer described in a restrictive covenant will be added to the NRMP (drawing C-2 from Appendix C to the Implementation Addenda). Ecology proposed a 100' buffer for Tyee Pond/east Des Moines Creek. The Port will re-evaluate the buffer proposal on Tyee Pond and the East and West Branches of Des Moines Creek and report back to Ecology. Material regarding South Access Road realignment and temporary interchange indirect impacts will be updated in the revised NRMP.

Issue: Vacca Farm floodplain habitat design elements

RESOLVED: Parametrix will show more specificity in drawings, text and notes relative to microtopography, wood placement, etc. to provide assurances to Ecology that more complex habitat structure will be added in the floodplain.

Issue: Stormwater pond cross sections

RESOLVED: Parametrix will provide cross section drawings of all open ponds adjacent to wetlands that will include elements such as pond, drainage channels, buffer, wetland, creek, and groundwater table elevation. The ponds, drainage channels, creeks, etc. relative to the buffer mitigation will be shown in the NRMP. Evaluation of the cross sections, groundwater

issues, etc. for potential indirect wetland impacts will be provided in the wetland assessment report.

Issue: Performance standards

RESOLVED: Parametrix will add a table and/or text in the revised NRMP to describe the performance standards used for particular wetlands. Ecology will check with the Corps regarding the ability of the performance standards to be measured in the field. Port will help to make this communication happen.

Issue: Documentation of indirect impacts

RESOLVED: The revised wetland impact assessment will include more technical information and documentation regarding indirect impacts to wetlands. This information is largely contained in letters responding to comments provided by A. Azous. The revised wetland impact assessment will also address stormwater ponds, borrow area 3, wetland 39b, and SR-509 temporary interchange issues.

Issue: Wetland delineation west of Miller Creek

RESOLVED: The wetlands west of Miller Creek have been delineated, will be described in the Wetland Delineation Report and accounted for in the revised NRMP. The Wetland Delineation Report will be a part of the re-notice for public comment. These wetlands have not yet been verified by the Corps, and wetland enhancement credits are not currently incorporated in the documents. If the Corps verifies these wetlands prior to public notice, mitigation credits will be calculated for wetlands within the Miller Creek buffer and included in the revised NRMP.

Issue: Documentation of Miller Creek buffer

RESOLVED: Parametrix will clarify Map C-3 of Appendix D relative to temporary construction line and buffer. This sheet will be revised to indicate the location of the Miller Creek Buffer relative to the temporary construction impacts and the stormwater management features.

Issue: Fencing and signage for buffers / mitigation areas

RESOLVED: Revised NRMP will identify fencing and signage for long-term protection of buffers/mitigation areas from public access (i.e. Auburn mitigation site). Port will review placing fencing and/or signage around protected mitigation areas within secured airport property to prevent encroachment by construction and maintenance activities. Restrictive covenants should address potential need for revised fencing/signage requirements based on future land use.

Issue: Restrictive Covenant language for Auburn mitigation site

RESOLVED: Ecology will check with their Attorneys about Restrictive Covenant language regarding long-term wetland mitigation use of the Auburn site to be certain that the language restricts use for stormwater management by others, consistent with King County and Ecology manuals.

AR 029014

FINAL DRAFT

Issue: Planting plan and timing of planting in area of potential RDF

RESOLVED: NRMP drawings will be revised to eliminate planting exclusion zone for a potential future RDF. This area will be planted by the Port before the end of 2004. Sheet C-2 of Appendix C will be revised to show buffer plantings.

Issue: Wetland impact analysis of IWS lagoon expansion

RESOLVED: Assessment of direct/indirect wetland impacts from IWS lagoon expansion will be included in the revised Wetland Functional Assessment & Impact Analysis. This was provided to Ecology in a Memo from Jim Kelley on 9/5/00. The IWS lagoon expansion is not a Stormwater Master Plan project, but is "reasonably foreseeable".

Issue: Source of irrigation water for mitigation areas

RESOLVED: Text explaining the source of irrigation water for mitigation areas will be included in the revised NRMP. The sources included will be from existing providers.

Issue: Mitigation Fund

RESOLVED: The revised NRMP will reflect the Port's commitment to a \$150K mitigation fund for the Des Moines and Miller Creek watersheds. The sunset clause will be modified to provide for the identification of projects by 2002. Permitting and implementation may occur after that date.

STORMWATER MASTER PLAN ACTION ITEM UPDATES**Issue Update: Project Effect on Base Flows**

RESOLUTION PENDING REVIEW: All base flow action items documented in 10/6 meeting notes are underway. Consultation held with Norm Crawford, PGG, Hart Crowser, Earth Tech and Parametrix regarding correlation between HSPF stormwater modeling and PGG modeling determined that: 1) embankment fill is expected to behave as reported in the PGG report and as observed on-site, delaying water discharge; and 2) HSPF model not suited for analysis of this condition due to small area of embankment fill influence, aggregate inflow parameter, the short duration of storage in the upper fill zone, and insufficient data to calibrate HSPF to represent condition of embankment fill soils. Results of the consultation recommend that the Hydrous model used by PGG be rerun using HSPF output for initial infiltration as input to the Hydrous model in order to analyze all components effecting base flows. In addition, other non-hydrologic affects (i.e. septic tanks) will be evaluated but not "modeled" in Hydrous. The results of this analysis will be documented in a technical memo as late summer (low-flow period) hydrographs (or table of this information) at specific performance points with an accounting sheet of considered contribution/reduction sources. This technical memo will be referenced in both the SMP and the NRMP. Ecology's Dave Garland will review this deliverable.

