

**WASTE DIVERSION & RECYCLING TASK FORCE**  
**Senate Bill 1319 (2021 Special Session 1)**  
**Extension of Senate Joint Resolution 42 (2020)**

**A Report of Findings and Recommendations**

**November 2022**

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## **EXECUTIVE SUMMARY**

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The Department of Environmental Quality (DEQ) was directed to establish a Waste Diversion & Recycling Task Force (Task Force) pursuant to Senate Joint Resolution 42 of the 2020 Session (SJ 42) and extended pursuant to Senate Bill 1319 of the 2021 Special Session 1 (SB 1319).

Additionally, Governor Youngkin issued Executive Order 17 also requesting recommendations from this Task Force that would encourage new recycling industries to locate in Virginia. While there are a variety of tax and other incentives that can assist with this, the Task Force indicated that the primary driver for companies locating in Virginia is evidence of a steady and sufficient supply of materials and markets. Accordingly, the Task Force noted that all efforts to divert material from landfills, and encourage state purchasing of recycled content will help achieve the Governors goals.

The Task Force heard from expert guests and discussed a variety of approaches for diverting waste from landfills in economically and environmentally beneficial ways. Overall, residents and local governments carry the burden for waste management and recycling without a role in the materials sold into their jurisdictions. Additionally, technology improvements in society result in new and swiftly changing waste streams and characteristics without end of life reuse, recovery, or safe disposal options.

Despite the progress made and recognizing that resources would need to be provided to support further work, many members of the Task Force recommend that, if resources are provided, new focused working groups be formed to address specific topics, engage more stakeholders, and provide more robust analysis before legislative recommendations are made. There were five main topics considered by this Task Force which are described in more detail in the Summary of Discussion and Recommendations section. However, there were some overarching themes related to the work of the Task Force that would assist future analysis of these topics. Specifically:

- Lack of centralized data or data collection for specific topics;
- The need for specialized task groups and specialized expertise to tackle complex technical and regulatory issues; and
- Need for funding or incentives to municipalities or those who could further study or implement recommendations.

The Task Force also wants to ensure that any recommendations made also weigh the impacts on, and provide opportunities for small rural communities and low-income individuals across the state.

## **BACKGROUND & PROCESS**

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In accordance with 9VAC20-81-20, “it is the policy of the Virginia Waste Management Board to promote the development of comprehensive waste management programs that include the following components of a waste management hierarchy:

1. Source reduction.
2. Reuse.
3. Recycling.
4. Resource recovery (waste to energy).
5. Incineration.
6. Landfilling.”

In accordance with this policy, local solid waste planning units consisting of regions or individual counties, cities, and towns are responsible for establishing solid waste management plans that address all components of the above hierarchy. Based on calendar year 2021 reporting by permitted solid waste management facilities<sup>1</sup>, Virginia has 87 active landfills, six incinerators and waste to energy facilities, and 15 compost facilities. These facilities reported that of total waste received, 73% was landfilled, 12% was incinerated, and 1% was composted (the remaining 14% was managed by on-site or off-site recycling). Separately, solid waste planning units also report on recycling activities. Based on calendar year 2020 reporting<sup>2</sup>, Virginia’s overall recycling rate is 45.5%; however, individual planning units reported recycling rates between 10.4% and 96.6%.

Senate Joint Resolution 42 of the 2020 Session (SJ 42) requested that DEQ establish a Waste Diversion and Recycling Task Force to meet and discuss ways to increase waste diversion and recycling. SJ 42 required that certain named stakeholders be included in the membership of the Task Force and directed the Task Force to discuss the following items:

- (i) methods of improving recycling, reducing waste, and diverting waste from landfills;
- (ii) recommendations to reduce waste at the source, such as composting and recycling of organic material; and
- (iii) whether current recycling rates required by Virginia law should be increased and whether state policy should be changed to give landfills a greater role in the management of organic material.

In addition, the Resolution also directed the Task Force to discuss:

- (i) potential improvements in the goals and efficiency of the grant program funded by the Litter Control and Recycling Fund pursuant to Article 3 (§ 10.1-1414 et seq.) of Chapter 14 of Title 10.1 of the Code of Virginia,
- (ii) §§ 10.1-1422.01 and 10.1-1422.04 of the Code of Virginia and related statutory provisions and whether amendments are advisable, and
- (iii) the allocation formula, codifying and increasing the percentage of grants that it awards to localities on a competitive basis, reallocating funds for the purpose of funding

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<sup>1</sup> 2022 Annual Solid Waste Report for CY2021, published June 2022, <https://www.deq.virginia.gov/home/showpublisheddocument/15488/637919249151430000>

<sup>2</sup> Virginia Annual Recycling Summary Report: Calendar Year 2020, published November 2021, <https://www.deq.virginia.gov/home/showpublisheddocument/12688/637750630967270000>

regional recycling programs that provide service to multiple localities, providing additional grants for educational programs, imposing constraints on the amount of grant funds that may be used to fund personnel salaries and wages, providing funding for additional collection points for recyclables generated by localities, and any other changes it deems appropriate.

Consistent with this directive, DEQ solicited for requested stakeholders to join the Waste Diversion and Recycling Task Force (Task Force). Unfortunately, due to various factors, including impacts of the COVID-19 pandemic, the Task Force was not established and meetings did not commence before the 2021 General Assembly Session.

§ 1 of Chapter 503 of the 2021 Special Session 1 Acts of Assembly (SB 1319) then requested that DEQ continue the Task Force, adding additional members to the Task Force and topics of study to include:

- (i) further study available options to divert from landfills in the Commonwealth food residuals, organic waste, and baseline recyclables;
- (ii) conduct a meta-analysis or systematic review of the policies, legislation, practices, and programs proposed and implemented by other states and draw upon such programs in considering recommendations for waste diversion policies;
- (iii) examine Virginia's status as a prime destination for out-of-state trash and explore ways in which waste from other states can be diverted from Virginia's landfills;
- (iv) assess the landfill, hazardous waste, and recycling facilities needed to manage toxic materials generated by electric vehicle and electric grid backup battery waste; and
- (v) investigate the role of a composting and food donation infrastructure in reducing the volume of waste that is accepted by landfills, including upgrading and refining existing food donation infrastructure, identifying food material and organic waste generators and haulers, comparing the use of in-house composting with regional composting hubs, studying the ideal distance between composting hubs and waste generators, considering the permitting of composting hubs, and exploring markets and systems for composting services and anaerobic digestion.

DEQ again solicited for requested stakeholders outlined in SJ 42 and SB 1319 and finalized the membership of the Waste Diversion and Recycling Task Force in July 2021. A total of 25 Task Force members were identified, and members are listed in Attachment 1.

During Task Force meetings, consensus was tested with respect to each recommendation proposed by the group, with the level of interest defined as follows:

- 3 – Strongly Support
- 2 – Some reservations, but can live with it and will not oppose it
- 1 – Serious concerns make it impossible to support and may actively oppose it.

Consensus was achieved so long as all members present indicated a level of interest of “2” or “3”. No consensus would be reached if any one member expressed a level of interest of “1.” It is important to note that when convening a stakeholder group, assuring representation in equal numbers among varying interests can be a challenge. Moreover, it was difficult for all members of the stakeholder group to attend all meetings of the group. The final report represents the views

of members in attendance and where there was or was not consensus among ideas or recommendations.

Executive Order 17 (EO17), signed by Governor Glenn Youngkin on April 7, 2022, requested that the Task Force also “discuss ways to encourage new recycling related businesses, including collection, processing and manufacturing facilities, to locate in the Commonwealth and include any recommendations in their next report.” These Task Force recommendations are intended to meet the goals of EO17.

## SUMMARY OF DISCUSSIONS & RECOMMENDATIONS

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For purposes of discussions and recommendations, the topics of the Task Force were divided into five general areas: Waste Reduction & Diversion, Improving Recycling, Litter Prevention & Recycling Grant, Food Donation & Organics Management, and Electric Vehicle & Grid Backup Battery Wastes. An additional section on Ways to Encourage New Recycling Related Businesses, as requested by EO17, is also included below. A summary of meetings and copies of meeting minutes are provided in Attachments 2.

### *Waste Reduction & Diversion*

The Task Force attempted to discuss numerous elements in this area of focus:

- Methods of reducing waste and diverting waste from landfills (SJ 42)
- Recommendations to reduce waste at the source, such as composting and recycling of organic material (SJ 42)
- Study available options to divert from landfills in the Commonwealth food residuals, organic waste and baseline recyclables (SB 1319)
- Conduct a meta-analysis or systematic review of the policies, legislation, practices and programs proposed and implemented in other states (SB 1319)
- Examine Virginia’s status as a prime destination for out-of-state trash and explore ways in which waste from other states can be diverted from Virginia’s landfills (SB 1319)

Some of these issues are discussed elsewhere in this report. The Task Force did not address the issue of importation of solid wastes from other states recognizing potential limitations following the Court’s decision in *Waste Management Holdings, et al v Gilmore (2000)*<sup>3</sup> which overturned a 1999 Virginia law to place a cap on the amount of waste that facilities could import and to ban shipment of waste by barge on the Rappahannock, James, and York Rivers.

The Task Force discussed numerous ways to reduce wastes and improve waste diversion. The Task Force ***reached consensus*** on the following recommendations:

- DEQ should be funded to develop a capacity analysis for waste and diversion systems. This would entail an analysis of capacities, needs and management systems statewide, similar to the biennial regional analysis<sup>4</sup> done by the Northern Virginia Waste Management Board (NVWMB). The NVWMB has found that the data gaps and lack of

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<sup>3</sup> *Waste Management Holdings, et al v James S. Gilmore*, 2000 U.S. Disf. LEXIS 1056.

<sup>4</sup> <https://www.novaregion.org/583/Solid-Waste-Report>

crosswalk between facility reporting, facilities in the field not reporting, and local responsibilities for waste management planning is a challenge. Additional staff capacity may be needed (one full time employee (FTE)). While there was consensus to include this recommendation, some Task Force members were concerned about the administrative burden of additional reporting that this analysis may create.

- DEQ should be funded to explore if the Commonwealth should move towards an Extended Producer Responsibility (EPR) framework. EPR programs have pros and cons. Advantages include removing burden from localities, improving waste stream quality, and potential transportation efficiencies. Disadvantages could include additional cost to manufacturers and consumers. An example EPR program is PaintCare, which is backed by the American Coatings Association. PaintCare looks to provide solutions to recovering and recycling paint wastes, which are a burden to local government recycling operations. Candidate wastes for an EPR approach could include: batteries, carpet, gas cylinders, household hazardous wastes, lighting, mattresses, medical sharps, mercury thermostats, mercury auto switches, motor oil, paint, pesticides, pharmaceuticals, radioactive devices, refrigerant-containing appliances, solar panels<sup>5</sup>, and textiles.
- Increase the tire recycling fee (§58.1-641) and ensure revenue is used to support tire recycling. The Virginia Automotive Association has expressed concerns regarding budget language directing diversion of funds from the Waste Tire Trust Fund (§10.1-1422.3) and delays in providing reimbursement to waste tire end users due to lack of funding.

### *Improve Recycling*

Recycling continues to be one of the most important ways to divert material from landfills, but recycling rates have only improved 10% over the last two decades<sup>6</sup> and recent changes in recycling markets hurt operations around the Commonwealth. The Task Force ***reached consensus*** on the following recommended actions for improving recycling:

- Develop a workgroup to explore how to establish a trust fund in Virginia to provide incentive grants to public and private entities to expand the diversion and recycling infrastructure for capital expenses such as collection containers and vehicles, processing equipment (both stationary and mobile) and building/site upgrades and improvements, not for acquisition of land or for operating expenses.
- Establish a Recycling Business Assistance Center (RBAC) to conduct periodic recycling impact studies, provide permit assistance, coordinate information on funding opportunities, provide tools and conduct research on recycling markets, work one-on-one with companies to assess needs and provide assistance, and provide news releases to public media about companies' successes and publications pertinent to the recycling industry.
- Look into siting intermediate glass processing facilities which could consolidate glass from the current facilities managing recyclables and “pre-process” and upgrade the glass to ship a

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<sup>5</sup> Senate Bill 499 & House Bill 774 (2022 Session) tasked the State Corporation Commission with creating a task force to analyze the life cycle of renewable energy facilities, including solar, wind, and battery storage components, with a report due May 1, 2023.

<sup>6</sup> <https://www.deq.virginia.gov/land-waste/recycling/recycling-data/recycling-rate-report>

higher quality product at a higher value to existing glass recycling (beneficiation) plants such as the one in Wilson, North Carolina.

- Collect data on glass quantities across regions to identify areas with 60,000 – 120,000 tons available within 250 miles.
- Consider economic incentives to encourage a glass recycler to locate in Virginia. These economic incentives could include participation by non-governmental organizations (NGOs) who are glass bottle producers and wholesalers using grants, etc.
- The Task Force endorses EPA’s National Recycling Goal of 50% by 2030, however, Virginia needs to evaluate its recycling infrastructure, measurement and reporting to determine how to best achieve that goal. A better method of gathering recycling data should be established.
- The Commonwealth should consider providing incentives to municipalities and regional planning units to create public recycling services or to help increase competition within the existing market.
- The Commonwealth should consider providing incentives through the Virginia Economic Development Partnership to attract regional private recycling facilities.
- Encourage multi-family housing complexes to provide information on recycling options for residents, if available in the locality, in alignment with Virginia’s recycling goals.

During the 2022 General Assembly Session, a House subcommittee considered a bottle bill, but did not ultimately recommend reporting the bill. The subcommittee indicated that they may request consideration of such legislation by the Task Force. Although a formal request for such consideration was not received before the Task Force completed its meetings, the Task Force discussed a bottle bill as part of its agenda, but was **unable to reach consensus** due to concerns outlined in the March 15, 2020, Task Force meeting minutes (see Attachment 2).

### *Litter Prevention & Recycling Grant*

DEQ, in collaboration with the Litter Control and Recycling Fund Advisory Board, provides crucial funding for municipal recycling programs through competitive and non-competitive litter prevention and recycling grants. Funding for these grants is provided by the annual litter tax (§ 58.1-1707), soft drink excise tax (§ 58.1-1702), and beer and wine cooler excise tax (§ 4.1-236). The Litter Control & Recycling Fund received nearly \$2.8 million in 2021 following the doubling of the litter tax effective July 1, 2020, and there is no shortage of grant requests for those funds. The Task Force **reached consensus** on the following recommendations for improvements to the grant program:

- Make the litter tax proportional to business size, with higher maximum fees. Currently, a small rural corner store and large big box retailer both pay the same annual fee. While the litter tax was recently doubled it was not indexed with inflation.
- Ensure that fast food and other restaurants are also paying into this fund.
- Send automated reminders/bills.



