August 19, 2022

Via Email: elish@idem.in.gov
Erin Lish, Wetlands Project Manager
Wetlands and Stormwater Section, Office of Water Quality
Indiana Department of Environmental Management


Dear Erin,

Please accept these brief public comments on behalf of the Hoosier Environmental Council (HEC) regarding the Section 401 Water Quality Certification (“certificate”) submitted by Lennar Homes (“Applicant”) as part of its proposal to permanently impact 832 linear feet (lf) of Unnamed Tributaries to Abner Creek (“headwaters of Abner Creek”) through fill, culvert installation, riprap installation, and severed hydrology.

Overview

Section 401 Water Quality Certifications are a useful tool in protecting and maintaining Indiana’s water quality. An integral part of the certification process is determining whether mitigation for impacts will be necessary. Mitigation is last step in a three-step process that is required for approval of a Section 401 Water Quality Certificate. To be specific, “applicants must demonstrate to IDEM that the impacts and their applications are necessary. If an applicant is unable to completely avoid impacts, they must demonstrate how their proposed project and unavoidable impacts to wetlands and waters of the US have been minimized.”1 Once applicants have satisfied these two requirements, they can then pursue mitigation.

In addition, according to IDEM’s website, 401 Water Quality Certificates can cover both the construction and operation of the proposed project. They can also impose certain conditions to ensure impacts will comply with state water quality stands.²

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1 [https://www.in.gov/idem/wetlands/information-about/section-401-water-quality-certification/frequently-asked-questions/](https://www.in.gov/idem/wetlands/information-about/section-401-water-quality-certification/frequently-asked-questions/)

2 [https://www.in.gov/idem/wetlands/information-about/section-401-water-quality-certification/frequently-asked-questions/](https://www.in.gov/idem/wetlands/information-about/section-401-water-quality-certification/frequently-asked-questions/)
Approval of this certificate will result in 832 lf of permanent impacts to the headwaters of Abner Creek, which is proposed to be mitigated at a 1:1 ratio. By nature, these impacts are not isolated, and HEC is concerned that the proposed mitigation will not offset the water quality impacts of both the construction and operation phases of the project. Further, the Applicants’ current demonstration that impacts are necessary and minimized addresses only the forested tributaries and only includes the addition of a single retention pond for water quality control. Therefore, HEC respectfully requests that the Applicants demonstrate that impacts are necessary and minimized as part of the mitigation process and propose more protective mitigation requirements, given the evidence presented below.

Water Quality Concerns

Abner Creek is not listed on the 2022 303(d) List of Impaired Waters, suggesting that it is potentially meeting water quality goals. The current water quality Abner Creek is to be “maintained and protected” and “any degradation of water quality that would interfere with or become injurious to existing and potential uses is prohibited” under Indiana’s water quality standards.

Headwaters, which are the subject of this certificate, play a critical role in the function and quality of downstream waters. They are the life source for larger streams and compromise at least 80 percent of the stream network in the US. Their ability to perform vital stream functions is often overlooked because they are smaller in size and can dry up seasonally, making them an easy target for development. Headwaters can mitigate flooding, maintain water quality and quantity, recycle nutrients, and create habitat for plants and animals. Since 2012, this portion of the headwaters of Abner Creek has undergone dramatic land use change, with much of the land being converted from forests and crops to residential subdivisions, a process referred to as urbanization.

The impacts of urbanization on water quality are well-known and widely studied. Concrete-laden areas reduce water infiltration rates, which increases the amount of water discharged to wetlands and streams. This increased rate of discharge erodes streams and contributes to excess sediment in waterways. Construction sites expose bare soil, which also leads to sediment pollution. Indeed, the most concentrated sediment releases come from construction activities, which are the subject of this certificate (i.e., fill, culvert and riprap installation, severed hydrology). Too much sediment in waterways can be detrimental to the aquatic ecosystem by preventing animals from seeing food, preventing vegetation growth, and clogging fish gills, reducing resistance to disease, lowering growth rates, and affecting fish egg and larvae development.

3 https://www.in.gov/idem/wetlands/information-about/section-401-water-quality-certification/frequently-asked-questions/
6 Exhibit 1, Land use change from 2012-2021.
After construction, the residential subdivision will be operating as an urban environment. Rainwater that falls on urban environments washes off contaminants such as pesticides, fertilizers, oil and grease, deicing agents, and pet waste into rivers, streams, and wetlands. These contaminants impair water quality, causing a variety of issues such as excessive algal growth, fish kills, public health concerns regarding bacteria and toxic pollutants, and unpleasant sights and odors. These issues make it increasingly difficult to meet water quality goals.

Given that Abner Creek is not yet listed as impaired, HEC is concerned that approval of this certificate without an improved mitigation plan or permit conditions will degrade the quality of its waterways. Therefore, we respectfully request that before the issuance of this permit, the Applicants demonstrate that the impacts are necessary and minimized and propose more protective mitigation requirements. In line with this request, and given the importance of headwaters and that this area of the Abner Creek watershed is experiencing intense development pressures, HEC raises a few questions:

1. Did the Applicants consider low impact development techniques or green infrastructure as part of the analysis? Green infrastructure and low impact development are practices that are often used to offset the harmful water quality impacts of urbanization. These techniques are aimed at reducing infiltration rates and boosting water quality.
2. Did the Applicants consider adding stream buffers to protect and enhance the water quality of the non-forested headwaters?
3. Can IDEM impose certain conditions on this permit that will boost its effectiveness, such as monitoring requirements to ensure there will be no degradation of Abner Creek?

HEC is grateful for the opportunity to comment on this proposed Section 401 Water Quality Certificate. Thank you for all the work you do in helping to make Indiana’s waterways cleaner and healthier, and for considering our concerns. We look forward to your response.

Sincerely,

Susie McGovern
Legal Assistant and Policy Associate
Hoosier Environmental Council

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9 [https://www.epa.gov/nutrientpollution/issue](https://www.epa.gov/nutrientpollution/issue)