

MEMORANDUM FOR RECORD (MFR)

SUBJECT: Summary of telephone conversations with Elizabeth Leavitt and/or Jim Kelley regarding Corps review of the draft response to comments from Azous and Sheldon

1. I spoke with Jim and Elizabeth over a two-day period on 9 and 10 April 2001 to discuss the Corps' comments on their draft responses to the Azous and Sheldon letters. Jim was present for both of the conversations and Elizabeth was on for approximately 1 hour on the 9th.

a. General overall comments:

(1) Need to be careful about making absolute statements of compliance with the 404(b)(1) Guidelines or having provided sufficient information. The Port may believe they are in compliance with the Guidelines, however, this is the Corps determination to make and we have not yet made a final decision. The Corps also has requested additional information and the responses should reflect that the Port is working on submitting answers to our questions.

(2) By dividing the letters paragraph by paragraph, the responses were sometimes difficult to follow and some answers either covered more than one paragraph or were matched to the wrong paragraph. I suggested organizing by topic, or subtopic, and giving an overall, comprehensive response and then, if there were specific data/issues in the paragraphs of the subgroup, add responses to those.

(3) I suggested finding an "informed layperson" to review information being provided to the Corps. Someone who understands wetlands, streams, environmental issues, etc. but is not intimately familiar with the 3rd Runway. Jim and the other consultants working for the Port know this project in minute detail and sometimes there are breaks in the logic that appear to someone like me just getting familiar with the project but are mentally filled in by those that have the details in their head.

(4) Some of the responses did not answer the questions. The responses focused more on discussing what mitigation is being proposed rather than simply acknowledging whether the impacts discussed will occur.

a. Comments on the Azous letter:

(1) *Paragraphs 1 – 5:* See general comment 1.

(2) *Paragraphs 6 - 13:* A response for this section of paragraphs would be greatly enhanced by giving an overall comprehensive response.

In response paragraphs 10 and 12, the question is not whether new information was presented, but if the numbers presented by Azous are accurate.

In response paragraph 11, the wetlands to be eliminated may be degraded, but what is their significance in the watershed? Are these degraded wetlands even more important because of the urbanization of the watershed?

(3) *Paragraphs 14 – 20*: An overall response is needed for this section. As in our comments on the NRMP, we need more information regarding the criteria used for determining temporary versus permanent impacts. To help us determine the difference, for the areas described as being temporarily impacted, individually discuss all the functions present and how they would or would not be impacted over time and what are the consequences of any impacts. Once we understand the rationale, we can determine whether we consider the impacts to be temporary or permanent.

There seems to be a disconnect regarding the question if smaller wetlands still function the same. The question is not whether all the functions present in the wetlands pre-construction will be present post-construction (e.g. a checklist of present or not present). The question is whether the functions will be present and functioning at the same level or if they will be degraded. If they are degraded, in the functional analysis, provide answers to the question "so what does this mean". For example, wildlife habitat may still be present, but does a smaller available area support the same number of species?

(4) *Paragraphs 21 – 28*: The cumulative impact assessment in the NRMP is not sufficient.

(5) *Paragraphs 29 – 33*: No specific comments on this issue. However, until we get the additional information requested regarding impact assessment, we cannot determine whether the mitigation is sufficient or if additional mitigation will be required.

(6) *Paragraphs 34 – 38*: Answering the questions we have regarding the impact assessment will provide the response to these questions. The question is how will the changes that will occur to the availability and transportation of organic matter affect the food web.

(7) *Paragraphs 39 – 43*: This is more of a description of what the Port is doing in the borrow areas and does not answer the questions raised. Portions of the response are also confusing because they state the borrow areas will not be completely cleared of vegetation. Doesn't the vegetation need to be removed to excavate the borrow material? We also need to get a copy of the restoration plan to ensure there will be no future impacts to the wetlands proposed to remain as a result of the restoration.

As for the discussion about the removal of the upland vegetation, the question is not whether these areas could be considered to be wetlands; they are not. The question

is whether the clearing of all the vegetation will alter the water balance in the area and thus impact either the wetlands and/or streams.

(8) *Paragraphs 44 – 46*: The work completed to date is occurring outside of Corps jurisdiction.

(9) *Paragraphs 47 – 49*: Answering our questions regarding the impact analysis will help to address these concerns. The Corps has not completed our review of the hydrology concerns associated with the MSE walls. We are unsure about how these drainage channels currently function and are designed to function. This may be a good issue to address during the upcoming site visit.

