

## **Participant Statement**

**Date:** March 26, 2019

**OMB Proceeding** PL170688

**Subject:** Hidden Quarry, Rockwood, Proposed Zoning By-law Amendment and Aggregate Resources Application; pt W1/2, Conc. 6, Guelph Eramosa Township

### **1. Personal Information**

My name is Dr. Stephanie De Grandis and I am the owner of Walnut Hill Tree and Critter Farm Inc.; a calf-cow farm business. I have actively managed my farm operation for more than 20 years. I obtained my PhD at the University of Guelph and an MBA at the University of Toronto. In my 25-year career in business development I have held senior executive positions both at the University of Guelph in the capacity of Associate Business Development Director and as scientific program manager at the Ontario Ministry of Agricultural Food and Rural affairs. During my career at the University of Guelph, I actively reviewed and provided expert advice to scientists creating disruptive agricultural technologies such as new plant hybrids, transgenic animals and diagnostic assays for food-borne pathogens. As scientific program manager I developed and validated diagnostic assays related to both water and food-borne pathogens. I have on many occasions served as a scientific reviewer for Food for Health, a multi-million dollar research fund managed by the University of Guelph/OMAFRA partnership.

Walnut Hill's business is the sale of finished beef products and cattle (see figure below). I currently own 50 cows, 30 stockers and 19 calves and 3 bulls.



I also manage a 60-acre woodlot that brings in significant revenues for the farm business. I hire at least 2-5 farm staff on a monthly basis and have 1 full-time worker. As all farmers do, I work about 14 hours a day seven days a week to make the farm business viable. My farm comprises 210 acres of class 1, 2 and 3 prime agricultural land (110 acres), wetlands, spring-fed ponds, forests and a wild-life corridor. My spring-fed ponds are the source of water for approximately 50 acres of wetland north of the proposed Hidden Quarry site. The same aquifer system supports my well. My pond also supplies water to the Brydson Creek that runs south through the Hidden Quarry site across Hwy 7 to the Blue Springs complex.

I joined the Concerned Residents Coalition (CRC) in 2013 as a board member and scientific lead due to my significant concern about the potential impact of the quarry operations on my personal health, farm operation and the environment. I have given many presentations to GET Council, Wellington County, Halton Region, MNRF, GRCA and the MOECP stating my concerns about the potential negative impacts of the quarry operation using sound scientific standards that were established for me during my academic studies. These presentations can be reviewed at [www.crcrockwood.org](http://www.crcrockwood.org). I have attached 2 reports that were used during these presentations and I will provide a summary of these reports during my verbal statement to the OMB member. I am also a member of the board of Gravel Watch Ontario, an organization that is dedicated to providing fair and honest analysis of the aggregate industry in Ontario to citizens of the province.

## **2. Impact on Agricultural Businesses**

Productive farmland, is a rapidly vanishing, non-renewable resource in Canada; only 5 percent of the country's landmass is suitable for farming. Protection of farmland in Ontario enables the province (and all of Canada) to be self-sufficient in food production. Between 1976 and 2011, 1.1 million hectares of farmland essentially disappeared in Ontario, according to Statistics Canada data. There remain about 4.9 million hectares of good growing land in the province. That equates to losing 175 acres a day in Ontario. Once farmland is lost, it is not usually rehabilitated to its original production capacity, since it takes many years for the topsoil needed for agricultural production to develop through natural processes. Spent quarries in particular can never be rehabilitated back to farmland and are left as small lakes with very little potential for recreational use due to safety issues.

Agricultural land covers approximately 75% of Wellington County, and it is widely considered to be among the most productive and fertile agricultural land in Ontario. With 2,511 farms, Wellington has the highest number of farms in Southwestern Ontario<sup>1</sup>. The County's industry is growing by revenue (13.2% growth in gross receipts),<sup>2</sup> has younger operators on average than the province, and exhibits a strong and growing profile of 'Family Corporation' farming operations. Presence of strong research (e.g. University of Guelph/Ontario Agricultural College, OMAFRA research farms) and business support (e.g. Wellington Federation of Agriculture,

---

1 <https://edac.ca/wp-content/uploads/2015/08/Wellington8.pdf>

2 Wellington Country Economic Impact Strategic Plan, 2012, Miller, Dickinson, Blais.

FarmStart) assets can also generate new business opportunities and support new and expanded agricultural ventures.