- Include quantity of waste diverted/collected as grant reporting criteria.
- Examine other state structures for additional funding opportunities.<sup>7</sup>
- Expand eligibility of grants to include regional planning district commissions.

### *Food Donation & Organics Management*

The Task Force discussed numerous initiatives to increase the amount of source-separated organic wastes (including but not limited to food and yard wastes) diverted from disposal to recycling. The Task Force ***reached consensus*** on the following recommendations:

- Remove barriers to feeding people and feeding animals while maintaining health and safety (see additional information below related to this issue).
- Explore financial incentives to encourage food waste prevention and establish compost and anaerobic digestion facilities.
- Designate and provide funding for an Organics Management Coordinator within DEQ or other agency to provide technical assistance in diversion program establishment, reporting, infrastructure development, and operations optimization.
- Implement an amendment to the Virginia Solid Waste Management Regulations (VSWMR) to define siting, design, construction and operational requirements for anaerobic digesters handling source-separated organic wastes.
- Consider legislation to require food waste diversion from disposal (composting, anaerobic digestion, animal feed) for large commercial generators of food wastes similar to legislation enacted in New York, New Jersey, Massachusetts, Connecticut, Vermont, Rhode Island, and California. Maryland also passed similar legislation that goes into effect January 2023.
- Encourage construction projects that include landscaping and are partially or fully funded by Commonwealth monies to use compost to improve soil quality and reduce storm water runoff and associated pollutants from new development projects.
- Encourage the use of minimum soil organic matter content requirements as a mechanism to improve storm water runoff quality by fostering greater rainfall infiltration.

The following statutes were identified by some members of the Task Force or invited speakers for possible amendments that could help remove barriers to feeding people and animals. The Task Force ***reached no consensus*** on the recommendations below as members felt further input from affected stakeholders such as the Virginia Department of Agriculture and Consumer Services, Virginia Department of Health, Virginia Farm Bureau, and others should be obtained.

- Code of Virginia Title 35.1, Chapter 2, Section 14.2 refers to the donations of food to charitable organizations. As currently worded, this section refers to the ability of restaurants or “any processor, distributor, wholesaler or retailer of food” to donate unserved excess foods to any charity organization and/or political subdivisions to donate

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<sup>7</sup> Some state recycling incentives and programs were previously highlighted in DEQ’s 2019 Recycling in Virginia: An Evaluation of Recycling Rates and Recommendations, <https://rga.lis.virginia.gov/Published/2019/SD7>

foods to needy persons. Some Task Force members suggested that this section may be in need of updating. Some Task Force members suggested that §35.1-14.2 be modified to allow non-profit entities and faith-based organizations sponsoring or holding food-based events to be able to donate excess food to the food-insecure and/or to needy people. **No consensus was reached.**

- Some Task Force members suggested increasing the tax credit offered under § 58.1-439.12:12 to farmers for the donation of food crops to nonprofit food banks. Similar tax credits could be extended to retail stores and other generators of food to encourage such donations. **No consensus was reached.**

### *Electric Vehicle & Grid Backup Battery Wastes*

With the recent growth in electric vehicles and household battery systems, the Task Force was asked to consider what Virginia's waste and recycling infrastructure may need in order to accommodate these new waste streams in the future. During the initial brainstorming exercise, Task Force members provided the suggestions below on the issue; however, due to lack of time and relevant experience of members, the Task Force determined **by consensus** that additional expertise in this arena would be required to identify actionable recommendations.

The Task Force discussed the following suggestions for consideration, but as noted above **reached no consensus** on these ideas:

- Further examine the existing processes for electric vehicle and hybrid battery replacements. Consider specific Extended Producer Responsibility (EPR) legislation.
- Ban landfill disposal of hybrid, electric vehicle, and large household batteries, similar to existing ban on Lead Acid batteries (§ 10.1-1425.1 through § 10.1-1425.5).
- Provide grant incentives (public and private) for localities to develop public education materials/targeted campaigns to appropriate businesses.
- Consider how to identify and target other novel waste streams before they become an issue (e.g. solar panels).
- Evaluate the impact of other types of batteries at waste facilities that have caused fire and safety issues and concerns.

Additionally the Task Force noted that HB 774 / SB 499 (2022) asks the State Corporation Commission to create a task force to analyze the life cycle of renewable energy facilities (including battery storage) and assess the feasibility, costs, recycling and salvage opportunities, waste strategies, and liability for the decommissioning of materials. The HB 774 / SB 499 task force may be an appropriate group to further evaluate the waste and recycling infrastructure needs.

### *Ways to Encourage New Recycling Related Businesses*

Governor Youngkin's Executive Order 17 requires this Task Force to "discuss ways to encourage new recycling related businesses, including collection, processing and manufacturing facilities, to locate in the Commonwealth and include any recommendations in their next report." The Task Force recognizes that all waste diversion efforts already mentioned will encourage new businesses

to locate in Virginia by increasing the volume of materials available. In addition, the Task Force *reached consensus* on the following recommendations to the Governor:

- Work with the Virginia Economic Development Partnership and local Economic Development Authorities to develop tools to assist industries in evaluating options for locating in Virginia, such as:
  - Develop a web-based Geographic Information Systems (GIS) model of the recycling and diversion infrastructure in Virginia to include locations, contact information, materials handled, etc.;
  - Develop a Model Zoning Ordinance; and
  - Develop a GIS model of sites that meet the siting criteria in the Virginia Solid Waste Management regulations (9VAC20-81-320).
- Work with State agencies to modify their procurement practices to use more recycled-content materials, such as:
  - Work with the Department of General Services to identify goods and commodities purchased by Virginia state agencies that could be sourced from vendors providing a higher “recycled content” in those goods and commodities (e.g. office/copier paper made from 100% recycled fiber);
  - Work with Virginia Transportation Research Council to revisit the conclusions of earlier studies of incorporating recycled glass into asphalt-concrete mixes and other suitable materials for road sub-base paving;
  - Publish a web-based directory of recycled-content goods and commodities that could be available to local jurisdictions’ purchasing departments and encourage them to use those goods, and seek legislative authority to reimburse Virginia colleges and universities who switch from disposable to compostable servingware in their dining establishments.
- Explore tax incentives for encouraging recycling businesses to come to Virginia.
- Develop labor market resources to encourage workforce development and training for the recycling industry in Virginia. This includes developing workforce opportunities to attract and train solid waste and recycling technical skills such as heavy equipment operation, CDL licensure for truck hauling, and other skilled labor to support the recycling industry in Virginia.

## ATTACHMENTS

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**ATTACHMENT 1: LIST OF TASK FORCE MEMBERS**

<b>Organization</b>	<b>Member</b>	<b>Alternate</b>
Southwest Virginia Localities	Michael Hatfield (Wise County)	Bill Dingus (Scott County)
City of Virginia Beach	Kristi Rines	None
Virginia Waste Industries Association	Tad Phillips	None
Virginia Beer Wholesalers Association	Robbie Pecht	None
Virginia Beverage Association	Morgan Guthridge	None
Virginia Petroleum and Convenience Marketers Association	Mike O'Connor	None
Virginia Manufacturers Association / Westrock	James (Jim) Taylor	None
Virginia Manufacturers Association / O. I. Glass	Brian Sernulka	Scott DeFife
Virginia Recycling Association	Joe Benedetto III	None
Virginia Municipal League	Mitchell Smiley	None
Virginia Association of Counties (VACo)	Joe Lerch <del>Chris McDonald</del>	None
Northern VA Regional Commission	Debbie Spiliotopoulos	Scott Macdonald
Hampton Roads Planning District Commission	John Harbin	None
Coker Composting	Craig Coker	None
Community Member / Landfill Advisory Board Prince William County	James Gestrich	None
Community Member	Rob Laurent	None
Virginia Tech	Greg Evanylo	None
James Madison University	Jared Stoltzfus	None
Tazewell County	Kenneth Dunford	None
SWANA/Central VA Waste Management Assoc. (CVWMA)	Kim Hynes	None
Charles City County	Rhonda L. Russell	None
City of Alexandria	Helen Lee	None
Virginia Trucking Association	Dale Bennett	None
Virginia Bottle Bill Organization	Rick Galliher	Scott Peterson
Virginia Council on Environmental Justice	Tom Benevento	Andrew Payton

## ATTACHMENT 2: SUMMARY OF MEETINGS & MINUTES

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The Task Force held its first meeting on October 13, 2021, to begin discussing the issues and brainstorm possible steps and actions to address the overall goals of waste reduction and diversion, improving recycling and the litter grant, food donation and composting infrastructure, and management of electric vehicle batteries. The ideas were consolidated and shared with the Task Force so that members had time to provide additional steps and actions for consideration by the group. This additional feedback was consolidated, and shared with the group for prioritization.

To aid in the work of the Task Force, DEQ shared program summaries related to the annual solid waste information and assessment (SWIA) report, annual recycling rate report, litter grant, and information about composting regulation and infrastructure. During the meeting, members also identified information needs to assist in Task Force work. While Task Force members shared ideas during the first meeting, no recommendations were developed as more research and discussion was needed.

The second meeting occurred on March 15, 2022. During this meeting, the Task Force heard from invited speakers on bottle bill programs (specifically proposed HB 826 from the 2022 session); activities of the Plastic Waste Prevention Advisory Council; policies tied to the Food Recovery Hierarchy; and input from EPA on the Task Force's initial brainstorm. The Task Force discussed bottle bill programs and food waste policies following these speakers.

The third meeting occurred on June 14, 2022. Several members of the Litter Control & Recycling Fund Advisory Board were present to provide a summary of the litter and recycling grant program and answer questions from Task Force Members. The group also heard from representatives for the Glass Packaging Institute and Virginia Waste Industries Association to formulate recommendations in response to Executive Order 17 and encouraging recycling related businesses to locate in the Commonwealth. Finally, the group also heard about state approaches to extended producer responsibility.

Following the third meeting, DEQ provided a template report, copies of the meeting minutes, and consolidated recommendations to two members of the Task Force who volunteered to prepare the draft report for the full group's consideration.

The fourth meeting occurred on August 16, 2022. Prior to the meeting, the draft report was shared with the group for their review and comment. During the meeting, additional feedback was solicited from the group regarding the recommendations and edits were made to create the final report.

## Meeting Minutes

Waste Diversion and Recycling Task Force  
DEQ Central Office, Third Floor Conference Room  
1111 East Main Street, Richmond, Virginia  
Wednesday, October 13, 2021

Members Present: Michael Hatfield, Kristi Rines, Tad Phillips, Robbie Pecht, Morgan Guthridge, Mike O'Connor, Jim Taylor, Brian Sernulka, Debbie Spiliotopoulos, John Harbin, Craig Coker, James Gestrich, Greg Evanylo, Jared Stoltzfus, Kenneth Dunford, Kim Hynes, Rhonda Russell, and Helen Lee.

Members Absent: Joe Benedetto, Mitchell Smiley, Chris McDonald, Rob Laurent, Dale Bennett, Rick Galliher, and Tom Benevento.

Other Attendees: Scott Peterson (alternate for Rick Galliher), Bill Dingus, Matt Wells, Kara Alley, Joe Levine, Kevin Halligan, and Chip Hall.

DEQ Staff Attendees: Kathryn Perszyk, Craig Nicol, Janet Weyland, Sanjay Thirunagari, Gary Graham, Melinda Woodruff, Meghann Quinn, and Sharon Baxter.

The meeting convened at 10:07 a.m. The meeting adjourned at 4:03 p.m.  
A quorum of the task force members (or their alternates) was present for this meeting.

1. Introductions and “Envisioning the Future” Brainstorming [Craig Nicol, DEQ]. Mr. Nicol introduced the DEQ staff members at the meeting, presented the agenda (Attachment 1), and oriented the members to the building facilities. Mr. Nicol handed out the Brainstorming Exercise (Attachment 2), divided the members into groups of two, and asked the members to consider the exercise theme assigned to their group and generate three primary steps to accomplish the goal and three specific actions to accomplish each of those steps.
2. Sharing “Envisioning the Future” Output [Craig Nicol and Janet Weyland, DEQ]. Individual task force members introduced themselves as they shared their output with the group.
  - a. Group A, Waste Reduction & Diversion.
    - i. Recycling – Needs to be more economical; needs to include regional MRFs; needs regional hubs for recycling; and needs to encourage more regional reprocessors.
    - ii. Diversion of organic waste – Strengthen the network of foodbanks, increase partnerships with farmers, and encourage new small scale composting.

- iii. Overall waste reduction – Improve both public and industry education, encourage the circular economy (cross industry recycling and use; and zero waste); and food waste reduction.
- b. Group B, Waste Reduction & Diversion.
  - i. Review current policies – Better recycling education for K-12 students; a bottle bill to raise money to pay for recycling; and better source separation.
  - ii. New rules for out-of-state trash (i.e., will not receive it unless the trash is properly separated, and fees are raised to support waste diversion and recycling hubs).
  - iii. Recruit businesses to sell recycling end products and gave them tax incentives.
  - iv. Reduce and divert for composting (collect foods from schools and industry to compost).
  - v. Increase the use of recyclables by expanding the number of useful end products and using more types of recyclables.
- c. Group A, Improving Recycling.
  - i. Every Bottle Back initiative to promote a circular economy.
  - ii. Strengthening collection infrastructure.
  - iii. Better recycling education and promotion.
  - iv. Improving collection rates.
  - v. Improving the quality of recyclables.
- d. Group B, Improving Recycling.
  - i. Improve recycling education, including on social media, print media, public service announcements, and a curriculum for school-aged children.
  - ii. Provide additional incentives for recycling through tax reimbursement, a landfill surcharge trust fund, and a grant program to public and private sectors.
  - iii. Improve infrastructure through regionalism (e.g., have smaller localities share equipment), economic development, and site readiness inventory.
- e. Group A, Litter Grant.
  - i. Review litter and recycling grant allocations, consider splitting the grants and creating subcategories, and set priorities for emergency use of funds.
  - ii. Litter Board to use COV section 10.1-1422.02 2 to the greatest extent possible.
  - iii. Identify new revenues to support litter program funding (e.g., plastic bag tax or other grant sources).
- f. Group B, Litter Grant.
  - i. Fund “charm centers” (open-air goodwill stores) at landfills through grants, including manning the center and public education and outreach for the centers.
  - ii. Fund “donation and repair centers” to sort out good things, repair as needed, and sell to auction or thrift stores, including public education and outreach.



