



March 1, 2023

Cambridge Township Planning Commission
9990 West M50
P.O. Box 417
Onsted, MI 49265

Re: Proposed Sand & Gravel Mine in Cambridge Township, South of US-12 between Allen, Meadow and Kelly Lakes

Dear Members of the Cambridge Township Planning Commission,

This letter is being written to voice Legacy Land Conservancy's support of the call for further studies and due diligence to be conducted in order to better understand the risks posed by the proposed gravel and sand pit operation prior to making any decisions regarding the change of zoning request submitted by SSP Leasing/Cambridge Lake LLC. Specifically, Legacy supports the completion of additional studies to determine whether the proposed gravel and sand pit operation would result in any Very Serious Consequences (VSCs), pursuant to the Michigan Zoning Enabling Act (ZEA).

Legacy is a non-profit 501(c)(3) corporation with the mission of securing a land base to conserve nature, agriculture, fresh water, and recreation for current and future generations in Lenawee, Jackson and Washtenaw Counties. Members of the community shared concerns with us about impacts to the natural communities and fresh water in the Irish Hills region. After reviewing some resources, we believe further information is needed to determine the negative impacts that may occur from the gravel and sand pit mine to occur on this property. Since Legacy's mission is specifically related to conserving important ecosystems, and because we hold a conservation easement in this area, we felt providing support for further studies was well within our responsibility to the area and the people we serve. The footnotes in the letter refer to previous correspondences the commissioners have received.

The Irish Hills area is well-known for its many lakes, streams, and wetlands, and is home to many high-quality natural communities¹, all of which are likely to be threatened by the proposed mining operation. Importantly, "the proposed gravel and sand pit mine is . . . sited where numerous geologic, hydrologic, and ecologic processes intersect to provide numerous irreplaceable public benefits" (Kellum, 2022, p.1). In our opinion, if the proposed mining operation is allowed to proceed, it could have significant negative impacts on the surrounding ecosystems and the invaluable benefits they provide to the surrounding and downstream communities, both human and natural, as well as the values that are central to the Irish Hills community and which draw many visitors to the area.

The additional due diligence inquiries which we are writing to support may reveal that the extraction of aggregate materials that would ensue should you approve the change of zoning request would result in very serious consequences. The numerous natural, economic, and cultural resources that are present

¹ Kellum, S. (2022, December 21). Gravel Pit Opposition Letter.

within the Irish Hills region, and which would likely bear much of the impacts of any potential VSCs, are summarized below.

This region is well-known for its high-quality natural areas, a fact supported by multiple entities within the state that are experts in this field. Indeed, in its 2020 Forest action plan, the Michigan Department of Natural Resources identified this region as a high-priority area for the protection and management of oak barrens, floodplain forests, as well as prairies and savannahs, and also noted the area as having a Medium-High Frequency of Species that are of High Concern to Forest Health.² Further, the Michigan Natural Features Inventory determined that the proposed mine is located in a region of High biological rarity based on their “database of know sightings of threatened, endangered, or special concern species and high quality natural communities.”³

The Planning Commission itself has also previously recognized the importance of these natural resources, as evidenced by its 2011 adoption of the Cambridge Township Master Plan, which includes among its stated goals to “[e]ncourage the protection and preservation of the Township’s natural resources for the purpose of maintaining the quality of the local environment” (p. 22), “[e]ncourage the preservation of wetlands” (p.22), protect and maintain “[h]igh quality groundwater resources” (p.23), and to “[p]reserve and protect the natural features of the township” (p. 34). While another goal of the Master Plan is to “[e]ncourage the development of industrial used to diversify the local economy and to provide a stable tax base for the Township,” it immediately thereafter specifies that such development should only be carried out “at locations that will allow the quality of the local environment to be maintained” (p. 31).⁴

The proposed mine is also in an area that is critically important to maintaining the health of both ground water and surface water resources in the region. The gravel mine would be immediately adjacent to Meadow and Kelly Lakes within the Wolf Creek sub-watershed of the River Raisin, but because the site is bisected by a watershed boundary, it will also drain into the Iron Creek sub-watershed of the River Raisin, which, among others, is home to Wampplers, Timber, and Mud Lakes, all of which lie within or border the Legacy-held Conservation Easement referred to as Camp O’ the Hills^{5,6}. The margins of many of our watersheds — including the boundary that bisects the proposed site — are heavily glaciated and serve as critical groundwater recharge zones, providing essential water volume via seeps and springs to recharge the surrounding lakes, as well as essential filtration to ensure that the water is very clean⁵.