Unfortunately, even with these strategic strengths and potential economic opportunities for the County, Guelph Eramosa Township, of Wellington County is presently burdened with the decision to rezone prime agricultural farmland from Agricultural use to Extractive Industrial use for the pending approval of the Hidden Quarry application. The proposed HQ site is flanked by agricultural lands on all sides including agricultural land only metres away on the other side of Hwy 7 that is classified as Greenbelt. An estimated 30-40 farm operations are located within neighbouring concessions of the HQ site and roads, including mushrooms, forage and grain crops, market gardening, equine breeding, horse training (racing), beef and lamb producers and greenhouses. The Hidden Quarry site if rezoned and approved for aggregate extraction would not be rehabilitated to agricultural production as below water table extraction results in a loss of the key hydrological activities of the overburden and bedrock as well as the destruction of soil structure. Yet another quarry lake would be developed on the site decades from the time of approval.

In the summer of 2015 the CRC requested Guelph Eramosa Township Council to fund an “agricultural impact assessment study” to determine if there would be any negative operational or economic impacts to township’s agricultural sector and the farm community. Unfortunately, the assessment has serious deficiencies with respect to many parameters of study. In addition, the new guidelines for Agricultural Impact Assessment by Aggregate Extraction developed in 2018 by OMAFRA were not followed. In particular, no farmers were interviewed for their opinions on the potential impact of the proposed quarry on their businesses.

#### **1. The geographic area studied**

The appropriate area that was studied was 600 ha including properties in Halton Region and Guelph Eramosa Township. It was estimated that only 300 ha or 50 % of the study area consisted of agricultural land uses. However, the area of study as determined by the proponent comprised part of the Blue Springs Wetland Complex. This area would never be considered for agricultural use. Clearly, the area of study should have been extended further North, East and West to include more adjacent agricultural land versus a provincially significant wetland complex. If the area under study had been increased larger agricultural operations would have been included in the study including the: (1) Storey cash crop farm, (2) McNabb cash crop farm, (3) Bird dairy farm and cash crop farm and the Donnell cash crop farm. These farms bring in significant revenues as almost all of the acreage is under cultivation (approximately 600 acres). A more detailed review of the area of study actually reveals that one of the farms has been essentially divided in half due to the northern boundary of the area studied (De Grandis property). The acreage that was excluded due to the boundary restriction is prime agricultural land (Class 2).

#### **Soil Usage**

The 1:50,000 Canada Land Inventory (CLI) mapping of soil capability for agriculture identifies the site as 50% Class 3 soils and 50% Class 5 soils and not 39% as calculated in, the proponent’s Agricultural Impact Assessment study. The Ontario Federation of Agriculture is also

lobbying the province to make Class 1 through 4 prime agricultural land and this change in classification would make the site 77% prime agricultural land.

## 2. Land Use

The proponent describes the farms that are within the area of study as cash crop, horse farms or the mushroom farm. Several farms have more agricultural businesses than cash crop or livestock. For example, there are at least 3 managed woodlots in the extended study area. Many farms have poultry and sell eggs or meat using road-side stands or direct sales. The generalization that some of these properties are stand-alone operations is incorrect. Many of the cash crop farms have agreements with multi-million dollar farm operations such as Sharpe's feed supply, Anthony Acres or Bob Storey. These farm operations have invested heavily in state-of-the-art equipment to farm these lands. Extending the study even 500 m would have included the Bird dairy farm that is investing many \$1M dollars in building a state-of-the-art robotic automated milking facility.

## 3. Assessment of Impact on Agriculture (Direct and Indirect)

The direct impact of losing even 50 acres of land is significant when 175 acres of farmland per day is disappearing in Ontario. It should be also noted that 1000s of trees will be clear cut to make way for aggregate extraction on the property if the application is approved. The Hidden Quarry site has over a 100 acres of old and new forest stands. These trees are important to our air quality and also to our natural environment. Currently in Southern Ontario, there is "less than 30 percent of the total area of woodlands that existed before European settlement" (Ontario Nature 2005). Almost all of this area that has been disrupted has been the result of human activity (ibid). Southern Ontario only has 0.07% of its original "old-growth" forests left (ibid). As well, only 30% of Southern Ontario's pre-settlement wetlands exist today (ibid).

