

Ecology Internal Memo

October 9, 2000

TO: Tom Luster
Ray Hellwig
Joan Marchioro

Kevin Fitzpatrick
Dave Garland
Jeannie Summerhays

FM: Erik Stockdale

RE: **Remaining Issues, SeaTac Natural Resource Mitigation Plan (and related documents) as of 10-9-00**

Here is a status summary of where the Natural Resource Mitigation Plan stands to date. I have outlined 23 items by subject area, some with suggested action items. Please let me know if you think these items need clarification or further detail.

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- 1. Next phase of Ecology review of natural resource mitigation plan.** Consistent with my request to SEA management, my involvement in the 3rd runway project is closing. Ecology will shift the cost of the remaining review to the Port. My responsibilities within the section are changing, and we do not have the capacity to transfer the review responsibility to other staff in the section.
 - **Recommendation:** Ecology and Port enter in a 3rd party agreement to hire an independent wetland consultant to continue review where I leave off. Consultant will report to Tom Luster and respond to his requests for technical consultation. I will be available on a very limited basis during transition. By limited I see it as 1-2 hours a week. Jeannie Summerhays (my section supervisor) is working on the arrangements to make this work.
 - 2. Compliance monitoring will require significant resources.** The 3rd runway project will continue to demand significant resources from Ecology. Construction drawings will need review and approval. A significant presence will be required on a daily/weekly basis as the natural resource mitigation plan is built. Construction timeframe will span 6-8 years or more? Ecology will receive numerous complaint calls during construction that will require site inspections. We need an efficient mechanism to be able to follow through on the project, provided it is approved.
 - **Recommendation 1.** Ecology hires a 3rd party consultant (at Port's expense) to conduct Ecology's construction oversight and compliance monitoring. A possible solution would be to expand the 3rd party oversight currently in place with Herrera Environmental, provided they have the necessary expertise. (Were the PGG study subcontractors who looked at the wetlands piece from out of state?).
 - **Recommendation 2.** Port should develop a web-based information clearinghouse to keep citizens informed about construction activities, and serve as conduit for complaint investigation and tracking.
 - 3. Continuity between design and implementation.** We retain a strong interest in ensuring that the designers of the mitigation elements are present to guide successful installation. The mitigation ratios we negotiated with the Port are based in part on this assumption. While we

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- can't tell the Port who they can hire to supervise installation, Ecology's level of reasonable assurance goes down (and risk of mitigation failure goes up) when plans are installed without the necessary design oversight. Our policy guidance on this matter is very clear.
- **Recommendation.** Given this, I recommend we craft a condition for the 401 that re-opens the negotiated mitigation ratios if the Port chooses to select construction oversight/supervision that does not include the original designer team. Obviously we will need consultation with Joan Marchioro on this.
4. **Public disclosure requests and document management.** PDR's are a big time suck for the agency, for the Port, and an avoidable time delay to the public.
 - **Recommendation:** I suggested to Jan Cassin (9-26-00) that the Port make documents and maps available on the web. Updated documents can be managed efficiently this way, and all parties with interest can have ready access. Several GIS maps have been provided to Ecology that greatly assist in visual interpretation of proposal. These maps could be made available via the web, and/or made available via CD-ROM. We should recommend this be established as part of the next review cycle. Alternatively, we REQUIRE that documents be submitted to us electronically so that we may provide them on a CD-ROM.
 5. **Consistency between IA drawings and grading & drainage plans (in stormwater plan).** I have not compared the stormwater plan to the natural resource mitigation plan. During a phone conversation with Amanda Azous sometime mid-September, she said she is concerned that the grading and drainage plans do not show the drainage channels shown in the NRMP. Specifically, she said the HNTB drawings (grading & drainage plans in appendix Q of stormwater plan) don't have the drainage trench that will deliver water to the wetlands. It is also unclear how water that runs off of face of wall and the slope of the embankment will be detained. She also questions whether some of the point discharges shown on the grading plans can meet BMP's since they don't indicate the necessary treatment and detention systems.
 - **Recommendation:** Plan sets cannot be considered complete at submittal until we are assured that they are consistent.
 - This leads to the next item:
 6. **Does the stormwater management plan mesh with the NRMP?**
 - Will the 4 ponds that drain to Miller Creek on west side of new embankment need to be sized larger to meet the targeted flow regime? If so, will they fit within the existing impact footprint? Parametrix has indicated they don't think this is a problem. Time will tell.
 - **Recommendation:** The NRMP needs to include a statement that Parametrix has conducted the necessary quality control reviews of the two plans to assure that both documents are fully integrated. Make this a condition of document submittal. Clock stops if documents aren't consistent.
 7. **Cumulative impacts from SR 509 and South Access road.** Parametrix is operating under the assumption that if adequate mitigation is required for each of the projects in the golf course area (regional stormwater facility @ NW ponds, SR509/South Access, and SASSA), then when considered jointly, the projects will not result in cumulative impacts. I can follow the logic of this to a point, but I remain concerned that such assumption is not based on much of an analysis. I believe what is needed one of the following:
 - A coordinated mitigation strategy between WSDOT, the Port, and the basin planning committee; or

