Mémoire de Balbir Gill l'Office Consultation Publique de Montréal Pierrefonds West development project- April 27 2017

I live in Montreal and my life is very much in the city. Pierrefonds West isn't a place that I often visit so it may seem odd that I want it conserved as a natural space. There are many families who live close to the Montreal core. I see daycare teachers helping the preschoolers cross busy streets on their way to the local park. I see the toddlers delighting in the flowers and plants in postage-stamp-sized gardens on residential streets. I know that many families leave central Montreal for the suburbs in order to provide a backyard, access to plenty of green space and cleaner air for their kids. That works for a while and then developments continue to spread out a bit further to ensure ample green spaces for the next generation of families. This isn't a sustainable way of developing and only encourages sprawl.

Local urban sprawl experts have developed a way to measure sprawl and Montreal doesn't perform well on that front. Jochen Jaeger is a Concordia professor and is part of a research team that came up with a way to measure sprawl: Weighted Urban Proliferation (WUP). This measure looks at how much of an area is built up, how far apart the built-up areas are, and how many people use the specific area. (http://www.concordia.ca/cunews/main/stories/2016/07/06/urban-sprawl-western-world-research-jochen-jaeger.html)

WUP allows us to compare sprawl in different regions and Montreal researcher Naghmeh Nazarnia did just that. Using WUP, she found that Montreal's sprawl increased dramatically, 26 times over, between 1971 and 2011. While cities like Zurich increased sprawl rapidly in the 1960s the rate of increase began slowing down in subsequent years. Montreal's sprawl kept on accelerating and has grown exponentially since then.

Our city is behind the times in tackling urban sprawl. Tellingly, the researchers looked at population growth of the city and found that the problem is not one of numbers of people but that each person is occupying more space. Even accounting for the number of people, the sprawl in our city is excessive. Instead of developing on valuable natural spaces, that cannot be replaced, we need to build smarter and focus on areas such as brownfields.

Other studies have shown that these fields are especially rich in biodiversity (http://montrealgazette.com/news/local-news/environmental-studies-recommend-preserving-pierrefonds-lands) In one study, Marie-Eve Roy, Patrick Gravel and Jérôme Dupras found more than 270 species of flora and fauna, including endangered or threatened species such as the bobolink bird. The open meadows and wetlands provide a varied habitat for wildlife and the neighbouring green spaces are important for supporting the species. As I understand it, carving out this natural space into smaller pieces will threaten the connectivity and affect the biodiversity of the entire area. We can't start cutting up sections of it and still expect to keep the diversity and numbers we have. The correlation is not the same proportionally. So for example, removing 25% of the land won't just reduce the flora and fauna by 25%.

(http://www.davidsuzuki.org/fr/publications/%C3%89valuation%20%C3%A9cologique%20de%20louest%20du%20territoire%20de%20Pierrefonds-Roxboro%20-16f%C3%A9vrier2016.pdf)

The Anse-a-l'Orme area is important to all of us. Last summer a Montreal heat map showed that urban heat islands have a direct relationship to areas with hard surfaces,

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pavement and buildings. You can see on the map that the cooler spots are where there are more trees and natural spaces. (http://www.cbc.ca/news/canada/montreal/montreal-warm-cool-places-interactive-1.3669639) As we deal with more extreme weather patterns as a result of climate change, we need the cooling effect of our remaining natural spaces more than ever before.

In April 2017, the Prairie Climate Centre published, *Building a climate-resilient city: Nine reports on climate change adaptation in Calgary and Edmonton*. This report acknowledges the importance of green spaces on citizens' physical and mental health. These green spaces also provide services as part of our natural infrastructure. To be a forward-thinking city we need to plan for the long term and for the effects of climate change. The Prairie Climate Centre report's key messages about urban ecosystems are:

- "Ecosystems and green infrastructure provide human health benefits and critical environmental, social and economic services, and protect against climate shock.
- Healthy and well-managed ecosystems are economic assets that enhance a city's resilience to natural disturbances and extreme weather events.
- Investing in urban ecosystems and green infrastructure can provide lower-cost solutions to multiple challenges when compared to traditional infrastructure solutions."

This land is part of our ecosystem and provides many long-term services to all of us. Left natural, this area requires no maintenance and would continue to provide these services.

How much would we have to pay to manage the recent spring flooding in l'Anse-à-l'Orme without the soil, fields and trees to soak up and filter the heavy rainfall? (http://prairieclimatecentre.ca/publications/) From a purely self-interested point of view we stand to gain a lot of benefit to many people as a result of keeping all of this land green and natural.

From my own perspective as a city-dweller, I know I benefit from the large natural green spaces in Pierrefonds West. This space helps to clean and cool the Montreal air. There aren't many green spaces left on this island and I want my city to remain a wonderful place to live. I want the kids in the local daycare to be able to breath air that's clean and fresh. It won't be without the natural services provided by these fields. It won't be if the air is choked up.