The indirect impacts of the quarry operations will be noticed by more than the farms closest to the site. The proposed site is within the Galt Paris moraine and water recharge areas and the wetlands to the North will be impacted by drawdowns of the water table by bedrock extraction and overburden removal. Noise and dust travel great distances and trees do not buffer all of the noise and dust that can travel up to 1 km away from the site (Airzone 1 report). Cash cropping operations will be impacted by the dust on the crops and this phenomenon has been well documented

(<http://www.sbcountry.gov/uploads/lus/environmental/sentinel/appendix3bpatternsofcarbonatedustdeposition.pdf>) Crop patterns may change due to the intolerance of some crops such as hay to withstand significant amounts of dust or because of lower price points for the farmer (Bob Storey and hay contaminated with quarry dust and reduced sales; personal communication).

## **Importance of the land to the farm community with respect to potential loss of well water**

CRC has already voiced their concerns about the lack of well water testing pre-extraction. The proponent has now restricted the number of private wells that will be tested if the application is approved. My well is not included on the current well testing list. However, the proponent tested my well extensively because of potential concerns about water impacts.

It is clear that monitoring and complaint protocols about water impacts will not guarantee to the GET community that there will be no impacts to the agricultural businesses in the area. The extraction of fractured bedrock in an area that is highly susceptible to groundwater contamination has to be completely understood. The reader is reminded that the *E.coli* O15H7 outbreak in Walkerton that resulted in significant human mortality was caused by farm waste seeping into fractured bedrock and traveling in an unpredicted way to the municipal well system. In fact, CRC's world class hydrogeologist Dr. Emil Frind has determined that a new GET municipal well (Well 4) may be directly linked to the site via bedrock fractures and groundwater movement. The precautionary principle should be used in this case.

The water complaint protocol currently described in the application does not reflect the true need of a beef or large horse farm/stable. Unfortunately, my farm is outside the 120 m limit and any impacts to my water and livestock will not be addressed. However, several of the horse-racing establishments are within the 120 m limit. The reliance on a scientifically flawed and significantly challenged proponent hydrogeology report is totally inappropriate for determining the 15-20 year impact to farmers adjacent to the proposed site.

### **4. Blasting Impacts: Vibration, noise and flyrock**

Noise and vibration from a quarry are significant and can have serious impacts upon the environment and human and animal populations. It can also cause destruction of farm buildings and well structures. No Standardbred horse trainer wants noise from trucks, blasting and crushing when he is training a young horse to race. Horse racing establishments are steps away from the proposed HQ site. Air quality is important for horse performance. Lung health can mean the difference between a first and last place finish. The Kingshott Stables that have been in the business for decades with many winners...again, steps away from the proposed site. Cattle also require clean air and minimal noise and vibration. Flyrock, although a rare event, can injure livestock and buildings.

### **5. Impact to my Farm Operation**

I am very concerned that my operation will be so dramatically impacted by the loss of water, dust and blasting damage that I will no longer be able to operate my calf cow business. As a property owner since the mid 1960's my business had been established in Wellington County long before JDCL's proposed operations. I have contributed for decades to the Township with respect to its tax base and its employment record. It is unclear to me why a business with such small economic impact to the township and severe environmental and human health impacts should be allowed to initiate operations. In addition, I am already dealing with extreme weather conditions due to climate change and high animal mortality rates as are other farmers. There is

only so much a business operator can incorporate into its proforma due to lost profit until it is time to close down operations.

I am also concerned that this company will continue to acquire farmland around the proposed site effectively terminating any further economic gains for farm businesses that own or run these operations. With land banking by both local and foreign aggregates companies already a problem in Ontario I am really concerned about 200 acres adjacent to the proposed site being acquired by a numbered company. The land is now leased to a farmer but I am afraid if this license is approved the company will sell to the highest bidder. Certainly, JDCI would be a potential buyer. Again, the 200 acres is farmed and would be lost to aggregate extraction.

