

WETLAND ISSUES (as identified by Sarah Cooke as of 11/3/09)

1. All the alternatives with the exception of the “No Action” Alternative include the same total number of residential units. Why are no alternatives suggested that propose a reduction of units so that there are no critical areas impacts to buffers or wetlands?. Reasonable use is not maximum use of a site. It should be maximum use without impacts to critical areas. Why is it the proposal’s objectives include a specific number of parcels that can be developed and not maximum density at the minimum environmental cost? Why did the City’s Director felt that 9 units/acre was a fair density on a site with this many critical areas?
2. Designation of Wetland CC into lobes CC1 and CC2, with a break in the wetland boundary. CC1 is a Category 1 mature forested wetland, and CC2 has been rated as a Category II wetland. Mature trees were found in the Wetland CC2 lobe and there does not appear to be a break as identified in the EIS, so Wetland CC appears to continue and so should the Category I mature forested wetland designation.
The problem? Without the Category I designation the CC2 lobe is slated to be filled in all the alternatives except for the “no action” alternative.
3. Wetland JJ has been divided up into 2 lobes; JJ1 and JJ2.
The problem? Both contain mature trees and so the entire system should be classified as a Category I forested wetland. Instead, JJ1 is categorized as Cat II with a 50 foot buffer. This reduced buffer width allows for some type of road to be placed between Wetlands JJ and KK under all the alternatives except for the “No Action” alternative. See #4 below to see why this is a problem.
4. The eastern wetland boundary of Wetland KK appears to extend farther east than indicated. There is a cedar grove that has been bisected by an informal road and the soil surface is covered by forest duff (organic litter). The water table was within a foot of the surface and all the cedars and a douglas fir all showed physiological signs of wetland conditions (buttressed trunks). The soils below the duff were black (10YR3/1) organic rich silts and there was running water in many locations just below the duff. These areas met all three of the required wetland criteria. The actual distance between the wetland edge with Wetland JJ1 appears to be closer to 20 meters (66 feet).
The problem? This would not leave sufficient space between the wetlands for the proposed road under all the alternatives except for the “No Action” alternative.

5. Buffers are designated under the old Critical areas ordinance despite the fact that under EIS guidelines, the impacts are to be determined as a scientifically-based evaluation of the environmental impacts. This means that Best Available Science applies and buffer widths as defined by the Washington Department of Ecology in their Best Available Science on Wetlands Document (2005) (See attached table).

The problem? The EIS fails to disclose significant impacts to wetlands and to their adjacent buffers. There is a large discrepancy between the recommended buffer widths between the old ordinance and what the DOE is recommending buffers need to be from a scientific perspective. In many cases, the buffers cited in the Draft EIS are less than half of the scientifically-based buffers recommended by the Department of Ecology; in some cases, less than one-third. Is important because the proposed development under all the alternatives except the “No Action” alternative reduces the buffers and takes out some of the wetlands (and their buffers) entirely.

- a. Buffer functions would be lost. Removal of some of the buffer and some of the wetland area will decrease the potential for these areas to function as filters for surface waters that contain pollutants associated with a development such as is proposed. The new roads, driveways and houses will discharge pollutants that are not currently present on site (petroleum hydrocarbons and heavy metals from cars, pet waste, fertilizers and pesticides). The reduction of the water quality improvement function at the time when you are increasing the potential for pollution is an impact not specifically addressed in the EIS.
 - b. **The** trees will probably come down as a result of wind-throw, at least for the forested wetlands. If the buffer trees fall down, then the trees in the wetlands will likely come down because they are no longer “buffered” or protected by the buffer. There will be a conversion from a forested wetland to a shrub or emergent wetland.
 - c. Even given the proposed buffers, the development plan under all the alternatives reduces the buffer widths for at least a portion of the buffers to more than the maximum allowed under the ordinance and yet, this reduction is barely touched in the analysis or discussion of impacts.
6. Wetlands DD and HH have been identified by the Army Corps of Engineers as mature forested wetlands, indicating that they would require a Category I designation and at least a 100-foot buffer. All the alternatives reduce the buffer on these wetland to almost zero for at least a small portion. Alternatives 2A, 2F, 3D, and 4F proposed filling part of Wetland HH.
 7. The project proposes a large amount of surface soil removal under all but the “No Action” alternative. They also recommend blasting into bedrock in some areas.

The problem? This amount of earth modification will surely alter the

groundwater and surface water flows that has to affect the existing wetlands. This activity was not discussed in the EIS, a document where the impacts are supposed to be identified and discussed.

8. Change of drainage patterns on and off- site. There is a significant amount of vegetation removal proposed under all alternatives except for the “No Action” alternative. The vegetation on-site coupled with existing surface and groundwater flow patterns prevents the site from currently flooding during storm events.

The problem? Removal of a significant amount of soil and in some cases, bedrock, throughout the site as well as removal of two-thirds (Alternatives 1A, 1B, and 1C) to one-half (Alternatives 2A, 2F, 3D, 4F) of the vegetation will likely result in flooding both off-site and potentially on-site. The vegetation will no longer act as a sink for the water because uptake and evapotranspiration will no longer be occurring. All the water that falls on the significant amount of impervious surface and in areas that will be reduced to lawn and landscaping will either drain to detention ponds or drain to any low-lying areas and if it the amount in either exceeds the storage capacity of the low-lying areas or detention facilities, will drain off-site. Since these impacts are not addressed in the EIS, it is reasonable to assume that they are not accommodated in the storm design.