



THE DISTRICT'S PAINTCARE PROGRAM WAS ESTABLISHED IN 2016 WITH NINE COLLECTION LOCATIONS WHICH TO DATE, HAVE COLLECTED ABOUT 200,000 GALLONS OF PAINT FOR REUSE

**Examples of targeted solutions:
Glass Recycling and PaintCare**

While the region's growth and resulting waste generation is exacerbating the areas limited processing capacity for solid waste, there have been some positive solid waste management solutions in the region. The "Purple Can Club," a network of more than 40 drop-off bins for glass food and beverage containers, was collaboratively developed by several Northern Virginia localities. Glass recovery in traditional material recovery facilities proves difficult in curbside recycling collection systems and often winds up in a landfill. To address this issue, Arlington, Fairfax, and Prince William counties as well as the City of Alexandria initially began to collect glass separately for recycling in recycling drop off centers using drop off containers painted purple. Glass collected separately from other materials contains fewer contaminants and is therefore easier to market. Since the founding of the Purple Can Club in 2019, the network has expanded to other Northern Virginia localities, Fredericksburg and Williamsburg regions of the state.

Another difficult to dispose of material is paint. The District of Columbia recently became a member of PaintCare, a national product stewardship program for leftover paint that is funded by paint

manufacturer association. PaintCare collects leftover and unwanted paints and coatings from residents and businesses for proper management. PaintCare is funded by a fee on every paint product purchased and this product stewardship program has reduced the District's costs for disposing/recycling paints. The District's PaintCare program was established in 2016 with nine collection locations, which to date, have collected about 200,000 gallons of paint for reuse (DC Program Plan 2021, paintcare.org). In addition to the District of Columbia, PaintCare has also been successfully implemented in ten states throughout the country.

The product stewardship model, where manufacturers or consumers identify end of life solutions for materials, offers a framework to improve waste management for many challenging items in the waste stream. The Northern Virginia Waste Management Board supports this approach to waste management, which has been implemented successfully in several other states. In 2022, several product stewardship bills were introduced in the General Assembly to explore this approach.

ABOUT NVRC AND THE NORTHERN VIRGINIA WASTE MANAGEMENT BOARD



The Northern Virginia Regional Commission (NVRC) is a regional council of thirteen-member local governments in the Northern Virginia suburbs of Washington DC. According to Virginia's Regional Cooperation Act, NVRC is a political subdivision (a government agency) within the Commonwealth.

<https://www.novaregion.org>

Since 1989, solid waste managers and public works directors from each of NVRC's member jurisdictions promote regional approaches and solutions to recycling and waste management through the Northern Virginia Waste Management Board. <https://www.novaregion.org/204/Solid-Waste-and-Recycling>

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<https://www.novaregion.org/583/Solid-Waste-Report>



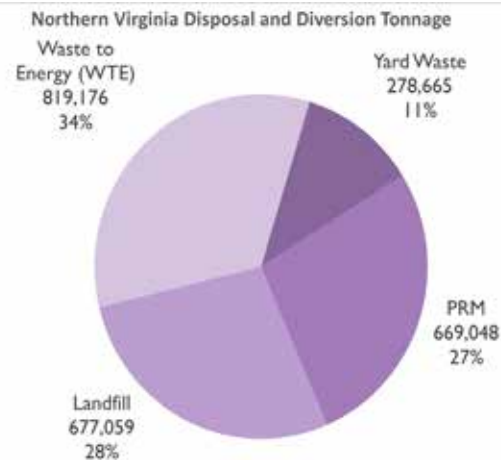
2021 STATE OF THE REGION

Public Solid Waste Services in Northern Virginia and the District of Columbia

This is a summary of the 2021 edition of the Northern Virginia Waste Management Board's Waste Report containing information on Northern Virginia and the District of Columbia solid waste management programs. The report is created by and for local waste managers, using local, state, and federal data. A dashboard, full report and earlier reports can be found here: <https://www.novaregion.org/583/Solid-Waste-Report>

Northern Virginia has cooperated for over 30 years in the management of solid waste generated by residents and businesses. The 2021 report reveals the following challenges and solutions.