## **6. Impact to the Environment**

As an owner of a farm I see first-hand how our natural environment is rapidly changing due to climate change. Climate change is in part due to the unrelenting need for urban development and aggregate extraction. The proponent has stated that there will be minimal impacts to the natural heritage of the area and I am quite concerned that the quarry operations will significantly impact my pond, well, wetland and the wildlife corridor that exists on my property.

Dr. Peter Kauss and I examined the proponent's GWS environmental assessment report for its scientific rigour and will briefly describe our findings and submit the attached report to the LPAT member.

The weaknesses of the proponent's natural environment report include:

### **1. Protection of the Northern Provincially Significant Wetlands**

There are PSW wetlands within and adjacent to the Hidden Quarry site that deserve protection. For example, there is no protection or barrier proposed for the possible significant lowering of the water table for the 27-acre PSW and spring-fed ponds that supply the Brydson Creek and Tributary B with recharge water. Drawdowns have been predicted to be minimal but data analyzed by Garry Hunter indicates that the drawdowns may be 2-fold greater than predicted by the proponent. This means to me dry ponds and wetlands north of the site. Ground Penetrating Radar studies have also indicated that the source of water feeding these wetlands is bedrock derived versus surface or overburden derived. Again, this direct link to bedrock structures implies that any disturbance to the bedrock and groundwater levels at the proposed quarry site may significantly impact these wetlands. With seventy percent of Ontario's wetlands destroyed by development or aggregate extraction we need to protect these wetlands. There is no reference to this fact in the report and no real concern is given to the fragile nature of these wetlands relative to blasting.

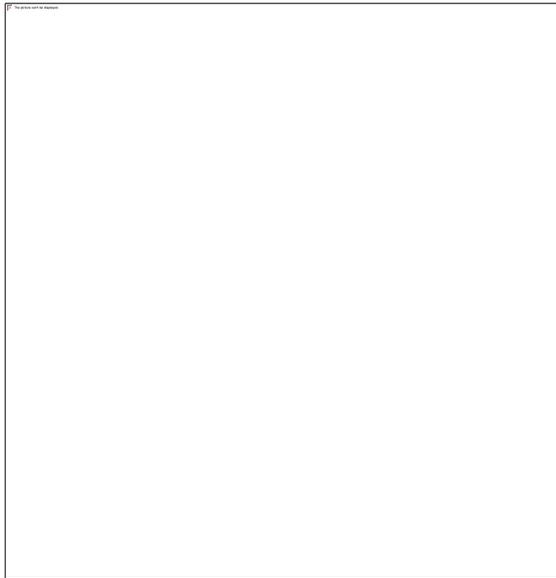
This Northern area also acts as a vital recharge area within the Galt Paris moraine. The entire area was reported to be an area that should be protected from any development because of its significant recharge capacity for the local aquifer in a Gartner and Lee study (2004). The proponent's hydrogeologist on several other projects has commented that the Galt Paris Moraine should be protected but does not seem to support the protection of the moraine in Rockwood. The protection of this critical moraine recharge area is the subject of Bill 71 that has passed second reading in legislature.

There is also no assurance that the marshes and wetlands within the site or adjacent to the site will be protected enough to save any amphibians and the on-site snapping turtles. In fact, there

will be a partial removal of wetland for extraction. The questionable drawdown values in water levels and the change in recharge values for the entire area may adversely affect this habitat.

## 2. Aquatic Habitat

Fish habitat exists north of the site in large ponds and streams that have not been surveyed. Bass and brown trout are found in ponds and streams less than 600 m from the site and in my pond a large population of both snapping and common turtles call the pond home.. In addition, in the late 1990's my pond supported stocked rainbow trout (Joe De Grandis in Figure below with caught Rainbow trout). A 2-3 m drop in the water table would certainly affect my ability to restock my pond with trout and/or support my turtle population.



Our concerns about fish habitat have been validated by letters from MPP Michael Chong and the Director of Trout Unlimited (see attached).

## 3. Wildlife Corridor

There is a connection both south and north of the site via woodlands and water systems. However, there have been no ecological wildlife movement studies performed to validate this hypothesis. The GWS report also states that mammals, reptiles and amphibians venturing across the road will become road kill. This statement is not significantly sound and is just an assumption and not fact. Clearly, GWS concedes that this is a corridor as the applicant promises to provide tree planting just before extraction to correct for the loss of this corridor. It is unclear how many small trees will be needed to be planted and how long they will take to grow to provide an adequate corridor for wildlife during extraction.