Indeed, an analysis carried out by US Forest Service (USFS) scientists determined that the Wolf Creek watershed is utilized for its surface waters by more than 185,000 direct and downstream consumers and by more than 20,000 consumers for its ground water. In their analysis, the USFS scientists also identified the Wolf Creek watershed as being in the top 14% nation-wide in its Importance to Surface Drinking Water and in the top 25% of the Nation’s watersheds that are most at risk due to Land Use Change.⁷

² Michigan Department of Natural Resources Forest Resources Division. (2020). *Forest Action Plan 2020 (IC4027)*. Online at: https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/FRD/Mgt/ForestActionPlan_Forestry_2020.pdf?rev=7753bf4ccceb4b6da4adf2badaa8e5b0&hash=C1C3EC3F7275544D64E8501DE2D4EC62

³ Michigan Natural Features Inventory (MNFI). (2022). *Biological Rarity Index*. Online at: <https://mnfi.anr.msu.edu/resources/biological-rarity-index>

⁴ Cambridge Township Planning Commission & Region 2 Planning Commission. (2011). “Cambridge Township Master Plan: Cambridge Township Community Land Use Plan”. Online at: <https://www.cambridgetownshipmi.gov/Document%20Center/Cambridge%20Township%20Master%20Plan/Combined%20master%20plan%20july%208%202011.pdf>

⁵ Kellum, S. (2022, December 21). Gravel Pit Opposition Letter.

⁶ Cripe, G. (2022, November 28). Re: SSP Leasing Proposal at the old Brighton Farm.

⁷ Mack, E., Lilja, R., Claggett, S., Sun, G., Caldwell, P. (2022). *Forests to Faucets 2.0: Connecting Forests, Water, and Communities* (Gen. Tech. Rep. WO-99). Washington, DC: U.S. Department of Agriculture, Forest Service, Washington Office. 32 p. <https://doi.org/10.2737/WO-GTR-99>.

Some of the Irish Hill region's valuable cultural and economic resources may also be threatened by the proposed mine. The site is immediately adjacent to Killarney Highway, a state-designated Natural Beauty Road. The *Natural Resources and Environmental Protection Act* requires that Cambridge Township "provide for a public hearing before an act that would result in substantial damage to native vegetation in the right-of-way of a natural beauty road or natural beauty street, respectively, is permitted" MCL 324.35704(2).⁸

The proposed use is incompatible with the low-density residential pattern of development in the Irish Hills region and the impact on the surrounding community has the potential to be devastating and severe⁹. Further, while the proposed mining operation would not fit with the existing character of Cambridge Township and the Irish Hills community, the location of the proposed site along a hilly, curvy, and heavily trafficked Michigan heritage route is similarly incompatible, or at least impractical, with heavy industrial use and transport of large, frequent loads of aggregate materials.

It is clear, then, that there is at least the potential for Very Serious Consequences (VSCs) to result from the proposed gravel and sand pit mining operation in a region that is home to a number of natural features that have been well-documented at both the State and National levels, and which provides critically important resources and services for the people that live within and downstream of Cambridge Township. Foremost among the many services provided by this ecologically- and environmentally-rich area is its role as a groundwater recharge zone, which enables it to provide drinking water for many citizens in the surrounding region. In addition to providing fresh, clean drinking-water to thousands, the natural communities that are present in this region, the beauty of which draws many visitors and dollars to Cambridge Township, have been marked as being among the most valuable and of highest-priority for preservation by organizations at the local, state, federal, and international levels.