- Population growth and employment has increased commercial and multi-family waste generation.
- Limited facility and capacity challenges limit the region's disposal and recycling options.
- The pandemic has negatively impacted local waste and recycling management and system economics.
- Hazardous and difficult to dispose of materials create a risk to the limited capacity of regional waste facilities.
- PaintCare offers an example of a product stewardship solution implemented in DC that could be replicated in Virginia.
- Purple Can Club glass recycling provides a regional solution to a challenging material.
- Jurisdictions are focused on reduction and reuse messaging to residents and businesses.



Waste Generation and Diversion in the region:

In 2020, Northern Virginia jurisdictions generated 1.5 million tons of waste. Given a regional average tip fee of \$56 per ton for 2020, the disposal fee revenue generated in the region was approximately \$87 million. In 2020, recycling reporting was required for all Virginia jurisdictions. The Virginia Department of Environmental Quality (DEQ) reports that Northern Virginia jurisdictions recycled 669K tons of Principal Recyclable Materials (PRM - The materials that comprise the largest recyclable fraction of the waste stream, such as paper, plastic bottles, cans), and composted 279K tons of yard waste.

Northern Virginia jurisdictions provide services for yard waste and organics management, with several



using the recently completed Balls Ford Road Compost Facility in Prince William County. Extensive local programs lead to organics representing approximately 30 percent of all materials diverted from disposal and 10 percent of all waste managed in the region.

Growth and how waste sectors are managed

Continued population growth in the Northern Virginia and DC metro region affects the types of wastes generated and the facilities needed for waste

implement regulations requiring businesses to recycle: the City of Alexandria, Arlington County, the District of Columbia, Fairfax County, City of Falls Church, and Prince William County.

Localities collect waste and recycling from 245K households, or 43 percent of single-family households out of the 642K single family households in Northern Virginia. Out of 922K total households (single- and multi-family), 23 percent are served. Loudoun and Prince William Counties do not provide household collection services, so individuals and homeowner associations contract with privately owned refuse and recycling collection companies. Fairfax County, the largest county in Virginia with over 286K single family households, provides public collection service to 44K household, or 15 percent.

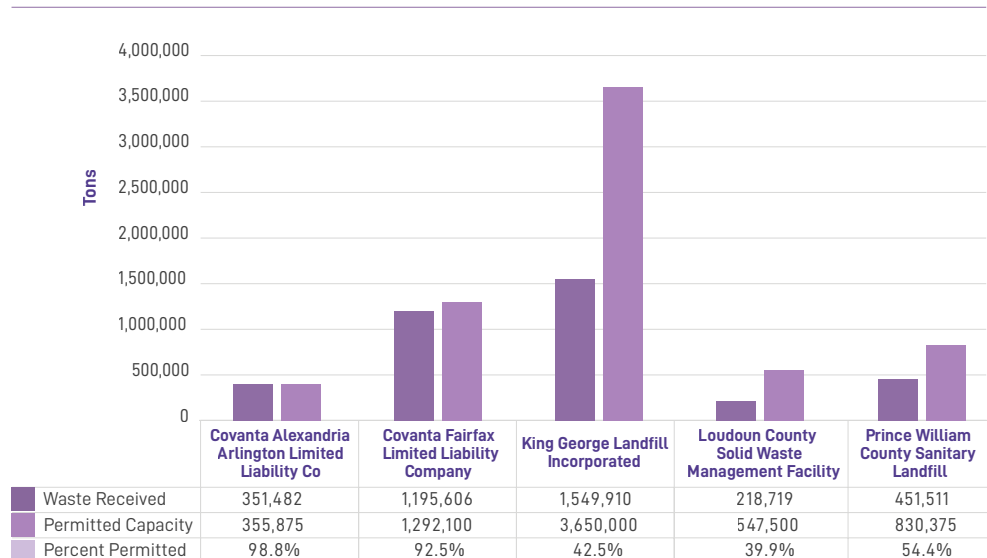
CONTINUED POPULATION GROWTH IN THE NORTHERN VIRGINIA AND DC METRO REGION AFFECTS THE TYPES OF WASTES GENERATED AND THE FACILITIES NEEDED FOR WASTE MANAGEMENT, EITHER DISPOSAL OR RECYCLING.

