

Title of Research Project:

Comparative analysis of dog waste processing methods

1. How will this project make a contribution to regional sustainability?

The proposal will advance a number of Metro Vancouver priorities identified in the 2015-2018 Strategic Plan including:

- Recovery of resources and energy
- Triple bottom line analysis informing projects
- Efficient and effective service delivery Reduce solid waste
- Plan for growth and identify best practices
- Evaluate the opportunities for energy generation and recovery, as well as the recovery of other resources from the liquid waste stream

2. The purpose of the project is:

Based on a literature review and a comparative analysis of at least three different methods of dog waste processing, determine if the current method being used in Metro Vancouver can be improved upon.

3. Outline the scope of project and how the scholar's work will be used by Metro Vancouver:

The scholar will review literature regarding dog waste composting and anaerobic digestion. In addition, conduct in-depth interviews to gather information about the current method of dog waste processing at: Metro Vancouver (Iona Waste Water Treatment Plant), The Resort Municipality of Whistler, and Green Pet Composting in Washington State. Compare each method based on evaluation criteria and make recommendations on the direction Metro Vancouver should proceed in the future.

Evaluation criteria may include but are not limited to:

- Impact to the environment
- Capacity of existing facilities
- Cost of development of new facilities
- Potential for revenue
- Potential for resource recovery
- Potential disruptions or efficiencies for the current collection model
- Impact to park visitor experience

Metro Vancouver
SUSTAINABLE REGION SCHOLARS
UBC Sustainability Scholars Program
Summer 2018

4. Project Deliverables:

- A report that contains the literature review and the comparative analysis of at least three different methods of dog waste processing.
- Recommendations for how Metro Vancouver might proceed in the future.
- Final report or executive summary for the UBC Sustainability Scholars Program online project library.

5. Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between **01 May 2018** and **10 August 2018**
- The scholar is expected to complete approximately 15 to 20 hours of work per week.
- Scholar to be available, either in person or by telephone as agreed, for project start-up meeting, periodic status updates and draft and final report presentations.
- The successful candidate will work directly with the project lead to determine the project timeline based on the Scholar's schedule and commitments.

6. Describe the required/preferred skill set and knowledge base for a Scholar

- ☒ Educational background in environmental science, microbiology, forestry and/or engineering would be an asset
- ☒ Experience with industrial composting and waste water treatment is highly desirable
- ☒ Excellent research and writing skills.
- ☒ Ability to work independently and prioritize tasks.
- ☒ Strong analytical skills
- ☒ Ability to work independently
- ☒ Demonstrated time management skills
- ☒ Deadline oriented

7. Identify specific requirements required for completing this project (if any)

Scholar will need access to own laptop and software