



Key Environmental Solutions, LLC.

January 22, 2019

City of Olympia
Attn: Nicole Floyd, Senior Planner, AICP
601 4th Ave E.
Olympia, WA 98501

Re: Olympia High School Addition / File: 18-4309, Project Address: 1302 North Street, Effects on Freshman Pond (Kettle Wetland).

Dear Ms. Floyd,

Key Environmental Solutions, LLC. (KES) has completed a review of the OHS Addition project and the effects on Freshman Pond (Kettle Wetland).

Discussion of Project effects on Freshman Pond (Kettle Wetland)

The Freshman pond is considered a “Kettle Wetland” and would be considered a high-quality Category II wetland. Under the new City of Olympia’s CAO 18.32.535, the buffer would be 260’.

It is KES’s professional opinion that under 18.32.535 and the old CAO, that buffer is 100% impacted already. KES does not feel it is necessary to perform a complete jurisdictional wetland delineation as the wetland is clearly defined and is fenced off. The new construction will not be impacting the buffer or wetland any more than what is already there. The entire buffer and existing structures are non-conforming per OMC 18.37.070.

From a water quantity and water quality point of view the new project will also not impact the wetland at all. If anything, they will be adding additional clean water into the wetland, which is a positive. The following are the steps the project has taken to insure the protection of the wetland water quantity and quality.

- *The proposed storm improvements will include a flow control system that will limit developed flowrates such that they closely match the existing conditions.

- *Stormwater from pollution generating surfaces that are created as part of this project will be treated.

- *The proposed stormwater improvements associated with this project will only enhance the existing wetland; no negative impacts are expected.

Pursuant to OMC 18.32.515 the wetland is greater than 1,000 ft² and is not exempt from mitigation sequencing, buffers, and replacement ratios. It is an isolated kettle wetland and is approximately 13,939 ft². Hence it is a regulated wetland, based on Kettle wetlands are rare on the landscape. It has high functions and values and would be considered a Category II wetland. It has snags, LWD, and has a tremendous teaching and learning opportunities. The Category II wetland was rated using the 2014 DOE wetland rating form.

The existing outfalls that discharge stormwater into the wetland will be unchanged as part of this proposal. As a result, there will be no impact on the existing habitat or the existing drainage patterns. All the structures and playing fields that surround the Category II (kettle wetland) were existing prior to OMC 18.37.070, and are nonconforming structures. These structures and the playfields currently make up the entire buffer of the wetland, except for the small wetland buffer that exists inside the fenced area. The entire existing buffer falls into nonconforming according to OMC 18.37.070. They were preexisting prior to the new change in the CAO rules and regulations. When the school was first built, it was constructed around the existing Category II kettle wetland. The OHS has used this wetland as an onsite wetland classroom, which is an asset to the school and the students. They have worked very hard to keep it free of non-native vegetation, applying for grants that added Large Woody Debris (LWD) to the wetland for increased habitat for various wetland species. The fence around the wetland will be maintained.

The quantity of stormwater discharging to the wetland will increase only marginally as a result of the proposal. This will increase the habitat value of the wetland and the species that use the wetland. During certain dry years, the kettle wetland may go dry. With the marginal increase in quantity of stormwater, may help maintain a more constant water level in the kettle wetland. Also, all the water going into the wetland will be treated, so stormwater discharging to the wetland following the proposed improvements will be cleaner than the existing condition.

All stormwater that discharges into the wetland infiltrates into the underlying soils or evaporates. There are no overflow pipes or weirs, nor is there a known history of stormwater over-topping the wetland. Stormwater will continue to follow this drainage pattern in the proposed condition in order to preserve the natural drainage system and outfall, as required by the Drainage Design and Erosion Control Manual. Given that the increase in quantity of stormwater is only marginal, it is expected that the wetland and drainage patterns will be unaffected.

From an educational point of view, how lucky are the kids to have a nice wetland classroom, right on their campus. I wish I had something like this at my high school.

Professional Standard of Care:

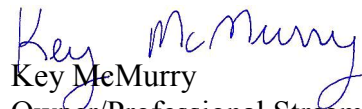
Please be advised that KES personnel has provided professional services that are in accordance with the degree of care and skill generally accepted in the performance of this environmental evaluation. Fish and Wildlife Habitat Assessments together with wetland delineations, mitigation plans, classifications, ratings, stream typing, riparian planting plans, ordinary high-water line determinations, fish removal and other critical area analysis should be reviewed and approved by the agency with permitting authority and potentially other agencies with regulatory authority prior to extensive site design or development. No warranties are expressed or implied by this assessment until approved by the appropriate resource and permitting agency.

The findings expressed in this report are based on field investigations, best available data, best available science, and our professional judgement. The services described in this report were performed consistent with generally accepted professional consulting principles and practices.

The services performed were consistent with our agreement with our client. Key Environmental Solutions, LLC, (KES) is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report. KES does not warrant the accuracy of supplemental information incorporated in this report that was supplied by others.

Thank you for the opportunity to evaluate this project and please contact us if you have any questions regarding this information, our findings, conclusions, or recommendations at (360) 942-3184 or (360) 562-5763.

Sincerely,



Key McMurry
Owner/Professional Stream and Wildlife Biologist, PWS

