

# POINT ROBERTS GREEN WASTE STUDY

## Executive Summary

June 29, 2024

### BACKGROUND

Point Roberts, Washington is five square miles surrounded on three sides by the ocean and to the north by Canada. It is more than one third wooded with mature towering Douglas fir and Western Cedar. There are a few commercial properties, two to three small restaurants/bars, and 2,410 residential properties with 60% part-time, seasonal residents. Currently, there is **no collection program for yard waste or food waste**. Residents are expected to take their yard waste and wood waste to the local transfer station, which is transported and composted on the mainland. Food waste goes into the trash.

It is estimated that **640 residential fires of slash piles occur each year** – these are principally where the property owners burn yard waste and based on fire department investigations, about 20% do not have a permit. During the dry summer and early fall there is a burn ban, so except for recreational fires, burning only happens in the late fall, winter, or spring, often when the material is damp, resulting in choking white smoke. There are also piles of brush that are left on properties or inappropriately dumped.

RRS estimated the organic waste streams generated in Point Roberts based on a 2020-2021 Washington Statewide Waste Characterization Study. Using Whatcom County population and total waste generated, the amount disposed per capita is 1,527 lbs. per year. Based on the housing occupancy seasonality, green waste generation seasonality (highest generation in the early spring to early summer), burn seasonality, and the waste characterization data, RRS was able to estimate the current amount of green waste that was hauled for disposal, burned, and collected for diversion, shown in the Figures 1 and 2 below.

Figure 1: Estimated Total Yard Waste Generation

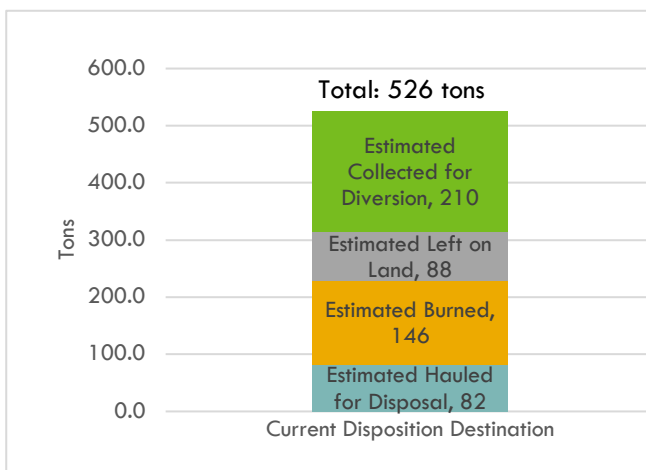
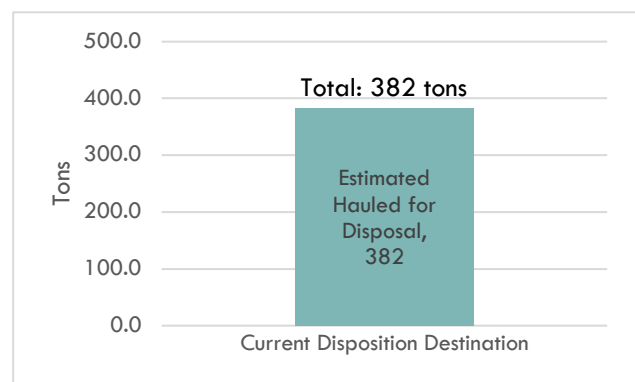


Figure 2: Estimated Total Food Waste Generation



**Of the total waste generated, only 37% of yard waste (210 tons) and 0% of food waste is diverted.**

**RRS estimates an initial potential diversion rate of 62% of all organics, including 10% of food waste.**

Potential yard waste and food waste diversion is 355 tons and 38 tons, respectively. The yard waste portion is made up of grass, leaves, and brush. **As the program expands, additional yard, wood, and food waste can be added, with a long-term potential diversion of close to 1,000 tons per year.**

## THE CHALLENGE

Residents are expected to take their yard waste and wood waste to the transfer station (large diameter woody material is not accepted) during restricted hours, Thursday and Sunday, and pay per pound. Yard waste is transported to Skagit Soils Composting Facility on the mainland (near Mt. Vernon, a 140-mile return trip). **Yard waste disposal is inconvenient, especially for the part-time residents. Food waste goes into the trash,** or some is composted by property owners on their own land. The cost for a property owner to dispose of their trash at the transfer station is \$0.135 per pound. **Finished compost in bulk is available across the border in Canada and requires self-transporting (no delivery available) and at the local hardware store with a delivery fee.** Bagged compost is also available at the local store, but it is not locally produced.

## THE SOLUTION

**The need for an organics processing facility in Point Roberts is clear to 1) reduce burning, landfilling, and transporting the long distance to the mainland, and 2) create access to local finished compost for Point Roberts residents.** An aerated static pile (ASP) composting facility that can handle 1,100 tons (2,900 cubic yards) of incoming material per year will provide Point Roberts with adequate long-term capacity to process green waste locally. At full scale, the facility would produce 450 tons (1,160 cubic yards) of finished compost. The finished compost can be sold bulk or bagged, thus, creating a revenue stream to help pay for the site development, equipment and ongoing operations.

A composting facility will reduce the volume of organics being landfilled, reduce air pollution and fine particulates from burning, minimize transfer station and landfill tip fees, reduce greenhouse gas production, generate economic benefits, and produce local compost for Point Roberts.

## RECOMMENDED NEXT STEPS

- **Educational Sessions and Public Survey** - understand how much a property owner would be willing to pay to support a green waste site, whether through collection/drop off fees, property tax, or sale of the products.
- **Determine Equipment and Site Needs** – evaluate available sites, the needs for equipment, evaluate site layout, and determine what innovations and/or changes could optimize operations and costs.
- **Develop Best Practice Operating Procedures and Staffing Needs** – determine staffing requirements, operating costs, and operating protocols, that result in a quality end product.
- **Refine the Compost Capital/Operations Cost Model** – the feasibility-level model can be further developed through a Request for Proposals or Request for Quotation from a site engineer and a compost system supplier.
- **Apply for Grants for Equipment and Site Development Capital Costs**