- iii. Fund “purple bin” glass collection centers including hauling to recycling centers and public education and outreach.
- 3. Welcome and Resource Expectations [David Paylor, Director, DEQ]. Mr. Paylor welcomed the members and thanked them for their willingness to bring their expertise to bear on the task of satisfying the legislative mandates (Attachments 3 and 4), and for their work generating good, forward-looking recommendations for the legislature.
- 4. Legislative Mandates and Goals [Kathryn Perszyk, DEQ]. Ms. Perszyk presented an overview of the Land Division Program involving Solid Waste and need for opportunities for solid waste diversion from landfills (Attachment 5). She discussed the responsibilities associated with participating on a public body, the fact that the meetings are open to the public, the legislative mandates for the task force, the specific topics required by the mandates, and the report to the legislature that is due on November 1, 2022. (Attachments 7 through 11 summarize relevant Land Division programs that may be impacted by waste diversion and recycling.)
- 5. Ground Rules and Framework [Craig Nicol and Janet Weyland, DEQ]. Mr. Nicol presented the ground rules for discussions (Attachment 6) and conducted an exercise concerning DEQ’s model for testing for consensus that will be used by the Task Force. By consensus, members preferred to raise hands or tip their tent card on end to indicate that they have something to say. By consensus, members also preferred to silence phones and pagers instead of turning them off.
- 6. Sharing “Envisioning the Future” Output (continued) [Craig Nicol and Janet Weyland, DEQ].
  - a. Group A, Food Donation and Composting.
    - i. Improve food donation through better relationships between food banks and restaurants, public education and outreach on the benefits of food donation programs, and creating incentives for donations from food stores, restaurants, and farmers.
    - ii. Reduce distances between donation centers by encouraging more centers, providing more financial and education assistance, and right-sizing the donation centers for the smaller areas served.
    - iii. Provide greater resources to partner outlets and composters through improving public outreach, fostering better farmer-composter relationships, and supporting more composting sites to make it easier to access those services.
  - b. Group B, Food Donation and Composting.
    - i. Expand composting capacity by using hazard mitigation planning and providing money for new facilities.
    - ii. Improve the composting market by requiring use of compost (and native plants) during all construction, including roads, providing benefits to

agriculture, and compost benefits to shoreline/streaming restoration projects.

- iii. Enhance collection through residential curbside pickup, food recovery pickup, and mandatory composting for large generators.

c. Electric vehicle Batteries (only one group).

- i. Develop new regulations, provide enhanced enforcement and permitting resources, ban irresponsible disposal, and require recycling of components that have secondary value.
- ii. Fund and conduct necessary technical and consumer research and facilitate business plan development to support meaningful battery regulation, recovery, and recycling.
- iii. Develop appropriate infrastructure through public and private grant incentives, by capital investment, and by marketing and education.

7. Develop Categories/Discussions [Craig Nicol and Janet Weyland, DEQ].

- a. Members wanted to know what other states were doing with respect to waste diversion and recycling, and what their “best practices” and program successes were.
- b. When ranking priorities, members suggested:
  - i. Grouping priorities by complexity, any additional regulation needs, the percentage of the waste stream that the priority represents, the relative risk of the products in the waste stream, the difficulty of recycling the waste stream, the broader sustainability of the waste stream, any environmental justice and community impacts, resources for educating the public and businesses, incentives that might be available, and the infrastructure available or needed to support the recycling and diversion;
  - ii. Conducting a lifecycle analysis on the waste stream; and
  - iii. Considering giving flexibility to the program and making solutions scalable because one solution does not fit all situations.

8. Next Steps and Future Meetings [Craig Nicol and Janet Weyland, DEQ].

- a. DEQ will publish a list of the goals and actions that were generated and discussed during the meeting exercise and invite the members to submit additional goals and actions based upon their individual expertise. Subsequent actions intended for this list are:
  - i. Identifying additional resources for adding to the list of goals and actions.
  - ii. Setting criteria and ranking priorities for action on the list of goals and actions (e.g., what is hard/middle/easy to achieve, what is most important, what would make the most impact, what is technically achievable, and what is low-hanging fruit that can be addressed with the least investment, the least delay, or the least regulation, etc.).
  - iii. Once the initial survey summary is done, that summary may be revised throughout the period that the task force is meeting.
- b. The Task Force identified the following information needs:

- i. Feedback from those states already doing Waste Diversion and Recycling so that the task force is not reinventing the wheel.
  - ii. A list of other states' failures concerning Waste Diversion and Recycling.
  - iii. Gaps from the exercise tasking and some outside resources for filling those gaps.
  - iv. More detail on waste management at permitted solid waste facilities (e.g. SWIA data and reports)
  - v. Recent Recycling Rate Reports and information concerning those Virginia localities that are not meeting their mandated recycling rates.
  - vi. A Copy of Senate document 7 that includes locality recycling survey results.
- c. Members will respond to DEQ's list of goals and actions generated at this meeting.
  - i. Members will add their additional thoughts and input.
  - ii. Members are not limited by the themes presented during the brainstorming exercise.
- d. The next meeting of the Task Force will be in February, 2022 on a date to be determined, with a possible snow-day alternative. DEQ will distribute some proposed dates for that meeting. Two other task force meetings will be held prior to October 2022, possibly in the May/June and August/September timeframes.

Attachments:

1. Agenda.
2. Brainstorming Exercise.
3. Senate Joint Resolution 42 (2020)
4. Senate Bill 1319 (2021)
5. Presentation slides.
6. Ground Rules for Discussions
7. Task Force Member List (revised)
8. Litter Grant Program Summary
9. SWIA Program Summary
10. Recycling Program Summary
11. Composting Program Summary

Attachment 1

**WASTE DIVERSION AND RECYCLING TASK FORCE**  
**Bank of America Building 3<sup>rd</sup> Floor Conference Room**  
**1111 East Main Street, Richmond, Virginia**

**October 13, 2021**

- 10:00**                    **ENVISIONING THE FUTURE / BRAINSTORMING**  
Craig Nicol / Janet Weyland
- 11:00**                    **BREAK**
- 11:15**                    **SHARING THE “ENVISIONING THE FUTURE” OUTPUT**  
Craig Nicol / Janet Weyland
- 12:00**                    **LUNCH BREAK (on your own)**
- 1:00**                      **WELCOME / INTRODUCTIONS / RESOURCE EXPECTATIONS**  
David Paylor
- 1:30**                      **LEGISLATIVE MANDATES AND GOALS**  
Kathryn Perszyk
- 1:50**                      **GROUND RULES & FRAMEWORK / DEVELOP CATEGORIES**  
Craig Nicol / Janet Weyland
- 2:30**                      **BREAK**
- 2:45**                      **DEVELOP CATEGORIES (continued)**  
Craig Nicol / Janet Weyland
- 4:00**                      **NEXT STEPS / FUTURE MEETINGS**  
Craig Nicol / Janet Weyland
- 4:30**                      **ADJOURN**

## Attachment 2

### Brainstorming Exercise

# Department of Environmental Quality

## Waste Diversion and Recycling Task Force

### Task Force Outcomes:

1. Discuss ways to increase waste diversion and recycling
2. Publish an executive summary and a report of its findings and recommendations.

### Directives:

SJR 42 – 2020 Session and S1319 – 2021 Special Session

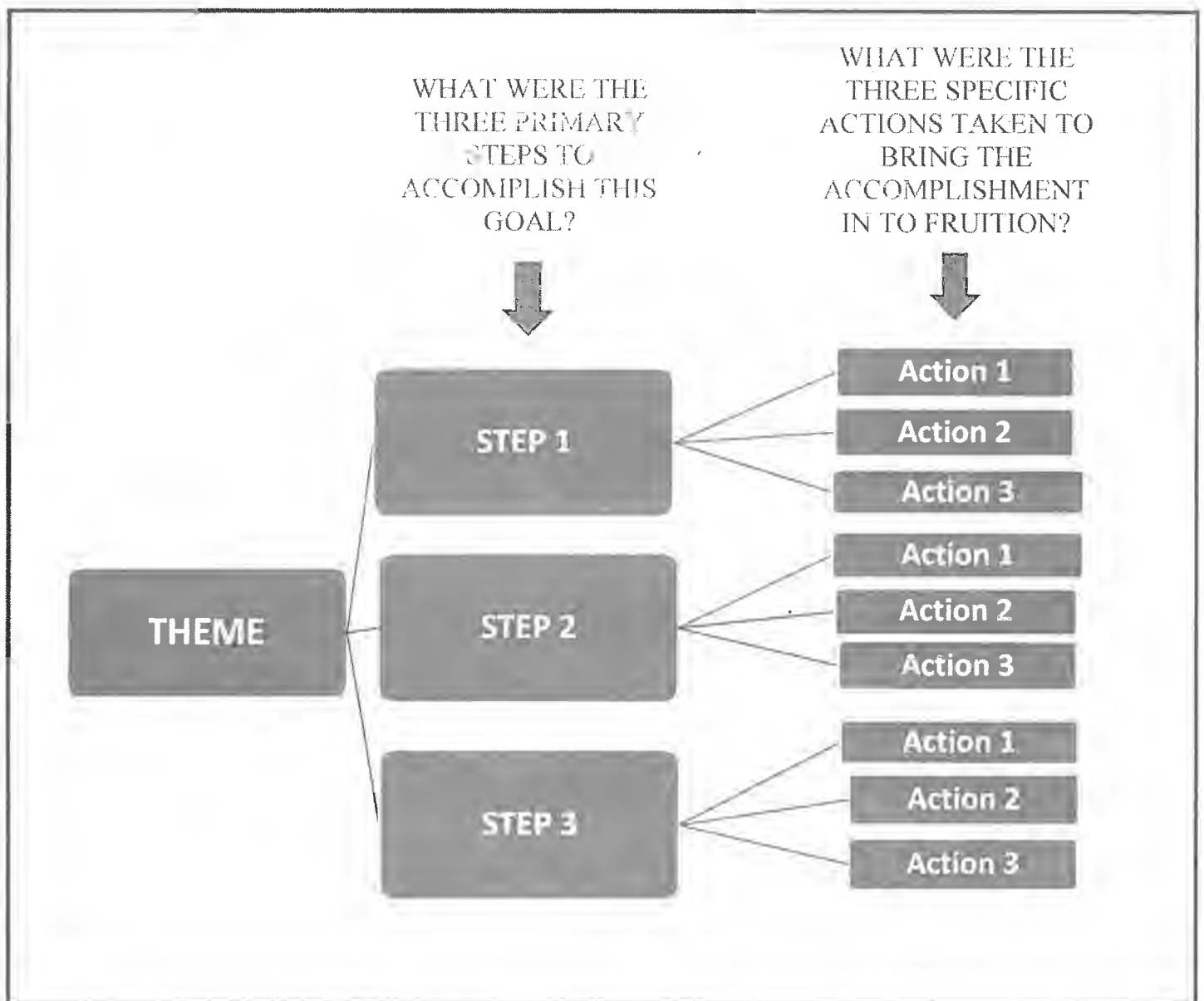
### General Themes:

1. Waste Reduction & Diversion
  - Methods of reducing waste and diverting waste from landfills (SJ42)
  - Recommendations to reduce waste at the source, such as composting and recycling of organic material (SJ42)
  - Further study available options to divert from landfills in the Commonwealth food residuals, organic waste, and baseline recyclables; (SB1319)
  - Conduct a meta-analysis or systematic review of the policies, legislation, practices, and programs proposed and implemented by other states (SB1319)
  - Examine Virginia's status as a prime destination for out-of-state trash and explore ways in which waste from other states can be diverted from Virginia's landfills; (SB1319)
2. Improving Recycling
  - Methods of improving recycling (SJ42)
  - Whether current recycling rates required by Virginia law should be increased (SJ42)
  - Study available options to divert baseline recyclables from landfills (SB1319)
3. Litter Grant
  - Potential improvements in the goals and efficiency of the grant program funded by the Litter Control and Recycling Fund pursuant to Article 3 (§ 10.1-1414 et seq.) of Chapter 14 of Title 10.1 of the Code of Virginia, (SJ42)
  - Review §§ 10.1-1422.01 and 10.1-1422.04 of the Code of Virginia and related statutory provisions and evaluate whether amendments are advisable (SJ42)
  - Review the allocation formula, codifying and increasing the percentage of grants that it awards to localities on a competitive basis, reallocating funds for the purpose of funding regional recycling programs that provide service to multiple localities, providing additional grants for educational programs, imposing constraints on the amount of grant funds that may be used to fund personnel salaries and wages, providing funding for additional collection points for recyclables generated by localities, and any other changes it deems appropriate. (SJ42)
4. Food Donation & Composting Infrastructure
  - Should state policy be changed to give landfills a greater role in the management of organic material (SJ42)
  - Investigate the role of a composting and food donation infrastructure to reduce the volume of waste that is accepted by landfills, including upgrading and refining existing food donation infrastructure, identifying food material and organic waste generators and haulers, comparing the use of in-house composting with regional composting hubs, studying the ideal distance between composting hubs and waste generators, considering the permitting of composting hubs, and exploring markets and systems for composting services and anaerobic digestion (SB1319)
5. Electric Vehicle Batteries
  - Assess the landfill, hazardous waste, and recycling facilities needed to manage toxic materials generated by electric vehicle and electric grid backup battery waste (SB1319)

## Brainstorming Exercise

You just picked up a well-known magazine and the cover has a feature article titled *Virginia Exceeds USDA & EPA 2030 Food Loss and Waste Reduction Goals: Cutting each by more than half*. Upon reading the article you see there were three primary steps to accomplishing that goal and each primary step further highlights three specific actions taken to bring the goal into fruition.

1. Based on the theme you have been assigned spend your time together deciding what the 3 primary steps were that allowed for the goal to be accomplished.
2. Then decide what 3 actions per step (9 in total) were accomplished to bring each step into fruition.