We propose that connectivity with respect to wildlife movement from North to South can occur via the highway and/or the culvert that is present (about 1.5 m height) under Highway 7 (S. De Grandis, pers. comm.). Culverts and bridges across highways are used by wildlife in many regions of Ontario and Canada.

#### 4. Wildlife - Birds

In 2011 and 2012, sixty-two bird species were observed on site of which **52 species were considered breeders**. Many birds require substantial areas of suitable habitat for successful breeding and their populations decline when habitat becomes fragmented and reduced in size. The larger and least fragmented forest stands within a planning area will support the most significant populations of forest-area sensitive species. (OMNR, 2000). The only solution offered by the proponent to deal with the presence of these birds on-site is to state that the birds will not be impacted by the loss of the conifer forest. There is a disturbing assumption made that the birds will be on site breeding for only the first few years until the woodlands are destroyed by extraction and they will then find suitable land elsewhere.

The ponds and wetlands within and adjacent to the proposed quarry site in some cases act as wintering sites for many types of ducks and geese. Every year at least 200 ducks and geese rest over the winter on my spring-fed ponds that never freeze over. Ducks Unlimited has alerted the township to the designation of the De Grandis pond as a Ducks Unlimited site for Wood duck habitat. (See attached letter).

#### 5. Wildlife - Mammals

Seventeen species of mammals have been found on the proposed Hidden Quarry site. Of concern are three Brown Bat species (Little,Big and Hoary) recorded on the site by GWS and Dougan and Associates. Little Brown Bat is an endangered species The proponent does not specify how any of species will be adequately protected from the loss of any woodland habitat, from dust, and from the noise and air concussion (of quarry operation blasting) which may disturb bat colonies as far away as 1,500 m (Langer, 2001).

Overall the analysis of the natural environment of the site contains serious flaws with respect to its accuracy in defining the impact on the natural features of a significant land corridor. This dramatic change in land use planning will impact many aspects of the local environment and potentially the Blue Springs Wetland Complex. The reliance on the Hydrogeology report by Harden Environmental has complicated the final conclusion of the natural environment report. The impacts to both ground water and surface flow to wetlands, the PSW on site, the North wetland, and ponds and in the Blue Springs Wetland complex still remain unknown.

#### 6. **Wildlife and Water on the De Grandis Property**

I have been blessed with the opportunity to wake up every morning to see an 8-acre pond and creek that on most days are filled with a variety of wild ducks and geese, frogs, turtles and aquatic flora. Deer herds cross my property on a daily basis.

My pond system is unique because its springs continue to flow well into the winter and one of the Brydson Creek tributaries (B) that initiates from my property is always flowing until a heavy snow fall hides its path. My concern has always been that the water system that crosses my property is unique and is not sufficiently understood to allow an informed decision on whether to approve this quarry application. As a scientist I know that it takes years of analysis to really understand any natural system. The proponent's studies that have been performed lack scientific rigour and scope especially with respect to adjacent properties like mine.

This area is one of the few natural corridors in the township that remain. The area is rich with spring-fed ponds and is home to many species of animals, plants, birds and amphibians. How

can areas like this natural corridor not be significantly influenced by quarry operations and why are PSW wetlands not given more priority in the analysis of the potential negative impacts of the quarry operations? Reliance on monitoring and mitigation procedures by the proponent is far too late if an operational failure occurs.

## **7. Conclusion**

The impact to our natural water systems including cold-water creeks, provincially significant wetlands, spring-fed ponds and species at risk and endangered species will be significant. The environmental and human health consequences of the Hidden Quarry operations to the Guelph Eramosa Township will certainly be known several years from now and will potentially only lead to more environmental issues for the global community. Our environment should be on the top of our list of concerns for our society in the future. We can see the impacts of neglecting Mother Nature already in the presence of climate change.

We have to protect our farmland as it is also becoming an “endangered species” that is headed for extinction. How will we grow our crops and feed families without productive farmland? The quarry will have too many impacts to our farm businesses and our environment. The application for rezoning should be declined and the aggregate application be refused.