To better understand the risks and potential Very Serious Consequences that may result from the proposed mining operation, Legacy Land Conservancy is writing to support the call for additional due diligence to be completed as mandated by the Michigan Zoning Enabling Act. Based on the breadth of possible impacts, Legacy believes that follow-up studies that evaluate the potential environmental, ecological, health, safety, and economic impacts in Cambridge Township and in the surrounding communities that depend on the services provided by the Irish Hills region are necessary.

Sincerely,

Diana L. Kern

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⁸ Natural Resources and Environmental Protection Act (excerpt) Act 451 of 1994. "Part 357 Natural Beauty Roads". Online at: [http://www.legislature.mi.gov/\(S\(1xt5gb3eavvmfhednmk4ko22\)\)/mileg.aspx?page=getObject&objectName=mcl-324-35704](http://www.legislature.mi.gov/(S(1xt5gb3eavvmfhednmk4ko22))/mileg.aspx?page=getObject&objectName=mcl-324-35704)

⁹ Cripe, G. (2022, November 28). Re: SSP Leasing Proposal at the old Brighton Farm.



Forests to Faucet 2.0 Watershed Summary Report

The Forests to Faucet 2.0 Assessment (see link at bottom of page) compares watersheds across the country to show which are most relied upon as sources of drinking water and are potentially threatened.

Watershed Name: Wolf Creek
HUC 12: 041000020204
State(s): MI
Acres: 36556

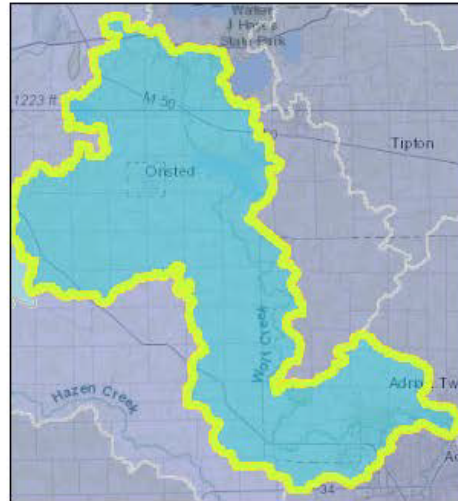
How does this watershed rank?

Importance to Surface Drinking Water Index 86 of 100
Ability to Produce Clean Water Index 23 of 100

Potential threats to this watershed

Wildfire 0 of 100
Insect and Disease 46 of 100
Water Yield Decrease (2010-2090 high emissions) 69 of 100
Land Use Change (2010-2090 high emissions) 75 of 100

Note: All indices have been normalized to allow comparison between watersheds. Values range from 0-100. For example, values between 90-100 are in the top 10% of all watersheds. For additional future scenarios, view the full report on the Forests to Faucet 2.0 website (see link at bottom of page).



This report describes the watershed outlined in yellow.

Watershed Characteristics

Surface Water

Intakes: 1
Consumers: 21,133
Downstream Consumers: 165,976

Ground Water

Intakes: 34
Consumers: 20,444

Mean Annual Water Yield in mm (Q): 334

Public Water Supplies within the Watershed

sorted by population served

ADRIAN

http://efm.pub.epa.gov/ape/xoflw/PpSDWIS_FED_REPORTS_PUBLIC/PWS_SEARCH::::PWSID:MI000040

ONSTED

http://efm.pub.epa.gov/ape/xoflw/PpSDWIS_FED_REPORTS_PUBLIC/PWS_SEARCH::::PWSID:MI0005020

RICHLYN MANOR

http://efm.pub.epa.gov/ape/xoflw/PpSDWIS_FED_REPORTS_PUBLIC/PWS_SEARCH::::PWSID:MI000048

BROOKDALE ADRIAN

http://efm.pub.epa.gov/ape/xoflw/PpSDWIS_FED_REPORTS_PUBLIC/PWS_SEARCH::::PWSID:MI000045

FAITH BAPTIST CHURCH

http://efm.pub.epa.gov/ape/xoflw/PpSDWIS_FED_REPORTS_PUBLIC/PWS_SEARCH::::PWSID:MI0520002

