Committee: **Environmental and Ecological Planning Advisory Committee**

Organization/Sector represented:

Name: **Joseph Stinziano**
Address:
1247 Huron St. Unit 147

Occupation: **Ph.D. Student in Biology at Western University**
Work experience: **I currently work in academic research at Western, where I study how the warming of Earth's climate affects the growth of trees and their physiology. This work involves planning and executing experiments, followed by data analysis and interpretation. In addition to my research responsibilities, I am also a teaching assistant, where I supervise and teach undergraduate students in laboratory and writing skills. At the same time, I am an advisor for an undergraduate research student, to whom I provide support in experimental design and critically examine the student's ideas. Prior to my graduate studies, I did both private and volunteer tutoring (with Western Students Offering Support) in undergraduate biology.**
Education: **I have a Bachelor of Science with an Honours Specialization in Biology from the University of Western Ontario, where my studies focused on the ecology and physiology of organisms. I graduated top of my class, receiving an award for the highest grades in the Faculty of Science. I am currently in the second year of my PhD in Biology, where I study the ecophysiology of trees, and have received two prestigious graduate research scholarships from the Natural Science and Engineering Research Council of Canada (NSERC): the Julie Payette NSERC Research Scholarship for the first year of my graduate studies, which is awarded to the top 24 scholarship applicants from across Canada, and the NSERC Canada Graduate Scholarship for the remainder of my Ph.D.**
Skills: **I have strong analytical and problem solving skills that allow me to critically read literature, assess issues with ideas/concepts and develop potential solutions/compromises to address such issues. My specialized knowledge of tree biology, especially of environmental effects (salinity, drought, heat, etc.) on tree growth and physiology, would assist in issues that regard wooded regions. In terms of communication, my strong written communication skills are evidenced by three published scientific papers, two of which are about the effects of global climate change on organisms; one on freeze-tolerant wood frog metabolism during winter, where I studied how increased freeze-thaw cycles in a warmer winter reduce fat and carbohydrate stores, and the other on boreal forest responses to rising temperature and carbon dioxide. Further, I run a blog (josephstinziano.wordpress.com), where I write non-technical summaries of science papers to promote science literacy in the general public, and one of my blog articles was used in an undergraduate course on biodiversity as an example about how to communicate science in lay terms. With regard to my strong oral communication skills, I have: presented my research at 11 conferences, winning an award for best oral presentation at one of them; been invited to give two guest lectures and received positive feedback from students and professors; been a teaching assistant for two years for an undergraduate class in plant physiology and ecology; been invited to speak to undergraduate students about volunteering in a lab, and to graduate students about how to make the decision to do a Ph.D.**

Interest reason: **I have lived in London my whole life, and as such, I want to give back to the city I call home by contributing my specialized knowledge and skills to serve the city. London has a lot of natural beauty and unique habitat, especially along the Thames River, and I would like to have a role in protecting those natural areas. And, as a graduate student funded by a federal granting body, I want to contribute directly to issues that affect taxpayers (who indirectly fund my research). I am applying for both the current committee and the committee starting March 1.**
Contributions: **I believe that I can contribute a balanced view of proposals that may affect the City's Natural Heritage System. In particular, I can provide an objective view on how the environment might be impacted without introducing bias into the facts. As well, I am part of a large biology department at Western University, and am frequently exposed to diverse perspectives on environmental issues, which keeps me open-minded with regard to balancing human and environmental needs.**

Past contributions: **While I have not been a part of an organization that has a direct environmental planning initiative, in my role as Chairperson for the Society of Biology Graduate Students (SOBGS) at Western, I am currently in the process of trying to establish an environment and sustainability representative in the department to organize initiatives aimed at reducing our environmental impact, including composting to reduce waste.**
Interpersonal: **As Chairperson of SOBGS, I have to depend on a number of graduate students with specialized roles to provide their views on issues arising in the department (including undergraduate and graduate student education, research, etc.). As well, I provide my own views and facilitate discussion surrounding issues that affect biology graduate students. As a graduate student, I frequently engage in discussion of the merits and issues of research experiments, providing advice to, and receiving advice from other students from diverse research backgrounds. As a member of the Biology Philosophy Evolution Discussion (BiPED) group at Western, I have to be able to provide my insights into the philosophy of science from my biologist's perspective in a form that is understandable to philosophers. At the same time, I have to appreciate the philosopher's ability to provide very precise definitions of concepts, which can radically change how I view a problem in biology.**

Interview interest: **Yes**