Attachment 3

Senate Joint Resolution 42 (2020)



SENATE JOINT RESOLUTION NO. 42

*Requesting the Department of Environmental Quality to establish a Waste Diversion and Recycling Task Force to meet to discuss ways to increase waste diversion and recycling. Report.*

Agreed to by the Senate, March 4, 2020  
Agreed to by the House of Delegates, March 3, 2020

WHEREAS, pursuant to § 10.1-1411 of the Code of Virginia, localities are required to maintain a minimum recycling rate of 25 percent of generated waste, or 15 percent in localities with a low population density; and

WHEREAS, technological and economic changes in the waste management industry have made it more difficult for localities to achieve those targets; and

WHEREAS, in 2019, pursuant to Chapter 615 of the Acts of Assembly of 2018, the Department of Environmental Quality (the Department) completed its report titled "Recycling in Virginia: An Evaluation of Recycling Rates and Recommendations" (the Report); and

WHEREAS, the Report recommended that the Department establish a Waste Diversion and Recycling Task Force to develop recommendations for reducing waste and diverting it from landfills; and

WHEREAS, the Report also observed that economic trends in the recycling sector have in some circumstances made existing local recycling practices fiscally unfeasible; and

WHEREAS, the Report noted that, until 2016, China was by far the largest consumer of the recyclable waste of the United States, purchasing about 40 percent of its recyclables; and

WHEREAS, in 2017, China implemented its National Sword policy to reduce smuggling and illicit activities related to recyclables; and

WHEREAS, in 2018, China banned the import of 24 types of recyclable materials and announced its intent to ban the import of all recyclable materials by 2020; and

WHEREAS, the Report observed that changes to China's recyclables policy decreased demand for recyclables from the United States by 40 percent, resulting in the reduction, suspension, or termination of service by public and private recycling facilities; and

WHEREAS, the Report concluded that "the cost of maintaining recycling programs is relatively high while the supply of recyclable material exceeds the current market demand" and "in several rural areas, due to a variety of factors, operation expenses can make recycling cost prohibitive"; and

WHEREAS, technological changes in the United States recycling industry and shifts in demand in the market for recyclable materials have rendered some Virginia recycling programs economically unsustainable; and

WHEREAS, for localities to meet their statutory recycling targets and accomplish Virginia's general policy of responsible management of waste material, additional state support to localities may be necessary; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Department of Environmental Quality be requested to establish a Waste Diversion and Recycling Task Force to meet to discuss ways to increase waste diversion and recycling.

In conducting its meetings, the Waste Diversion and Recycling Task Force shall include stakeholders, including localities, the Virginia Waste Industries Association, the Virginia Beer Wholesalers Association, the Virginia Beverage Association, the Virginia Petroleum and Convenience Marketers Association, the Virginia Manufacturers Association, the Virginia Recycling Association, the Virginia Municipal League, the Virginia Association of Counties, and any other entity it deems appropriate. The Waste Diversion and Recycling Task Force shall discuss (i) methods of improving recycling, reducing waste, and diverting waste from landfills; (ii) recommendations to reduce waste at the source, such as composting and recycling of organic material; and (iii) whether current recycling rates required by Virginia law should be increased and whether state policy should be changed to give landfills a greater role in the management of organic material.

In conducting its meetings, the Waste Diversion and Recycling Task Force also shall discuss (a) potential improvements in the goals and efficiency of the grant program funded by the Litter Control and Recycling Fund pursuant to Article 3 (§ 10.1-1414 et seq.) of Chapter 14 of Title 10.1 of the Code of Virginia, (b) §§ 10.1-1422.01 and 10.1-1422.04 of the Code of Virginia and related statutory provisions and whether amendments are advisable, and (c) the allocation formula, codifying and increasing the percentage of grants that it awards to localities on a competitive basis, reallocating funds for the purpose of funding regional recycling programs that provide service to multiple localities, providing additional grants for educational programs, imposing constraints on the amount of grant funds

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that may be used to fund personnel salaries and wages, providing funding for additional collection points for recyclables generated by localities, and any other changes it deems appropriate.

All agencies of the Commonwealth shall provide assistance to the Waste Diversion and Recycling Task Force for its meetings, upon request.

The Waste Diversion and Recycling Task Force shall meet no more than four times and shall complete its meetings by November 30, 2021, and shall submit to the Governor and the General Assembly an executive summary and a report of its meetings, including meeting minutes and any identified recommendations, for publication as a House or Senate document. The executive summary and report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports no later than the first day of the 2022 Regular Session of the General Assembly and shall be posted on the General Assembly's website.

Attachment 4

Senate Bill 1319 (2021)

2021 SPECIAL SESSION I

ENROLLED

VIRGINIA ACTS OF ASSEMBLY — CHAPTER

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*An Act to study waste control and recycling; permits.*

[S 1319]

Approved

**Be it enacted by the General Assembly of Virginia:**

**1.** § 1. A. *That the Department of Environmental Quality (the Department) is requested to continue its Waste Diversion and Recycling Task Force (the Task Force) that was created pursuant to SJ 42 (2020).*

B. *That the Department shall include in the Task Force additional members including (i) two directly affected community members who reside within a reasonable vicinity of a currently permitted and operating landfill; (ii) two experts on solid waste management and recycling at the academic or research level who shall be independent of and not associated with or employed by any public or private waste management entity or any advocacy group; (iii) a member of the Virginia Council on Environmental Justice; (iv) a representative of a rural solid waste planning unit; (v) a representative of an urban solid waste planning unit; (vi) a representative of a rural local government with experience in land-use planning; (vii) a representative of an urban local government with experience in land-use planning; (viii) a representative of the Virginia Trucking Association; and (ix) a representative of an environmental advocacy group focusing on the management and recycling of solid waste. If the Director of the Department determines that certain additional members would contribute to the deliberations of the Task Force, he may allow participation of additional members who shall be nonvoting members and shall not be counted for purposes of a quorum.*

C. *That in addition to those topics of study identified in SJ 42 (2020), the Task Force shall (i) further study available options to divert from landfills in the Commonwealth food residuals, organic waste, and baseline recyclables; (ii) conduct a meta-analysis or systematic review of the policies, legislation, practices, and programs proposed and implemented by other states and draw upon such programs in considering recommendations for waste diversion policies; (iii) examine Virginia's status as a prime destination for out-of-state trash and explore ways in which waste from other states can be diverted from Virginia's landfills; (iv) assess the landfill, hazardous waste, and recycling facilities needed to manage toxic materials generated by electric vehicle and electric grid backup battery waste; and (v) investigate the role of a composting and food donation infrastructure in reducing the volume of waste that is accepted by landfills, including upgrading and refining existing food donation infrastructure, identifying food material and organic waste generators and haulers, comparing the use of in-house composting with regional composting hubs, studying the ideal distance between composting hubs and waste generators, considering the permitting of composting hubs, and exploring markets and systems for composting services and anaerobic digestion.*

D. *That in developing its recommendations, the Task Force shall take guidance from the U.S. Environmental Protection Agency's Sustainable Materials Management Program Strategic Plan.*

E. *That the Task Force shall hold its first meeting of the 2021 interim no later than October 15, 2021, and shall publish an executive summary and a report of its findings and recommendations no later than November 1, 2022.*

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SB1319ER

## Attachment 5

Presentation slides



## Legislative Mandate & Goals

### Waste Diversion & Recycling Task Force

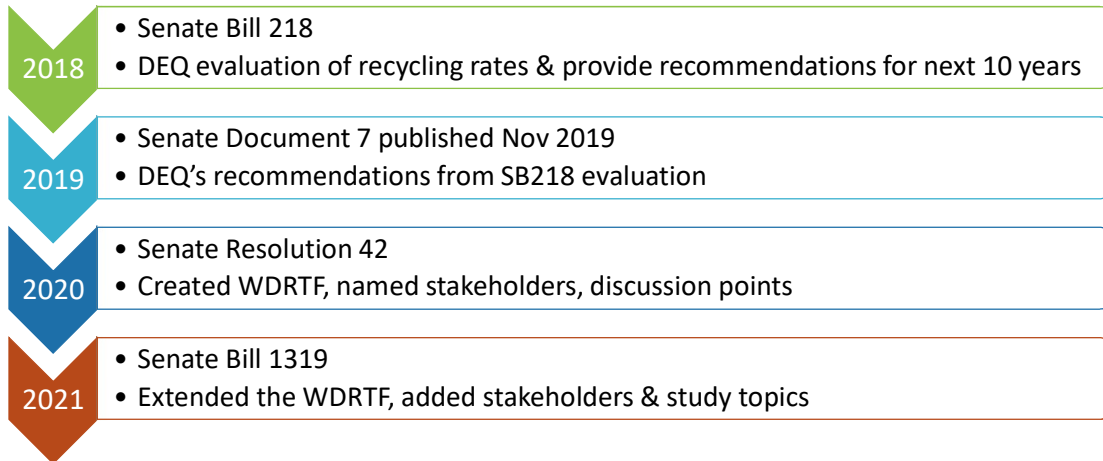
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Kathryn J. Perszyk  
Director, Land Protection & Revitalization Division  
Virginia Department of Environmental Quality  
October 8, 2021

### WDRTF = Public Body

- All meetings of the group are public meetings, subject to FOIA
- TF goal is to reach a *consensus* on recommendations
- *Consensus* is defined as a willingness of each member of a group to be able to say that he or she can live with the decisions reached and will not actively work against them outside of the process

## How'd we get here?



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DEQ

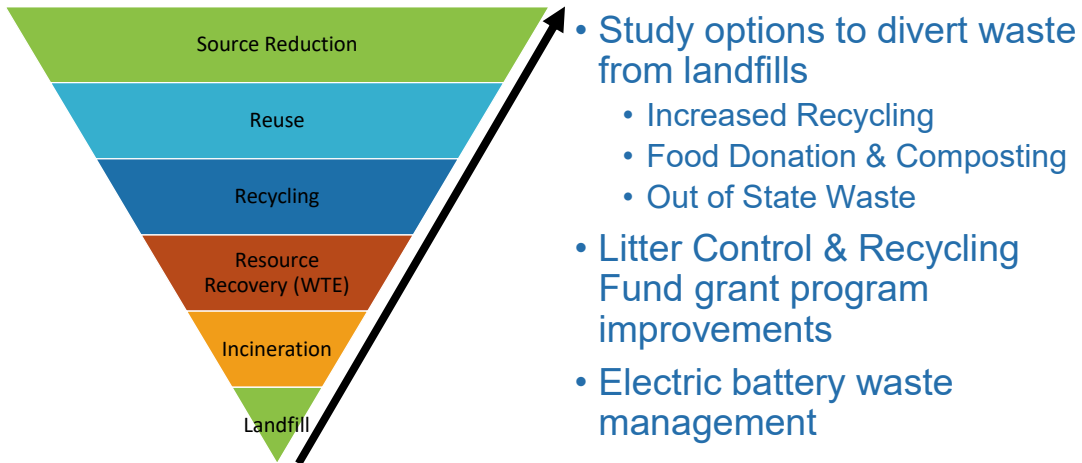
## Senate Document 7: Recycling in Virginia: An Evaluation of Recycling Rates and Recommendations

- Creation of a Waste Diversion & Recycling Task Force
- Suggested Economic Incentives
  - Direct economic funding to recycling & beneficiation facilities
  - Increase resources for local recycling programs & recycling efforts
  - Resources to support recycling initiatives at the state level

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DEQ

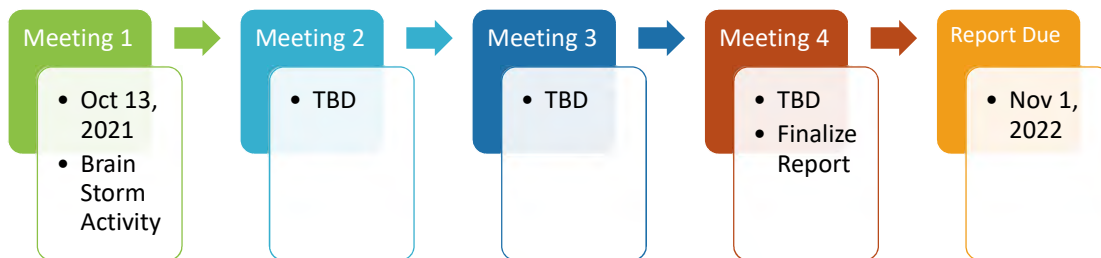
## Waste Diversion & Recycling Task Force



6

DEQ

## Waste Diversion & Recycling Task Force Timeline



7

DEQ



## Other Waste Related Activities

- Plastic Waste Prevention Advisory Council (PWPAC)
  - Eliminate plastic waste impacting native species
  - Contribute to achieving plastics packaging circular economy industry standards
  - Report Due Nov 1, 2021
- Executive Order 77
  - Eliminate single-use plastics at state agencies, colleges & universities
  - July 1, 2021 cessation of buying, selling, or distribution of plastic bags, single-use plastic and polystyrene food service containers, plastic straws and cutlery, and single-use plastic water bottles
  - Overall waste reduction effort

8

DEQ

## HB1902 Polystyrene Food Service Container Ban



Shutterstock

- Certain chains - July 1, 2023
- All food vendors – July 1, 2025
- Up to \$50/day civil penalty
- Litter Control & Recycling Fund
- Public information campaigns

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DEQ

## HB1801 Litter Fine Increase

**\$500 FINE**



Daily Express



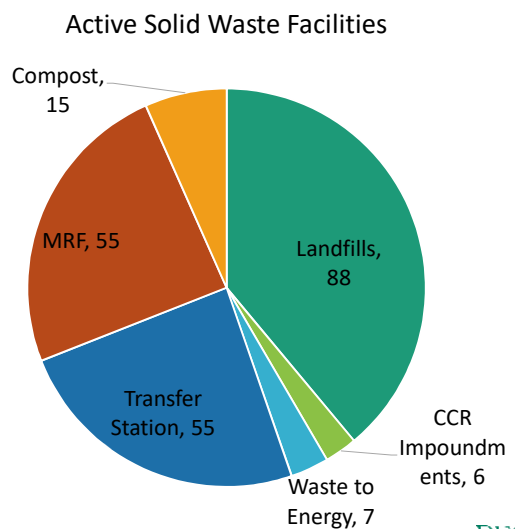
Salisbury Post

10



## Waste Management in Virginia

- 71 Solid Waste Planning Units
  - Solid Waste Management Planning (20yr)
  - Recycling Rate Reporting / Action Plans
  
- Mix of Solid Waste Owners & Operators
  - Locally owned/operated facilities
  - Authority owned/operated
  - Locally or Authority owned / Privately operation
  - Privately owned/operated (host agreements)
  
- 25% waste received from out of state



11



## Statutory Permit Exemption for Recycling

- 10.1-1408.1 J
- No permit shall be required pursuant to this section for recycling or for temporary storage incidental to recycling.
- As used in this subsection, "recycling" means any process whereby material which would otherwise be solid waste is used or reused, or prepared for use or reuse, as an ingredient in an industrial process to make a product, or as an effective substitute for a commercial product.

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DEQ

## Regulatory Exemption for Recycling

- 9VAC20-81-95.F.
- The following solid wastes are exempt from this chapter provided that they are reclaimed or temporarily stored incidentally to reclamation, are not accumulated speculatively, and are managed without creating an open dump, hazard, or a public nuisance:
  1. Paper and paper products;
  2. Clean wood waste that is to undergo size reduction in order to produce a saleable product, such as mulch;
  3. Cloth;
  4. Glass;
  5. Plastics;
  6. Tire chips, tire shred, ground rubber; and
  7. Mixtures of above materials only. Such mixtures may include scrap metals excluded from regulation in accordance with the provisions of subsection C of this section.