(10) *Paragraph 50*: How was the time of shading (15 minutes) calculated? The question is not whether generically the plants next to the wall can tolerate different temperatures or shading, the question is whether there will be a change in species composition due to the wall and what does that mean to the functions.

(11) *Paragraphs 51 – 60*: In response paragraph 53, could birds become entangled in the netting that might be used over the stormwater ponds?

In response paragraph 55, I thought the flooding of Miller Creek at Vacca Farms was from backwater flooding and not bank overtopping?

In response paragraph 58, I do not understand the discussion of headwaters. The question is whether headwater wetlands will be filled and how hydrology to the downstream wetlands will be impacted and what that means to the remaining wetlands.

(12) *Paragraph 61*: See general comment 1.

b. Comments on the Sheldon letter:

(1) *Paragraphs 1 – 15*: A response to these issues would be greatly enhanced with an overall, comprehensive description of the components of the wall, the construction methodology for the wall, and the existing and propose water flow in the area of the walls. Many people, including the Corps, are still confused about how the wall and maintaining the water flows work together. We have a much better understanding of the construction details of the wall once we read Corps document EM 1110-2-2502, Chapter 10. However, we still will need to have construction drawings, not just conceptual, to be able to complete the engineering review of the wall.

We are still unsure about the flow of the water through the walls. We are confused with all the different water sources discussed (i.e. shallow aquifer, seeps, and groundwater flow) and where they are all located relative to the different components of the wall. A cross sectional drawing showing water movement pre- and post -

construction may help to clarify how the water will work. We still have questions regarding how much water will get through the wall and when relative to what is currently existing. Responses to different paragraphs sometime seem to contradict each other. Also, will the method of discharge be different – surface versus seeps? The functions may still exist but are they existing at the same level? We are still in the process of reviewing all of the hydrology information and have not made any final determinations.

We are also confused about what soils will or will not be removed. In one place the response state “soils will almost entirely remain undisturbed by construction” and in another place “areas of soft soils that need to be removed to provide embankment foundation support will be backfilled.” Will the natural terrain be disturbed or not? What do the subgrade improvements consist of? What are the stone columns mentioned in response paragraph 9 and how do they affect hydrology? Where will these improvements be needed? For how much of the wall and in which locations?

In response paragraph 4, do not direct us to another response. Summarize here.

In response paragraph 6, how will increasing the time of travel for water infiltration enhance the existing wetlands and Miller Creek? Increasing travel time paints the picture that less water will be available than is currently being discharged to these systems which could have a negative impact. How will the hydroperiod be changed?

In response paragraph 9, trees do not trap sediment as efficiently as emergent vegetation. You may be maintaining the hydrology to the wetlands but there will be a change. In the revised impact assessment you need to discuss the consequences of this change.

I am still confused about the drainage channels. I am unsure about how these drainage channels currently function and are designed to function. This may be a good issue to address during the upcoming site visit. Why are the drainage swales upslope of the mitigation channels needed when they are expected to be dry much of the time and are not located in areas with seeps or wetlands? Will they need to be maintained and what impacts would result from those activities?

(2) *Paragraphs 16 – 25*: A general response to the main issues would greatly assist in answering the questions.

Why does the geotextile fabric need to be used? Will the fabric not become clogged and become a barrier that isolates the stream from the surrounding wetlands?

The 3rd paragraph in response paragraph 19 does not make sense. As in our comments on the NRMP, more information regarding the creek and its relationship to the floodplain needs to be provided.

Provide the engineering practices followed to design the Miller Creek relocation.

The response to paragraph 21 does not answer the question of the peat rebounding.

The question in paragraph 22 is about subsurface lateral flow and not surface flow as discussed in the response.

(3) *Paragraphs 26 – 34*: As discussed in our comments on the NRMP, the criteria used to differentiate between temporary and permanent impacts need to be provided. The description of the operation and construction of the stormwater ponds is confusing. Will they be excavated or will filling occur? What kind of ground disturbance will occur and how will that impact water flow in and around the ponds? Will or won't indirect impacts occur?

(4) *Paragraphs 35 & 36*: Post-construction groundwater monitoring data is necessary. We need more than a delineation that shows the 3 parameters are present. Need to monitor for the changes in the plant community, diversity, density, the amount and duration of saturation, etc. from what was existing pre-construction. We need to know not just if the wetlands remain but if their ability to perform their existing functions has been compromised (i.e. are they functional at the same level or better).

The performance standards included in the response are not enforceable.

(5) *Paragraphs 37 – 39*: See general comment 1.


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