- A more detailed evaluation of the cumulative impacts, and an assessment of the mitigation provided for the port impacts in the basin.
- Requiring buffers and restrictive covenants for all wetlands and creek reaches considered "avoided" by the 3RW project in the golf course area of the airport property. We have identified 100 feet as a suitable buffer width. This would apply around Tyee Pond, and both sides of all reaches of Des Moines Creek. If the South Access Road is proposed to cross Tyee Pond with a bridge, then impacts from the encroachment can be dealt with by WSDOT through the permit review process for the road.

What do the volumes of Port submittals say about cumulative impacts? Well, at the time that the function assessment report was submitted in August of 1999, the South Access/SR509 project wasn't very well defined. Here's what the function assessment states:

4.4 CUMULATIVE IMPACTS

"Additional impacts to wetlands could occur as a result of other projects planned in the vicinity of STIA by a variety of project proponents. These projects include the proposed SR 509 and South Access Freeway (Washington State Department of Transportation 1999), the Des Moines Creek Regional Detention Facility (Des Moines Creek Basin Planning Committee 1999), the LINK light rail project (Regional Transit Authority 1998), and potential commercial developments in Borrow Areas I and 3 (Port of Seattle).

Final designs for these projects are not available. Each of these projects may have direct or indirect impacts to wetlands near the airport and may result in some cumulative loss of wetland area and ecological functions. SEPA, NEPA, and Section 404 review for these projects will require evaluation of options that avoid and minimize impacts to wetlands and the aquatic environment. For unavoidable impacts to wetlands, mitigation must be provided. Mitigation provided by these projects for unavoidable wetland and stream impacts is likely to require protection of water quality conditions in creeks and wetlands, replacement of wetland functions on-site, and restoration of aquatic habitat. Thus, significant cumulative impacts to wetlands are not anticipated."

- I think we need to consult with the Corps to determine if these two paragraphs are detailed enough to pass the reasonable assurance test. My sense is this needs further evaluation. Given the new timeframe, is there enough time to require a coordinated approach?
8. **SR 509 Temporary Interchange:** Corps staff responded to ACC letters on matter. I believe Port is discussing issues regarding this project element with Corps as part of next public notice.
 9. **Vacca Farm floodplain habitat design elements.** The IA needs another page with figures in Appendix A of IA drawings that show microtopography and woody debris placement and other habitat features, consistent with bird strike concerns. Topography does not need to be uniform as shown. Have spoken with Jan Cassin about this. Page 17 of IA makes passing reference to this, but plans need more detail. Jan indicated she would work on providing this detail. She said it has been planned for but agrees not well documented.