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DEQ

## SB1164 Advanced Recycling

Manufacturing process for conversion of post-use polymers & recovered feedstocks into basic hydrocarbon raw materials & other materials



Ayuterd/Adobe Stock

Pyrolysis

Gasification

Depolymerization

Solvolyis

### Post-use polymers & recovered feedstocks:

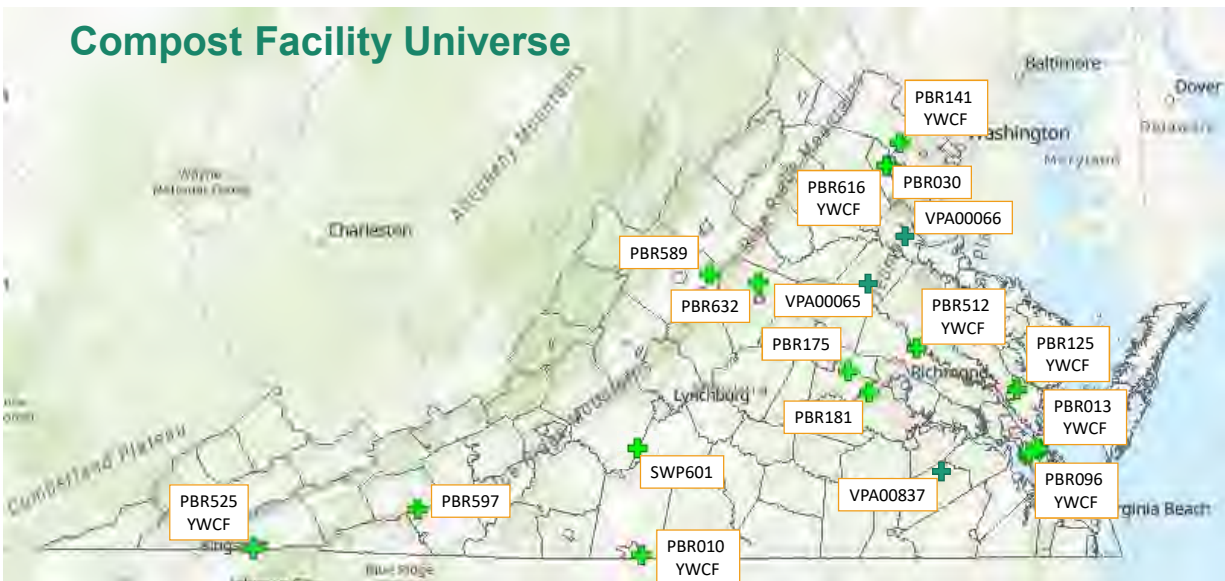
- Do not include (& are not mixed with) unprocessed MSW
- Are not considered SW when processed through advanced recycling



14



## Compost Facility Universe



15



## GUIDELINES FOR DISCUSSIONS

1. Listen actively with an open mind.
2. Speak from your own experience instead of generalizing.
3. Be respectful and focus on the issue or the idea, not the speaker. Refrain from personal attacks.
4. Be concise and speak only once on a particular issue. Weigh in with new or different information to share *after* everyone else has had an opportunity to speak.
5. Simply note your agreement with what someone else has said if you feel that it is important to do so; it is not necessary to *repeat* it.
6. Present options or alternatives at the same time you present the problems you see.
7. Be courteous and speak one at a time; interruptions and side conversations are distracting and disrespectful to the speaker. "Caucus" or private conversations between a group member and an audience member may take place during breaks or at lunch, not during the work of the group and be mindful that this is an open public meeting.
8. Come prepared.
9. Turn off all devices.
10. Stay positive; a negative attitude hinders the group's ability to reach agreement.

Attachment 7

Task Force Member List (revised)

## Task Force Member List

<b>Organization</b>	<b>Member</b>	<b>Alternate</b>
Wise County	Michael Hatfield	Bill Dingus
City of Virginia Beach	Kristi Rines	None
Virginia Waste Industries Association	Tad Phillips	None
Virginia Beer Wholesalers Association	Robbie Pecht	None
Virginia Beverage Association	Morgan Guthridge	None
Virginia Petroleum and Convenience Marketers Association	Mike O'Connor	None
Westrock	James (Jim) Taylor	None
O. I. Glass	Brian Sernulka	None
Virginia Recycling Association	Joe Benedetto III	None
Virginia Municipal League	Mitchell Smiley	None
Virginia Association of Counties (VACo)	Chris McDonald	None
Northern VA Regional Commission	Debbie Spiliotopoulos	Scott Macdonald
Hampton Roads Planning District Commission	John Harbin	None
Coker Composting	Craig Coker	None
Landfill Advisory Board Prince William County	James Gestrich	None
Community Member	Rob Laurent	None
Virginia Tech	Greg Evanylo	None
James Madison University	Jared Stoltzfus	None
Tazewell County	Kenneth Dunford	None
SWANA/Central VA Waste Management Assoc. (CVWMA)	Kim Hynes	None
Charles City County	Rhonda L. Russell	None
City of Alexandria	Helen Lee	None
Virginia Trucking Association	Dale Bennett	None
Virginia Bottle Bill Organization	Rick Galliher	Scott Peterson
Virginia Council on Environmental Justice	Tom Benevento	None

## Attachment 8

### Litter Grant Program Summary





## LITTER GRANT PROGRAM

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DEQ awards non-competitive and competitive grants to Virginia localities for local litter prevention and recycling program implementation activities.

### **Non-Competitive Litter Grants:**

Since 1980, non-competitive litter grants have been awarded annually to localities for litter prevention and recycling program implementation, continuation and/or expansion. The grant program awards are based on population and road miles. All Virginia localities are eligible if they have eligible litter prevention and/or recycling program. The grant applications are due to DEQ by June 30<sup>th</sup> each year. The accounting and performance reports for the grant awarded in the preceding year are due by August 1<sup>st</sup> each year.

An eligible program must include at least two of the following elements to have a comprehensive program:

- planning and organization,
- recycling,
- youth education,
- cleanups,
- law enforcement,
- public communication,
- Adopt-A locality-sponsored programs.

To date, Virginia businesses, who pay into the Litter Control and Recycling Fund, have contributed over \$67 million to support those local government litter control and recycling programs. The amount of funds available for this grant program is approximately 90% of the net resources allocated for the Litter Fund. This grant funding is to be used primarily for educational activities that support anti-littering and pro-recycling efforts. Towns usually receive the smallest grant amount in an approximate range of \$800 to \$1,000.

For the 2021 grant year (same as fiscal year), \$1,708,156 was disbursed among 187 applicants.

### **Competitive Litter Grants:**

Since 2017, competitive litter grants have been awarded to Virginia localities for a variety of litter prevention and recycling projects. All localities currently receiving the non-competitive litter grant are eligible to apply for the competitive litter grant. The competitive grant funds can be used for developing and implementing statewide and regional litter prevention and recycling educational programs and special/pilot projects. The competitive grant applications are due to DEQ by July 15<sup>th</sup> each year. The accounting and performance reports for the grants awarded in the preceding year are due by August 1<sup>st</sup> each year. The grant applications are reviewed by the Litter Control and Fund Advisory Board and the recommendations are submitted to DEQ for final approval.

The amount of funds available for this grant program is approximately 5% of the net resources allocated for the Litter Fund. For the 2021 grant year, \$95,035 was disbursed among 13 localities.

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

**DEQ Summary Report:**

DEQ provides an annual summary report on the litter grant to the public and stakeholders. This report summarizes the litter prevention and recycling program expenses and activities conducted in the previous fiscal year by the local government recipients of the annual litter and recycling grants.

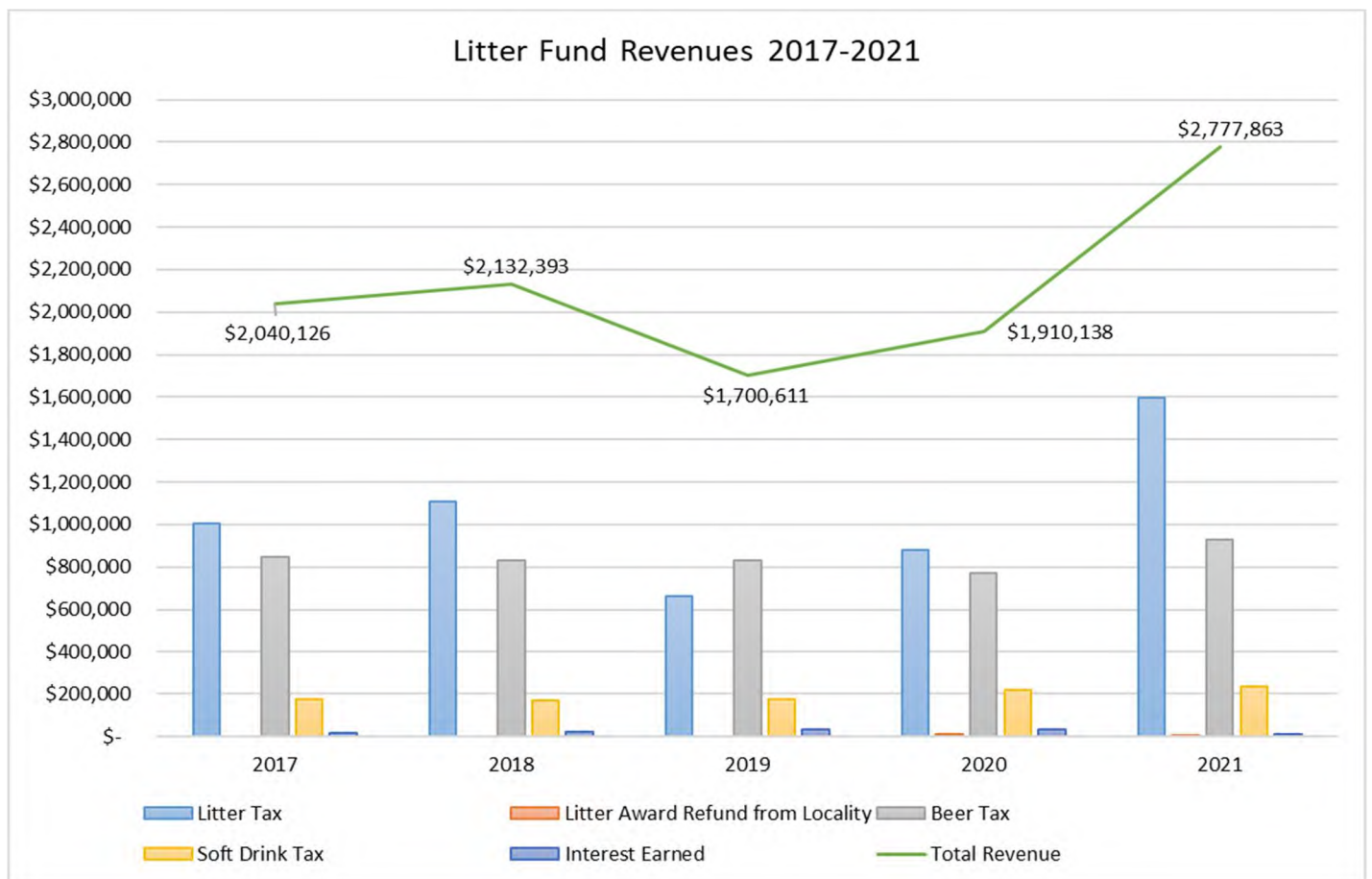
**Litter Control and Fund Advisory Board:**

The Litter Control and Fund Advisory Board is appointed by the Governor and consists of five members as follows: one representative for each of the three types of entities required to pay the litter taxes, one local litter or recycling coordinator and one member from the general public. The Litter Control and Fund Board meets annually to track the status of the Fund and the progress of the annual grant programs.

**Litter Control and Recycling Fund & Changes:**

The Code of Virginia provides for the following annual litter taxes to be collected and deposited in an interest earning account - the Litter Control and Recycling Trust Fund (Fund). Figure 1 below shows the litter fund revenues from 2017 to 2021.

**Figure 1: Litter Fund Revenues from 2017 and 2021**



**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

The 2021 General Assembly made changes to the [statute](#) and added a requirement for operation of public information campaigns to discourage the sale and use of expanded polystyrene products and to promote alternatives to expanded polystyrene. Also, statutory changes were made to fund the public information campaign by allowing use of litter funds up to a maximum of five percent.

- **Litter Control and Recycling Fund (Section 10.1-1422.01)** - Provides formula for allocation of funds, amended by legislation in 2008 and effective July 1, 2009.
- **Litter Tax (Section 58.1-1707)** - \$20 per year for each location of manufacturers, wholesalers, distributors or retailers of consumer products and an additional \$30 per year, per location where groceries, soft drinks and beer are sold.
- **Excise Tax on Soft Drinks (Section 58.1-1702)** - A gross-receipts tax on wholesalers.
- **Excise Tax on Beer and Wine Coolers (Section 4.1-235 & 4.1-236)** - 2% of the taxes collected go to the Fund.

#### **Information Links:**

- Litter Grant Online Application: <https://portal.deq.virginia.gov/>
- Statute: <https://law.lis.virginia.gov/vacode/title10.1/chapter14/section10.1-1422.01/>
- DEQ Litter Grant Guidelines:  
[https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\440\GDoc\\_DEQ\\_2282\\_v5.pdf](https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\440\GDoc_DEQ_2282_v5.pdf)
- GY2020 Annual Performance and Accounting Summary Report available at:  
<https://www.deq.virginia.gov/home/showpublisheddocument/8257/637680040846072667>

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

## Attachment 9

### SWIA Program Summary



## SOLID WASTE INFORMATION AND ASSESSMENT (SWIA) PROGRAM

Since 1998, permitted solid waste facilities (“Facilities”) have been required to report annually to DEQ the amount of solid waste they managed (treat, store, or dispose of), by weight or volume, at their facility during the previous calendar year. This reporting requirement is known as the Solid Waste Information and Assessment (SWIA) program. The report is due by March 31<sup>st</sup> of each year. As of 2002, these Facilities have also been required to report their available capacity and the expected life of the facility.

Per the Solid Waste Management Facility Permit Action Fees and Annual Fees regulations (9VAC20-90), all Facilities active or in post-closure care are subject to annual fees. The tonnage provided through SWIA reporting is used for calculating the annual fee for landfills and waste to energy facilities.