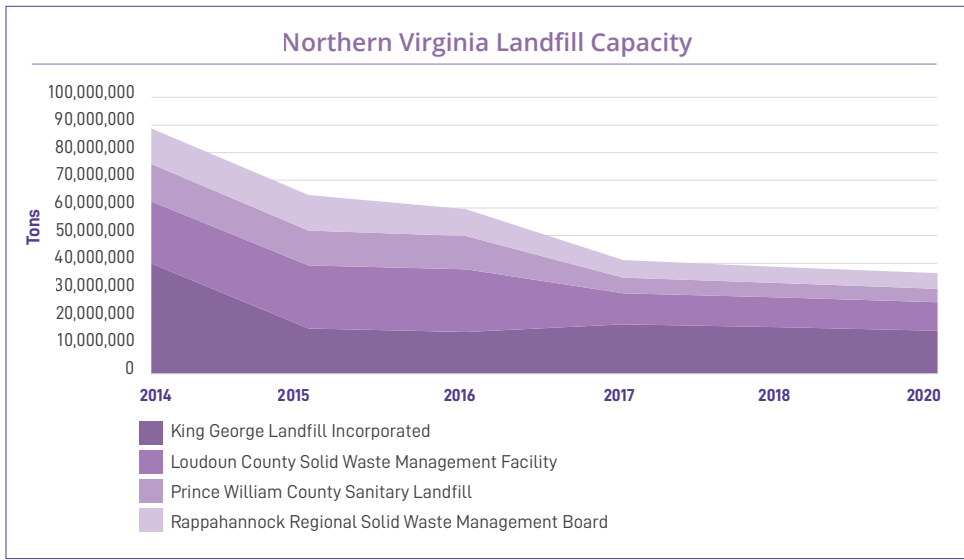
management, either disposal or recycling. Waste generation from commercial and multi-family sectors represent approximately 50 percent of the municipal solid waste generated in 2020. Businesses and institutions may continue to affect the types of waste management services needed in the future. All jurisdictions require that collection of waste generated by commercial and business entities meet local and state requirements. While waste must be collected for disposal, six of 13 jurisdictions

Limited capacity for waste and recycling in the region

A very limited number of disposal and recycling facilities are used by all Northern Virginia jurisdictions and the District of Columbia. With respect to disposal, only four local facilities are available for the management of 1.5 million tons generated in 2020 by the region’s residents, institutions, and local businesses. Back-up waste disposal is provided only

Waste Received vs. Annual Permitted Capacity for Northern Virginia Facilities 2020





facility hosting agreements end in 2031 and 2038, respectively. This is likely to affect the cost and capacity of disposal in the region in the future. Per ton disposal fees noted in the report do not include transportation costs.

Northern Virginia jurisdictions are totally reliant on the private sector for recyclables processing and sale. Northern Virginia jurisdictions and the District of Columbia use three privately owned Material Recovery Facilities (MRF) in

by privately-owned landfills located anywhere from 60 to 130 miles south of the Northern Virginia area. The main haul route is on I-95, one of the most congested roads on the east coast of the U.S. Travel distances and time to these landfills complicate the management and delivery of waste from Northern Virginia in addition to increasing transportation costs.

Northern Virginia and one in Maryland which process recyclables generated within the region (paper, cardboard, plastic, cans, etc.).

The Northern Virginia Waste Management Board members cite several reasons to focus on regional disposal capacity issues. Population and employment continue to increase, resulting in increased waste generation, while land use pressures limit opportunities to locate solid waste management facilities in Northern Virginia. The advanced composting system enhancements by Free State Farms at Prince William County's Balls Ford Road Compost facility represents the most significant solid waste infrastructure investment in the past 20 years in Northern Virginia. Fairfax and Alexandria/Arlington waste-to-energy

Two construction and demolition debris (CDD) landfills in Northern Virginia closed in the past five years, with jurisdictions reporting decreased opportunities for this material's disposal. With continued growth in construction sector employment and related construction waste generation, the capacity for CDD management has reduced in other regions as well. DEQ reports that remaining permitted CDD disposal lifespan statewide has dropped from 21.4 years in 2019 to 16 years in 2020.