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10. **Miller Creek wetlands and stormwater ponds.** Stormwater ponds C, G and D are adjacent to Miller Creek. We haven't seen cross section drawings showing the dimensions of the stormwater ponds in relation to the creek buffers, wetlands, drainage channels, and elevations. Parametrix has indicated in its reports that wetlands downslope of the embankment, roads, wall, and stormwater ponds will not be deprived of their hydrology, and has proposed performance standards. I asked Jim on 9-21-00 for cross-section drawings. He said ponds haven't been designed yet so drawings would be preliminary.
- Jim Kelley agreed that performance standards apply to ALL wetlands downslope of the embankment wall/stormwater ponds/road and would be monitored for assurance (table 4.5 on page 62 of IA) (9-22-00 phone conversation). Table in report needs to be updated to reflect this restoration element. The performance standard on page 62 of the IA that reads "*Create replacement drainage channels to convey seepage water to wetlands downslope of the embankment wall*" should be revised to add "*and stormwater ponds, and perimeter roads.*"
 - Some of the wetlands downslope of the proposed MSE wall remain wet through the summer. Page 62 IA, however, proposes a hydrology performance standard that will assure that hydrology is maintained for the remaining wetland downslope of the wall only to mid-April. I have spoken with Jim Kelley about this, and he agrees that this standard needs more attention.
 - Pond F (SDW2) drains to Walker Creek. Wetland 41a will be filled to accommodate the pond. This impact has been included in public notice. Need to ensure design will not de-water wetland 39b which exists just downslope of the proposed pond.
11. **Indirect impacts: Are they addressed adequately?**
- Ask Gail if she concurs with the direct wetland impact calculations, as well as temporary impacts. Amanda's 8-16-00 p. 10 report raises concerns.
 - Will Pond D divert throughflow away from wetland 39B and dry it up? Need to look at design of Pond D. This item noted above.
12. **Wetland delineation on Miller Creek:** Wetlands on west side of creek delineated by Parametrix, though not verified by Corps. Am not concerned with this as Parametrix has done excellent job in ensuring delineation has been done correctly. If the wetlands are accounted for in matrix, in-basin mitigation ratio will increase, as higher ratio is given for wetland enhancement than upland buffer. Resolution of this could change the mitigation ratio in favor of the Port so my recommendation is for it to be updated in the next submittal. Issue may need to be more clearly defined by the time construction drawings are prepared because it will change the planting detail for the buffer.
13. **Wildlife Hazard Management Plan:** The Wildlife Hazard Management Plan has been edited to address our concerns (dated August 2000, date stamped Sept 5, 2000 in my files). Elizabeth Leavitt's 9-19-00 email states
- "FAA, the Port and USDA Wildlife Services have now approved and signed the final version of the WHMP, which addresses the comments from the COE and Ecology."
- We can check this item as completed.
14. **Buffer averaging on Miller Creek.** Several maps in appendix B of the Implementation Addendum state the following:

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"The wetland and riparian buffer shown is 100 feet from ordinary high water mark of Miller creek or from edge of riparian wetlands, whichever is greater. Proposed encroachments into the wetland and riparian buffer include detention ponds, S. 154th/ S. 156th Street and embankment. An existing sanitary sewer line with a 20 foot easement is also located in the wetland and riparian buffer." "Approximately 6.6 acres of increased buffer area will be added to the wetland and riparian buffer to compensate for encroachments and the existing sanitary sewer easement. All buffer areas will be placed in restrictive covenants."