The following solid waste categories are to be identified in the report:

- municipal solid waste,
- construction and demolition debris,
- industrial waste,
- regulated medical waste,
- vegetative and yard waste,
- incinerator ash,
- sludge,
- tires,
- white goods,
- friable asbestos,
- petroleum-contaminated soil and
- other special waste.

The Facilities are also required to provide data on each of the following methods of waste management:

- recycled onsite,
- composted onsite,
- landfilled onsite,
- incinerated onsite,
- sent offsite to be recycled,
- sent offsite to be treated, stored or disposed,
- stored onsite at the beginning of the reporting period,
- stored onsite at the end of the reporting period, mulched and
- other.

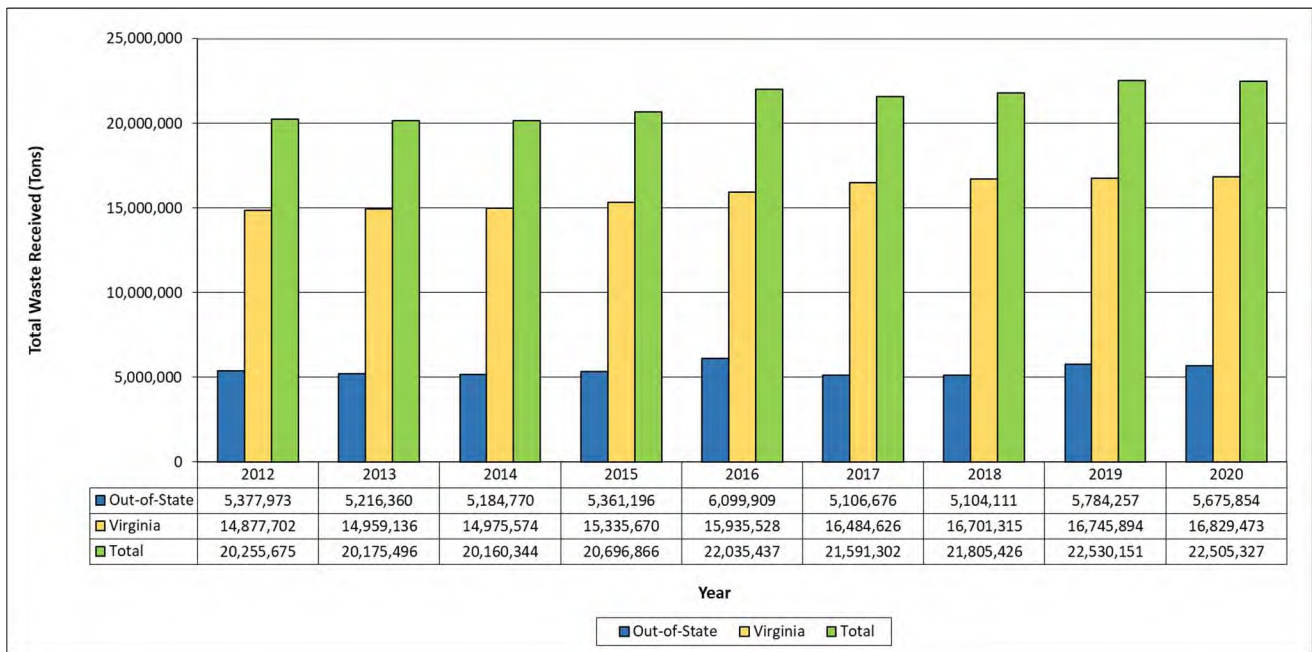
**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

For Calendar Year 2020 (CY2020), two-hundred and one (201) Facilities provided information on their activities. The reports summarize the following:

- 22,505,326.75 tons of solid waste received. Of this total, 16,829,472.76 tons (75%) originated in Virginia and 5,675,853.99 tons (25%) originated from other states.
- Municipal Solid Waste (MSW) constituted 14,321,452.83 tons of the total. Of this total, 10,251,111.06 tons (72%) originated in Virginia and 4,070,341.77 tons (28%) originated from other states.
- Five (5) states accounted for 97.20% of all waste received from out-of-state sources:
  - Maryland (42.72%); New York (16.71%); New Jersey (16.47%); Washington, D.C. (15.14%); and North Carolina (6.16%). See Figure 1 attached for the total waste received from both Virginia and out-of-state over the last nine years.
- Facilities reported that 8.67% of the total waste they managed was diverted from disposal by recycling or mulching.
- Facilities composted 1.10% of the total waste managed.

Most recycling occurs at facilities other than permitted waste management facilities. Local governments provide more complete information on the recycling of waste generated in Virginia in the recycling rate reports submitted to DEQ.

**Figure 1: Total Waste Received from In and Out of State (in Tons):**



**Information Links:**

- VA Regulations: <https://law.lis.virginia.gov/admincode/title9/agency20/chapter81/section80/>
- SWIA Online Application: <https://portal.deq.virginia.gov/>
- CY2020 Annual Solid Waste Report: <https://www.deq.virginia.gov/home/showpublisheddocument/9500/637593571415570000>

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

## Attachment 10

### Recycling Program Summary



## RECYCLING PROGRAM

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The Department of Environmental Quality's (DEQ) recycling program works closely with local governments and solid waste planning units to ensure that locality-based recycling programs are able to meet or exceed the state's mandated recycling rates. DEQ provides guidance on recycling topics and programs, tracks and reports on Virginia's recycling efforts, and works with businesses, localities, other state agencies and environmental groups to promote environmental awareness through recycling.

DEQ works with interested parties from the public and private sectors to identify opportunities to strengthen the state's recycling infrastructures and also encourages citizens to follow the waste management hierarchy and engage in recycling. DEQ also works with the public and regulated community on pollution prevention for reducing, eliminating or even better, *stopping* pollution before it's created, recycled or disposed.

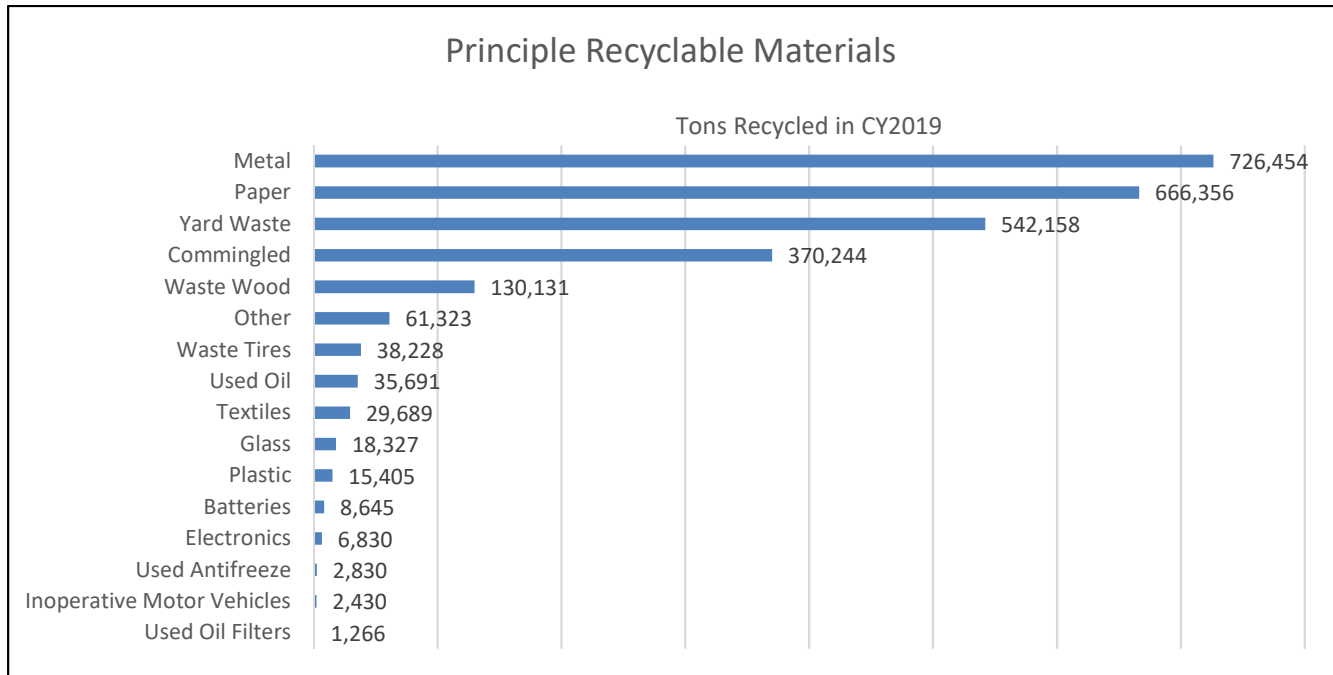
The Virginia General Assembly passed [legislation](#) in 1986 requiring localities (e.g. Solid Waste Planning Units, or SWPUs) to meet the mandated recycling rates and also provides incentives in form of a state income tax credit to facilities for the purchase of machinery and equipment processing recyclable materials. In 1989, the Virginia General Assembly adopted legislation that established a 25 percent recycling rate target for communities, which was modified in 2006 when the General Assembly established a two-tiered recycling mandate of 15 percent and 25 percent (effective July 1, 2006). In 2012, additional Legislative action resulted in the elimination of the annual reporting requirement for SWPUs with populations of 100,000 or less after 2012. Instead, those SWPUs are required to report every four years, beginning with 2016. All SWPUs with populations over 100,000 are required to report annually.

Currently, Virginia has 71 planning units that are required to submit their recycling data to DEQ. Every year, DEQ publishes an annual summary recycling report that provides details on recycling conducted by each solid waste planning unit along with a state recycling rate calculation based on the data provided by these planning units. Virginia's calculated recycling rate for CY2019 was 43.2%, which included credits for solid waste reused, non-municipal solid waste recycled, recycling residues and source reduction programs. This calculated rate was derived from the recycling rate data submitted by 17 Virginia SWPUs to DEQ as required by regulation. However, DEQ received recycling reports voluntarily from 25 additional planning units. Historically, most of the highest recycling program rates were in the urban areas of Virginia. Figure 1 below shows the amount of principle recyclable materials recycled by the localities. The annual recycling report for calendar year 2020 will be issued later this year. Some localities have expressed challenges collecting data from businesses located in their planning unit.

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.



**Figure 1: CY2019 Principle Recyclable Materials Recycled Tonnage**



**Recent Reports - Senate Bill 218:**

Senate Bill 218 was adopted by the 2018 General Assembly and directed the Department to provide an evaluation of recycling rates and recommendations for improving the reliability of the supply of recycled materials during the next 10 years in order to provide for beneficial use by industry. As part of this effort, DEQ reached out to solid waste planning units, locality recycling coordinators, recycling organizations and other stakeholders to provide input. This report was due to the General Assembly by November 1, 2019. A link to the published report is provided below as the last link.

**Information Links:**

- Statute: <https://law.lis.virginia.gov/vacode/10.1-1411/>
- VA Recycling Requirements: <https://law.lis.virginia.gov/admincode/title9/agency20/chapter130/section125/>
- VA Recycling Date Reporting Requirements: <https://law.lis.virginia.gov/admincode/title9/agency20/chapter130/section165/>
- Recycling Rate Reporting Form (DEQ Form 50-30): <https://www.deq.virginia.gov/home/showpublisheddocument/4988/637485727027000000>
- CY2019 Annual Recycling Summary Report: <https://www.deq.virginia.gov/home/showpublisheddocument/5524/637503709360970000>
- SB218 Report: <https://rga.lis.virginia.gov/Published/2019/SD7>

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

Attachment 11

Composting Program Summary



## SOLID WASTE COMPOSTING OPERATIONS

The Virginia Waste Management Act (§10.1-1408.1 K & L) has long required that the Board, in establishing its solid waste management regulations, provide for reasonable exemptions from permitting requirements, both procedural and substantive, in order to encourage the development of yard waste composting facilities and facilities for the decomposition of vegetative waste. These exemptions were originally promulgated in separate yard waste composting regulations in 1992 (VR672-20-32), revised and recodified over time (9VAC20-100, 9VAC20-101), and subsequently incorporated into the Solid Waste Regulations in 2011. The current regulations provide permitting exemptions for the following composting activities:

- Composting of sewage sludge at the sewage treatment plant of generation without addition of other types of solid wastes.
- Composting of household waste generated at a residence and composted at the site of generation.
- Composting activities performed for educational purposes as long as no more than 100 cubic yards of materials are onsite at any time. Greater quantities require DEQ approval.
- Composting of animal carcasses onsite at the farm of generation.
- Composting of vegetative waste or yard waste generated onsite by owners or operators of agricultural operations or owners of the real property or those authorized by the owners of the real property with conditions.
- Composting of yard waste by owners or operators (includes agricultural operations) who accept yard waste generated offsite provided the requirements of 9VAC20-81-397 B are met. Requires registration.
- Composting of preconsumer food waste and kitchen culls generated onsite and composted in containers designed to prohibit vector attraction and prevent nuisance odor generation.
- Vermicomposting, when used to process Category I, Category II, or Category III feedstocks in containers designed to prohibit vector attraction and prevent nuisance odor generation. If offsite feedstocks are received no more than 100 cubic yards of materials may be onsite at any one time. Greater quantities require DEQ approval.
- Composting of sewage sludge or combinations of sewage sludge with nonhazardous solid waste provided the composting facility is permitted under the requirements of a Virginia Pollution Abatement (VPA) or VPDES permit.

