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DEPARTMENT OF ECOLOGY

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November 8, 2006

RECEIVED

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KITTITAS COUNTY  
CDS

Patrick Butler  
Kittitas County Community Development Services  
411 North Ruby Street, Suite 2  
Ellensburg, WA 98926

Re: Wetlands issues for McIntosh gravel pit proposal

Dear Patrick:

Thank you for the opportunity to make a site visit and discuss the wetland issues with you, Lenny and Mr. Turnbull. While on site, we reviewed three proposed pit areas, on parcels A1, A2, and A3.

Parcel A3 contained what appeared to be a side channel of Dry Creek, running along the west side of the property and there was a broadened area of that channel which met the criteria for a wetland at the hole I dug upstream of its confluence with Dry Creek. I understand that irrigation water may be the primary source of water: however, if this side channel intercepts natural surface waters, groundwater or long term (10 to 14 days) of continuous flood waters, then the side channel would also be considered a jurisdictional wetland. There are wetlands associated with Dry Creek and its confluence with the side channel to the south of the proposed pond area on parcel A3. The distance between this feature and the side channel/wetland area should be marked on a map. As I recall, there was less than 50 feet between this area and the proposed pond. I understood from the applicant, however, that the pond edges could be adjusted to increase the buffer area.

My sense is that parcel A2 site was topographically higher and had less wetland-looking areas, but as we walked along, I noted rushes and other obligate plants growing in the low spots. It will be critical to determine whether the reason for these plants being in these areas is due to a high groundwater table level or irrigation practices. At the time of the site visit, saturation to the surface in these areas was not observed.

Parcel A1 definitely needs more study with respect to the exact location of site wetlands. Wetland vegetation was much more prevalent on this parcel and denser in the low spots. (More than 80 percent cover in the swales.) Throughout our walking path on parcel A1 (generally from south to north, about 100 to 150 feet west of Dry Creek), I saw undulating topography and depressional areas that would just dead-end. It was not certain whether they were just superficial remnants of an irrigation system or old channels where the Creek used to flow. Given the proximity with the Creek and aerial photos of the area that I have observed, I strongly suspect they are associated with old creek channel beds. A detailed (1-foot contours) topographic map



or survey could shed some light on the situation. (Perhaps LIDAR data for this area may be available from the WSDOT because of the proximity of SR 97 just to the west.)

Recommendations/Concerns:

The two most critical things to obtain in order to correctly understand site conditions are 1) the location of the groundwater table level and 2) an assessment of how the water will move laterally through the site soils and flow into the gravel pit area. These items are needed to complete an accurate wetland delineation and to determine what the indirect impacts to the vicinity wetlands and impacts to the local groundwater table/hyporheic zone will be. Even if the mining is done in the wet, it may have a draw-down effect on surrounding areas. The applicant needs to get a more rigorous wetland delineation done than just my walk-through because the sites are simply too complicated to figure out everything in one visit. All wetland areas (regardless of their origin - irrigation induced or natural) should be put on a map, with distances to the mining operation.

A proper wetland delineation for the site will be based on groundwater table levels, information on the flow of Dry Creek and an understanding of the soil condition across the site. If I were doing the delineation, I would get historical data from stream flows/floods, and wait until spring to do the delineation when site conditions would be more natural. HOWEVER, the influence of irrigation is still considered a normal and jurisdictional condition by Ecology until the water is permanently removed and the wetland goes away. I would want to understand water levels both in the spring and in the summer.

I would also want to keep grazing off areas in question for at least two or three months in the spring so that plants could grow and the delineation would be easier. Perhaps the delineation could be done in phases if the cows still are using the property at all. (Do one phase or area each year)

Even though parcel A3 contained a wetland area, this area may be where mining should start, given that this area is more clearly understandable, uniform and the low spots are concentrated along the stream corridor. Of course, indirect impacts due to pit excavation need to be clearly understood to predict how much the wetland and Dry Creek corridor could be affected by the proposed mining project. The effect of avulsion of the pits into the Dry Creek system should also be discussed. A complete application should include all staging areas as well as anticipated protective buffers for known wetlands.

Wetlands found on this disturbed site will be category 3 or 4 wetlands, and can be mitigated, given that their current main function is water quality improvement and storage. The mining ponds could be constructed so that there are wide planting benches 12 inches below the place where the groundwater table will be intercepted. However, there will be a temporal loss of wetland function until final land-contouring occurs and the pit is abandoned. I would suggest that some stream-side wetlands could be created or restored before mining begins (see our website [www.ecy.wa.gov/programs/sea/wetlands/publications/ Wetland Guidance on Wetland Mitigation vols 1 and 2](http://www.ecy.wa.gov/programs/sea/wetlands/publications/Wetland%20Guidance%20on%20Wetland%20Mitigation%20vols%201%20and%202) to read about how to create mitigation plans). We don't want to wait 10 years for wetland mitigation to be accomplished, so understanding what the mining and mitigation time-line would be is important.

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I would urge the applicant to obtain a wetland delineation, fill out a JARPA application form and contact Jason Lehto with the US Army Corps of Engineers (his number is (206) 764-6900) as soon as possible (if wetlands will be filled or dewatered) to get that permit process started.

Thank you for your patience regarding my communication about this project. Please let me know if I have forgotten any major points that need to be made regarding wetlands on this site or if you have any questions about the content of this letter.

Sincerely,

A handwritten signature in cursive script that reads "Catherine D. Reed".

Catherine D. Reed  
Wetlands and Shorelands Specialist

CR:jt 061101

Cc: Scott Turnbull, Kittitas County Development Services  
Scott and Gayle McIntosh  
Pam Perun, Ecology Water Quality