- This is consistent with what Ecology and the Corps have asked for. I asked Parametrix for a map that shows how they calculated the 6.6 acres additional buffer; a simple "show me the math" request. On Sept 27, 2000 I received three color drawings that show 6.57 acres of buffer encroachment areas, and where a total of 7.07 acres of buffer averaging will be provided (same areas shown in appendix B of IA). (I sent a copy to you 9-28-00). Maps submitted are well done as they graphically depict the buffer averaging proposal, with acreage calculations. The buffer averaging proposal extends to the southern boundary of the Vacca Farm floodplain restoration project. Buffer averaging mitigation is not currently proposed for the edge of the runway embankment encroachment on the farm floodplain.
- 15. **Fencing and signage on mitigation areas:** At some point we will need a map that shows where fencing and signage will be placed to protect the mitigation areas in the NRMP.
- 16. **Restrictive covenant language:** Spoke with Joan Marchioro 9-20-00 and we agreed we are ready to sign off on this element of the NRMP. Need to ask Joan if the restrictive covenants for the Miller Creek buffer will prohibit a recreational trail from being built in the buffer in the future (a condition that is necessary).
- 17. **Performance standards and monitoring protocols for MSE wall base discharge:** Contained in Table 4-5 of IA, page 62. "Create replacement drainage channels to convey seepage water to wetlands downslope of the embankment wall." This needs to include all the stormwater ponds, and all wetlands receiving water from that edge of new runway. (mentioned above).
- 18. **Response to Azous letters:** I have received several memos from Parametrix outlining responses to letters written by Amanda Azous. Do you have them?
- 19. **Borrow site 3 hydrologic impacts:** Borrow Area 3 still under design, in terms of collection/discharge ditch to wetland 29/30. (p. 6 of technical memo). Need to ask Dave Garland to review and approve the proposed collection system that will deliver hydrology to downslope wetlands. Parametrix emailed performance standards on 9-21-00. Need to make sure this is included in next IA document. I have taped it into table 4.5 of my IA document.
 - Still Needed: Still need a drawing that shows design of collection system that will deliver water to these wetlands. Coordinate review with Dave Garland.
 - Will excavation of Borrow Site 4 affect wetland 28? Need Dave Garland to take a look.
- 20. **Merger of documents.** The Corps has indicated to the Port that it wants a single, integrated final Natural Resource Mitigation Plan that integrates the old NRMP with the latest iteration of the Implementation Addendum. I agree with the Corps. The goal is a self-contained document that new (future) agency staff can pick up and take into the field and use. Presently the documents do not achieve that goal. I indicated to Jim Kelley that we couldn't

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realistically require such an integrated document by September 29. Now that we are past this point, I think it is not unreasonable to ask for the integrated document.

- Document should strive to clarify the issues raised by Azous and other reviewers.
 - I have suggested several changes to the documents and plans, and I believe Parametrix staff have been keeping track. Many suggested changes are currently reflected in the latest submittal. Newer suggestions include:
 - Appendix drawings in the IA should be indexed better (i.e. bottom right hand corner should include the appendix letter);
 - Habitat details at Vacca Farm floodplain should be on new sheet, per #6 above.
 - Buffer averaging details provided Sept 27 should be included in document.
 - There is a discrepancy between the buffer widths in Appendix B, drawing L2 and Appendix D, page C3. Jan Cassin indicated she would correct page C3 in Appendix D.
21. **Performance Standards:** Corps will continue review of standards, including monitoring protocols. I expect further refinement, but this is not an area of significant concern. The latest IA has standards addressing hydrologic support for downgradient wetlands.
22. **Auburn mitigation site:** The remaining "undeveloped" space at the Auburn site has been included as part of the mitigation package to accommodate wider buffers. This is consistent with what the Port heard from the agencies last August.
- Need to make sure that there are strict prohibitions in the restrictive covenants and in permit conditions to ensure that the Auburn site can only be used for wetland mitigation. It cannot be used as a regional stormwater detention and/or treatment system for future development.
 - The perimeter road at the Auburn site is proposed to be decommissioned after 10 years of monitoring. See p. 35 of IA.
23. **Tyee Golf Course Mitigation and Conflicts with RDF.** There is a 100-foot buffer on the south/southwest bank of Des Moines Creek totaling approx. 6.36 acres shown in the IA drawings. This buffer is provided in lieu of a buffer on the wetland mitigation area just to the north. This buffer will need to be installed in coordination with the RDF. Need to consider planting timing requirements. Goal is to prevent buffer from being damaged if and when the Des Moines Creek improvements are constructed as part of the RDF. The FAA will limit the height of vegetation planted in the buffer to under 30 feet.
24. **Other items?** Am sure more will come to mind later. I will update with another memo when appropriate.

Thanks.