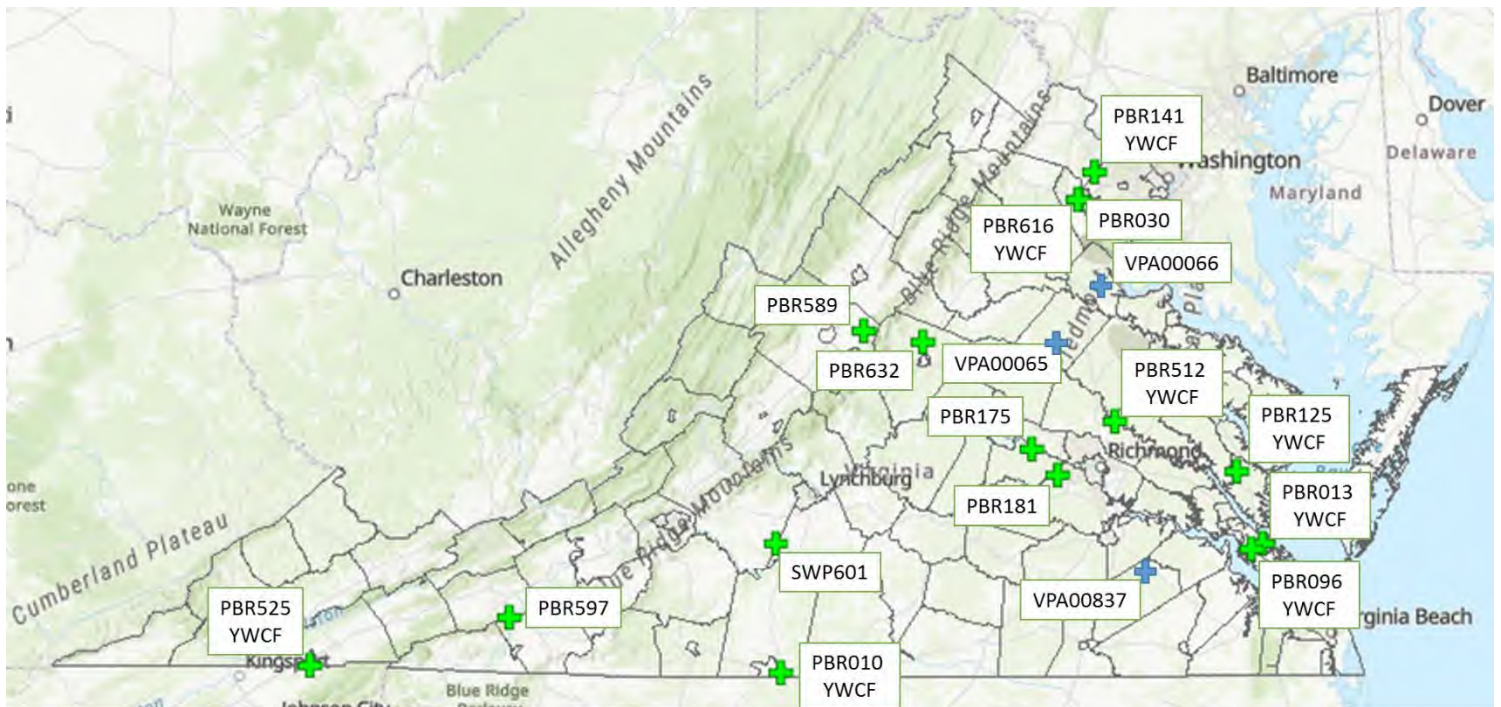
All other compost activities are required to obtain a solid waste permit. A Permit-by-Rule is available in lieu of a full solid waste permit. The compost facility must meet the regulatory siting, design, operation, finished product testing, and closure standards outlined in Part IV of the VSWMR, maintain financial assurance, and have a certified waste management facility operator.

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

**Figure 1: Solid Waste Permitted Universe #s**

Permit ID	Facility Name	Unit Subtype	Facility Size (acres)	Process Rate (tpd)	Waste Storage Capacity
PBR010	Danville City of - Yard Waste Composting Facility	Feedstock Category I	3	35	
PBR013	VPPSA -Compost Facility	Feedstock Category I			
PBR096	Newport News City - Yard Waste Compost Fac	Feedstock Category I	29		
PBR125	Middle Peninsula Landfill and Recycling Facility	Feedstock Category I	1		4500 cy
PBR141	Loudoun Composting	Feedstock Category I	25	123	
PBR512	Hanover County - 301 Solid Waste Facility	Feedstock Category I	3	5	1900 tons
PBR525	Bristol Integrated Solid Waste Management Facility	Feedstock Category I	2		
PBR616	Commonwealth Recycled Aggregates Inc	Feedstock Category I	15	600	35000 cy
PBR030	Prince William County - Balls Ford Yard Waste	Feedstock Category II-IV	15	368	
PBR175	DOC Powhatan Correctional Center	Feedstock Category II-IV			1 ton
PBR181	Watkins Nurseries Inc	Feedstock Category II-IV	6	24	
PBR589	Black Bear Composting	Feedstock Category II-IV	47		
PBR597	Commonwealth Compost and Recycling Services Inc	Feedstock Category II-IV		5	
PBR632	Panorama Paydirt	Feedstock Category II-IV	20	150	20 cy
SWP601	Royal Oak Farm Solid Waste Composting Facility	Feedstock Category II-IV	17	516	36948 cy

**Figure 2: Compost Facilities GIS Map**



**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

## Meeting Minutes

Waste Diversion and Recycling Task Force  
DEQ Central Office, Third Floor Conference Room  
1111 East Main Street, Richmond, Virginia  
Tuesday, March 15, 2022

Members Present: Michael Hatfield, Kristi Rines, Tad Phillips, Robbie Pecht, Morgan Guthridge, Mike O'Connor, Jim Taylor, Brian Sernulka, Joe Benedetto, Joe Lerch, Debbie Spiliotopoulos, John Harbin, Craig Coker, Rob Laurent, Greg Evanylo, Jared Stoltzfus, Kenneth Dunford, Kim Hynes, Helen Lee, and Rick Galliher.

Members Absent: Mitchell Smiley, James Gestrinch, Rhonda Russell, Dale Bennett, and Tom Benevento.

Other Attendees: Andrew Payton (alternate for Tom Benevento), Mike Smaha, Marshall Hall, and Kathryn Paxton.

DEQ Staff Attendees: Kathryn Perszyk, Craig Nicol, Sanjay Thirunagari, Gary Graham, Melinda Woodruff, Meghann Quinn, and Sharon Baxter.

The meeting convened at 10:02 a.m. The meeting adjourned at 3:54 p.m.  
A quorum of the task force members (or their alternates) was present for this meeting.

1. **Welcome, Group Reminders** [Craig Nicol, Kathryn Perszyk, DEQ].
  - a. The draft meeting agenda (Attachment 1), a revised Task Force Member List (Attachment 2), and the following links had been sent to the members prior to the meeting:
    - [HB647 \(2022\) Packaging Stewardship Program and Fund; Stewardship Advisory Committee; established](#)
    - [HB709 \(2022\) Packaging Stewardship Program and Fund; established](#) (identical to HB918)
    - [HB918 \(2022\) Packaging Stewardship Program and Fund; established](#) (identical to HB709)
    - [HB826 \(2022\) Beverage container deposit and redemption program; established; civil and criminal penalties](#)
    - [ReFED's Policy Finder Tool](#)
  - b. Mr. Nicol and Ms. Perszyk reviewed the meeting agenda and presented a meeting introduction (Attachment 3) that:
    - i. Reminded members of the responsibilities of participating in a public body subject to FOIA,
    - ii. Reviewed the consensus process in the context of Task Force decision-making, and
    - iii. Reminded members that DEQ must report the Task Force recommendations to the General Assembly by November 1, 2022.

2. **Overview Bottle Bill State Programs, Q&A** [Mike Smaha, Can Manufacturers Institute]. Mr. Smaha provided a presentation (Attachment 4), and a handout (Attachment 5) in support of the presentation, that reviewed the bottle bill program proposal for Virginia HB 826 and provided the status of bottle bill programs in other states, the types and advantages of various bottle bill programs, the potential cost savings for municipalities, the higher recycling targets possible with bottle bill programs (up to 90%), and the bottle bill program stakeholders. Discussion after the presentation centered on the potential for grants; the success of the Oregon bottle bill; the benefits, impacts, and disadvantages of the bottle bills on local recycling programs and existing material recovery facilities; and concerns about capital costs, space conflicts at seller collecting centers, and the potential for undermining the financial basis for local recycling programs.
  
3. **Plastic Waste Pollution Advisory Council** [Meghann Quinn, DEQ]. Ms. Quinn provided a presentation (Attachment 6) that introduced the Plastic Waste Prevention Advisory Council, discussed its purpose, reported on the council's 2021 recommendations to the Governor, and outlined the Council's priorities for 2022. The presentation also briefly mentioned the circular economy concept, some beverage container deposit and return programs, and planned topics for future Council meetings. Discussion after the presentation centered on getting updates for the Council's 2021 recommendations for an expanded polystyrene packaging ban and disposable plastic bag tax. The members also briefly discussed expanding the container recycling fees to products that are not recyclable, the fact that deposit programs function better for beverage containers than other types of recycling, the fact that collection programs work better in more densely populated areas, and concerns that collection programs place an undue burden on more rural areas.
  
4. **Facilitated Discussion & Group Recommendations** [Craig Nicol, Kathryn Perszyk, DEQ].
  - a. Discussions:
    - i. Extended Producer Responsibility (EPR) programs have advantages in removing burden from localities, improving waste stream quality, using the same trucks to deliver product and remove waste, and locating pickup locations where they gather the most waste.
    - ii. Rural communities bear an undue burden under bottle bills and recycling programs. What can be done to minimize this burden? Focus on urban areas. A bottle bill might include reverse vending machines in rural areas even though the return is smaller there.
    - iii. Locating collection facilities nearer users has mixed reviews. Use of parking lots for collection limits parking; point-of-use collection may improve collection in rural areas; dumpster hygiene and runoff are of concern for residential collection boxes; thinking more holistically about point-of-use collection may have benefits for both rural and urban areas; and concentrating on beverage container collection at point-of-sale/point-of-use locations would be best for roadside litter prevention.

- iv. Is a bottle bill program too narrow? Should it be a container program instead?
- v. Do bottle bill programs and EPR programs conflict? A container collection program can morph into an EPR program without a deposit program.
- vi. Do locality-run recycling programs conflict with EPR and deposit programs? Local recycling programs take a financial hit if they co-exist with purer waste stream operations like purple can clubs and EPRs.
- vii. Crushing of containers inhibits success of deposit program collections because the label on the container must remain visible. Time and education can fix this.

b. **Test for consensus.** Proposal: Does the Task Force support a recommendation in the final report for a beverage container deposit/redemption program (e.g. a Bottle Bill program)? **No Consensus achieved.** Concerns that remain include:

- i. A beverage container deposit/redemption program will hurt the more general curbside recycling programs.
- ii. It is unknown whether the current political climate will support such a proposal.
- iii. Such redemption programs are expensive and inefficient.
- iv. Would rather strengthen existing collection programs.
- v. There are sanitation and food safety issues associated with redemption collection.
- vi. Possibility of abuse by redeeming containers brought in from out of state.
- vii. Different container materials (glass, plastic, cans) have different market values. Redemption programs equalize the value of all collected materials without regard to the real market value of the materials.
- viii. Collection costs are still an undue burden in rural areas.
- ix. Redemption programs strip local recycling programs of the most valuable materials, reducing the recycling revenue necessary to run those more general programs.
- x. Generally, there are too many unknowns about these impacts for localities to endorse the proposal.
- xi. The Task Force has no representation from metal recyclers and needs their input.
- xii. There may be consensus if proposals are separated out by material.

5. **Policies tied to Food Recovery Hierarchy, Q&A** [Samantha Goerger, ReFED]. Ms. Goerger presented a number of policies designed to reduce food waste, including (among others) the 2-label system (i.e., separate quality/safety dates), liability protections, tax incentives (credits, not deductions), recycling for animal feedstock, and organic waste bans (see Attachment 7). Further resources for case studies, data, models, etc. were provided.

6. **EPA Food Waste Resources, Food Waste work in Region 3** [Melissa Pennington, EPA R3]. Ms. Pennington presented an overview of EPA's program for keeping food waste out of

landfills. She emphasized that meeting EPA's waste recycling rate goals (50% by 2030) will be difficult without building additional capacity for organics recycling. Preventing food waste and food waste recycling will be necessary to meet those goals (see Attachment 8).

EPA's recommendations include:

- a. Make food waste a Principle Recyclable Material (PRM) through policy interpretation or changes to 9VAC20-130.
- b. Require compost facilities to be operated by state-licensed operators.
- c. Ban yard waste from being accepted at landfills.
- d. Upgrade existing yard waste composting facilities to accept food waste.
- e. Take advantage of new EPA grant programs.

7. **Facilitated Discussion & Group Recommendations** [Craig Nicol, Kathryn Perszyk].

Discussion points include:

- a. Banning organics from landfills. Generators of more than 2 tons of food waste per week to go to organic recycling and not to landfill, if there is a facility within 25 miles regardless of whether a business or municipality
- b. Making necessary changes so that food waste is included as PRM and can be included in the locality's recycling rate. As an alternative, use Director discretion to include food waste as PRM.
- c. Mandating the composting of food waste.
- d. Clarifying solid waste definitions.
- e. Breaking out a separate category for food waste on the SWIA report for composting facilities.
- f. Facilitating the use of food waste/scrap for use as swine feedstock.
- g. Requiring composting of construction site clearing and road clearing waste, and possibly requiring that the compost to be used for rebuilding the soil profile at construction sites which will also improve water quality run-off.
- h. Hiring a DEQ organics coordinator to review priorities and the need for locating new composting facilities.
- i. Including the management of organics in the agency's strategic planning.
- j. Reviewing composting exemptions for clarity, and add more exemptions for agricultural operations.
- k. Removing barriers to food donations by developing infrastructure with Virginia Department of Health and providing liability protections (such as HB1249).
- l. **Test for consensus.** Proposal: Remove barriers to feeding people and feeding animals while maintaining health and safety. **Consensus achieved.**

8. **Topic Priority, Next Steps, Future Meetings** [Craig Nicol, Kathryn Perszyk]. Ms. Perszyk presented the topic priorities selected by members from the brainstorming session in Meeting 1 (see Attachment 9).

- a. Next Steps:
  - i. Start assembling the tools for writing the DEQ report to the General Assembly. DEQ will generate a template. Craig Coker and Jared Stoltzfus volunteered to assist with the writing and editing. Include hurdles and



challenges in the report. Members proposed getting the Farm Bureau, VDACS, and VDOT reactions and thoughts on the Task Force topics before finalizing recommendations.

- ii. Focus on infrastructure and development – what changes need to happen to expand capabilities with the new grant money discussed in the EPA presentation.
- b. Next Meeting:
- i. Feedback from the Litter Board is requested, noting that resources at the Litter Board are limited.
  - ii. More information on extended producer responsibility (ERP) is requested at the next meeting (more than just the Bottle Bill presentation).
  - iii. Discuss more of the priority items in Attachment 9.
  - iv. Possible dates for the next meeting include Wednesday, April 27 and Tuesday, May 10. Once DEQ settles on potential dates, they will be distributed as a Doodle Poll to members.