Issue Update: Use and documentation of HSPF and KCTRS models

RESOLUTION PENDING REVIEW: The Miller Creek runoff file error/inconsistency was found, and work is underway to model this basin. Parametrix submitted the revised Appendix A material for Des Moines Creek basin to King County and Ecology.

AR 029015

Issue Update: SASA facility compliance with King County off-site restrictions

RESOLUTION PENDING REVIEW: Parametrix requested and received clarification from King County. Based on this information, Parametrix will provide material to King County and Ecology on 10/16.

Issue Update: New information for Walker Creek calibration

RESOLUTION PENDING REVIEW: King County and consultant Joe Brasher will meet and perform a field check on 10/16 to support Walker Creek calibration. Results of this work will be submitted to King County and Ecology on 10/19.

Issue Update: IWS Pump Station overflow modeling

RESOLUTION PENDING REVIEW: The Port reported that pump station overflows to the stormwater system are connected in series. The Miller Creek basin model will be rerun based on this information.

Issue Update: IWS Pump Station routing of water quality design storm

RESOLUTION PENDING REVIEW: Confirmation of pump station piping configuration (discussed above) will likely resolve this issue.

Issue Update: Modeling of potential IWS Lagoon overflow

RESOLUTION PENDING REVIEW: The Port will provide to King County and Ecology a previously completed report by Kennedy Jenks that addresses this issue.

Issue Update: IWS treatment performance

RESOLVED: Port reported that influent data and evaluation is available from Kennedy Jenks material. Parametrix will include language in the SMP addressing this issue.

Issue Update: Des Moines Creek Basin Plan consistency

RESOLVED: Port and Ecology agreed that the SMP is a stand-alone document that can receive approval without any reliance on a potential future RDF. If the Port proposes use of the RDF in the future, review and approval of an amended SMP would be necessary. The 401 Permit may reference this requirement.

Issue Update: Runway De-Icing / Dissolved Oxygen Study

RESOLUTION PENDING REVIEW: Ecology and Port discussed the timing and potential phased review of the Runway De-Icing / Dissolved Oxygen Study, as well as its relationship to the 401 permit. The Runway De-Icing / Dissolved Oxygen Study will be submitted to Ecology prior to final 401 decision. Target date for submittal is early to mid November. Ecology determined that the following statement characterizes the relationship of this study to the 401: "Ecology and the Port have agreed that the 401 Permit will be conditioned as necessary to address any water quality concerns identified in the Runway De-Icing / Dissolved Oxygen Study, while recognizing that the 402 NPDES Permit process will address ongoing monitoring and BMP requirements".

UPDATE: SOUTH ACCESS ROAD / TYEE POND

RESOLUTION PENDING REVIEW: The Port highlighted that the existing Tyee Pond provides a stormwater management spill control function, a function overlooked in discussions at the 10/10 meeting. The Des Moines Creek Basin Plan envisions Tyee Pond's continued use for spill containment. The SMP does not propose any change to the use or maintenance of the pond. Ecology and the Port will confirm that the Corps is fully informed of the spill containment function to factor into decision-making. During evaluation of a potential buffer at Tyee Pond, restrictive covenant language will be checked re: acknowledgement of the stormwater management spill control function. The Port is reviewing the feasibility of a 100-foot buffer around the Tyee Pond.

UPDATE: HPA ISSUANCE

RESOLVED: Ecology confirmed with Fisheries that a letter from either King County or Ecology stating that the SMP document is "approvable" pending public review and a copy of the SMP is required in order to issue the HPAs.

NPDES MAJOR MODIFICATION

RESOLVED: The NPDES major modification application process underway is not related to the 401 permit process. Notification and potential public hearing decisions will be coordinated with Ecology if necessary.

CONCLUSIONS AND NEXT STEPS

The scope of work for review of the NRMP was generally defined as review of the revised final draft NRMP for consistency with the SMP and the issues defined above. This review will be performed on the same final draft that is released for public comment. Therefore, Ecology review of the NRMP will not delay the public comment process. Following Ecology's internal meeting on 10/17, staffing for review will be discussed further.

Schedule Status for Deliverables related to SMP issue resolution:

The following list shows a target schedule for Port submittal of deliverables to Ecology and King County for review. Dates refer to submittal by close of business (cob) on that day. Deliverables completed are followed by actual submittal date in parentheses.

10/11	SR 509 redesign report (10/10)
10/13	Des Moines Watershed revised Appendix A package (10/13)
10/13	Other SMP deliverables not in Appendix A (text revisions per King County comments 10/13)
10/13	IWS Lagoon overtopping analysis (answer to question 10/13; analysis performed by Kennedy Jenks to be submitted by cob 10/16)
10/19	Walker Watershed revised calibration appendix (following 10/16 field visit by King County and consultant Joe Brasher)
10/20	Walker Watershed revised Appendix A package (following 10/19 Walker re-calibration)
10/20	Miller Watershed revised Appendix A package (based on 10/13 resolution by King County, consultant J. Brasher and Parametrix of problem with input files)
early Nov	Base flow technical memo (does not require review by King County)