Attachments:

1. Agenda.
2. Task Force Member List (revised)
3. Introduction Presentation
4. Bottle Bill Presentation
5. Bottle Bill Handout
6. Plastic Waste Pollution Advisory Council Presentation
7. Policies Tied to Food Recovery Hierarchy Presentation
8. EPA Food Waste Resources, Food Waste work in Region 3 Presentation
9. Priority Ranking Slides

Attachment 1

**WASTE DIVERSION AND RECYCLING TASK FORCE**  
**Bank of America Building 3<sup>rd</sup> Floor Conference Room**  
**1111 East Main Street, Richmond, Virginia**

**March 15, 2022**

**10:00**      **Welcome, Group Reminders**  
Kathryn Perszyk / Craig Nicol

**AM Focus: Packaging Stewardship & Bottle Bills**

**10:15**      **Overview Bottle Bill State Programs, Q&A**  
Mike Smaha, Can Manufacturers Institute

**10:45**      **Plastic Waste Pollution Advisory Council**  
Meghann Quinn, DEQ

**11:00**      **Facilitated Discussion & Group Recommendations**  
Craig Nicol / Janet Weyland

**12:00**      **LUNCH BREAK (on your own)**

**PM Focus: Policy Options to Target Food Waste Diversion**

**1:30**      **Policies tied to Food Recovery Hierarchy, Q&A**  
Samantha Goerger, ReFED (Virtual -- Zoom)

**2:00**      **EPA's Food Waste Resources, Food Waste work in Region 3**  
Melissa Pennington, U.S. EPA Region 3, RCRA Programs Branch (Virtual)

**2:30**      **Facilitated Discussion & Group Recommendations**  
Craig Nicol / Janet Weyland

**3:30**      **Topic Priority, Next Steps. Future Meetings**  
Craig Nicol / Janet Weyland

**4:00**      **ADJOURN**

Attachment 2  
Task Force Member List

<b>Organization</b>	<b>Member</b>	<b>Alternate</b>
Wise County	Michael Hatfield	Bill Dingus
City of Virginia Beach	Kristi Rines	None
Virginia Waste Industries Association	Tad Phillips	None
Virginia Beer Wholesalers Association	Robbie Pecht	None
Virginia Beverage Association	Morgan Guthridge	None
Virginia Petroleum and Convenience Marketers Association	Mike O'Connor	None
Westrock	James (Jim) Taylor	None
O. I. Glass	Brian Sernulka	None
Virginia Recycling Association	Joe Benedetto III	None
Virginia Municipal League	Mitchell Smiley	None
Virginia Association of Counties (VACo)	Joe Lerch	None
Northern VA Regional Commission	Debbie Spiliotopoulos	Scott Macdonald
Hampton Roads Planning District Commission	John Harbin	None
Coker Composting	Craig Coker	None
Landfill Advisory Board Prince William County	James Gestrich	None
Community Member	Rob Laurent	None
Virginia Tech	Greg Evanylo	None
James Madison University	Jared Stoltzfus	None
Tazewell County	Kenneth Dunford	None
SWANA/Central VA Waste Management Assoc. (CVWMA)	Kim Hynes	None
Charles City County	Rhonda L. Russell	None
City of Alexandria	Helen Lee	None
Virginia Trucking Association	Dale Bennett	None
Virginia Bottle Bill Organization	Rick Galliher	Scott Peterson
Virginia Council on Environmental Justice	Tom Benevento	Andrew Payton

## Attachment 3

### Introduction Presentation



## Waste Diversion & Recycling Task Force

### Welcome, Reminders, & Updates

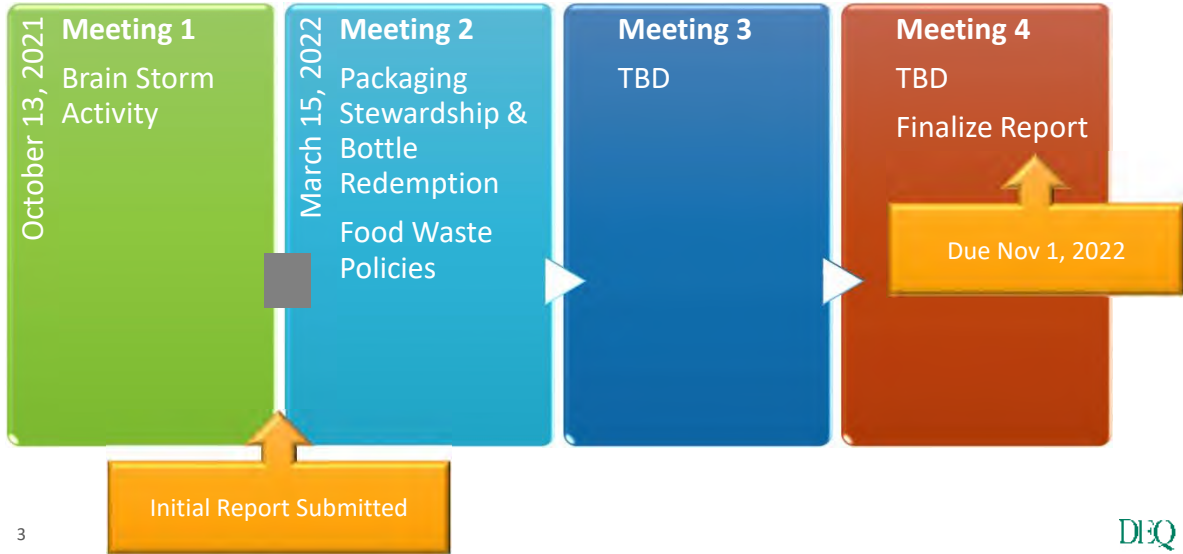
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Kathryn J. Perszyk  
Director, Land Protection & Revitalization Division  
Virginia Department of Environmental Quality  
March 15, 2022

### WDRTF Reminders

- The Task Force = Public Body
  - All meetings of the group are public meetings, subject to FOIA
  - Goal is to reach a *consensus* on recommendations
  - *Consensus* is defined as a willingness of each member of a group to be able to say that he or she can live with the decisions reached and will not actively work against them outside of the process

### Waste Diversion & Recycling Task Force Timeline



### Task Force Themes



## Meeting 2 Agenda Topics & Speakers

### Packaging Stewardship & Bottle Redemption Programs

- Overview Bottle Bill State Programs  
*Mike Smaha*  
*Can Manufacturers Institute*
- Plastic Waste Prevention Advisory Council  
*Meghann Quinn, DEQ*

### Policy Options to Target Food Waste Diversion

- Policies tied to Food Recovery Hierarchy  
*Samantha Goerger, ReFED*
- EPA Feedback and Recommendations Regarding WDRTF Brainstorming Activities  
*Melissa Pennington*  
*U.S. EPA Region 3*

## Attachment 4

### Bottle Bill Presentation





# Presentation and Discussion on Beverage Container Deposits

March 15, 2022

VA DEQ Waste Diversion and Recycling Task Force



1

## Agenda

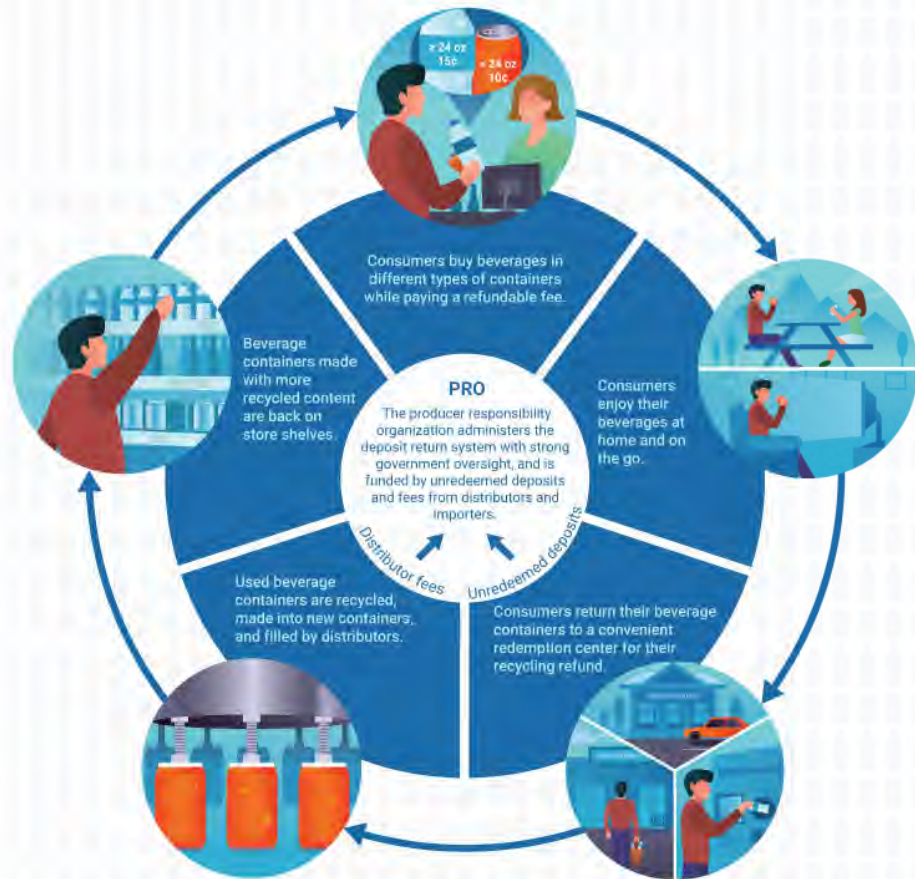
- How Does a Deposit Return System Work?
- Virginia Deposit Legislation: HB 826 – How We Got Here
- Can Industry Recycling Targets
- Deposits and Their Benefits
- CMI Thought Leadership and Key Elements Development
- Stakeholder Outreach
- Addressing Stakeholder Concerns
- Wrap Up

VA DEQ Waste Diversion and Recycling Task Force



# How Does a Deposit Return System Work?

## Buy the Beverage, Borrow the Container



VA DEQ Waste Diversion and Recycling Task Force

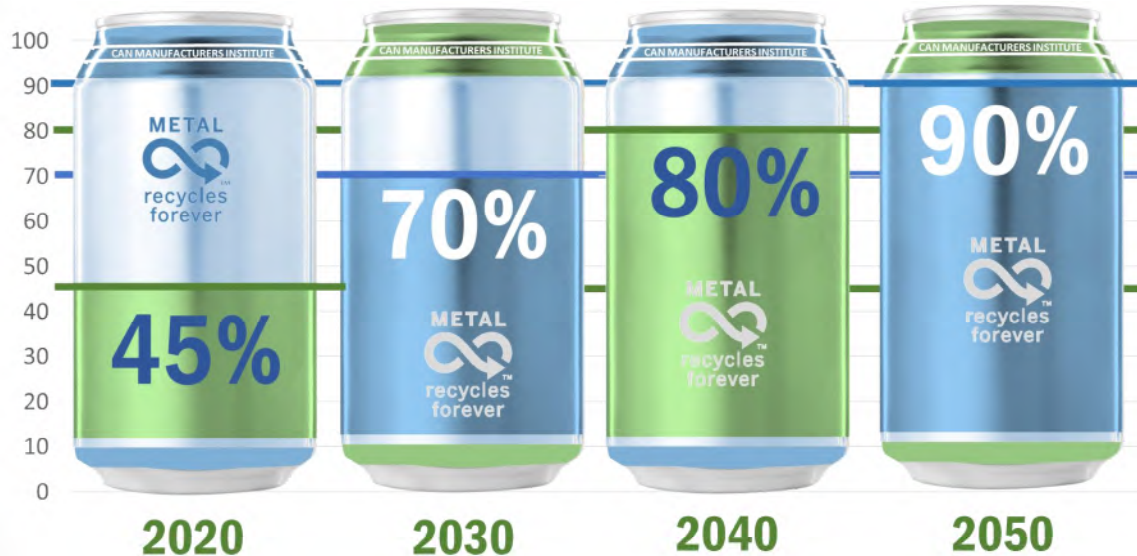
## Virginia Deposit Legislation: HB 826 – How We Got Here

- Introduced by Delegate Patrick Hope
- Agriculture, Chesapeake and Natural Resources Committee
- Subcommittee Chairman referral to Waste Reduction and Recycling Task Force for consideration



VA DEQ Waste Diversion and Recycling Task Force

# Aluminum Beverage Can Industry Recycling Rate Targets



## Four Pillars of Action to Achieve the Targets

- 1**

Well-Designed Deposit Systems

CT-HI-IA-ME-MA-NY-VT 5c  
MI-OR 10c CA CRV
- 2**

Increased Household and Away-From-Home Recycling
- 3**

Proper Sortation at Recycling Centers
- 4**

Increased Consumer Awareness of the Can's Sustainability Advantage

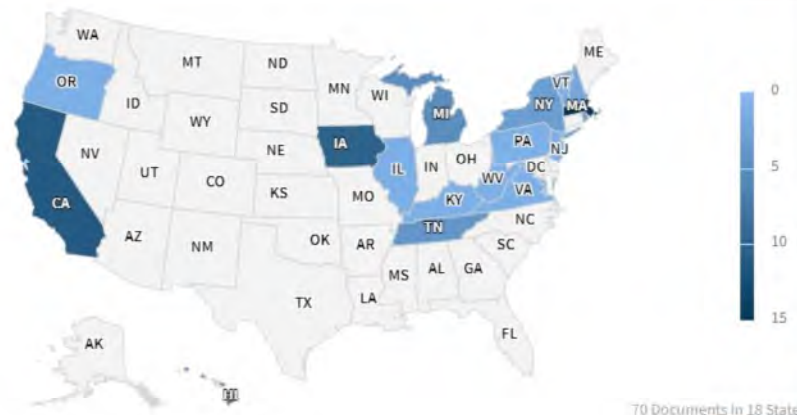
# Interest in Deposit Programs Continues!

## 2022 Deposits Activity

- Discussions on a national beverage container deposit program
- Nine states considering new deposit programs
- Bills introduced in seven of the ten deposit states to amend their programs
- Supply chain pressure on domestic manufacturers continues

Deposits

M MULTISTATE

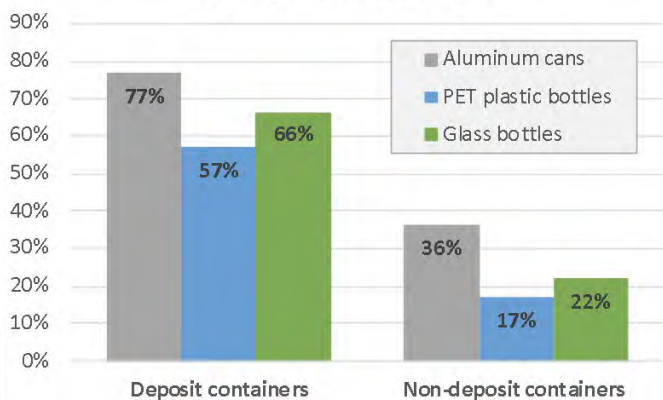


VA DEQ Waste Diversion and Recycling Task Force



## Deposits Boost Container Recycling

U.S. Nominal Recycling Rates by Deposit Status, 2019



"2019 Beverage Market Data Analysis."

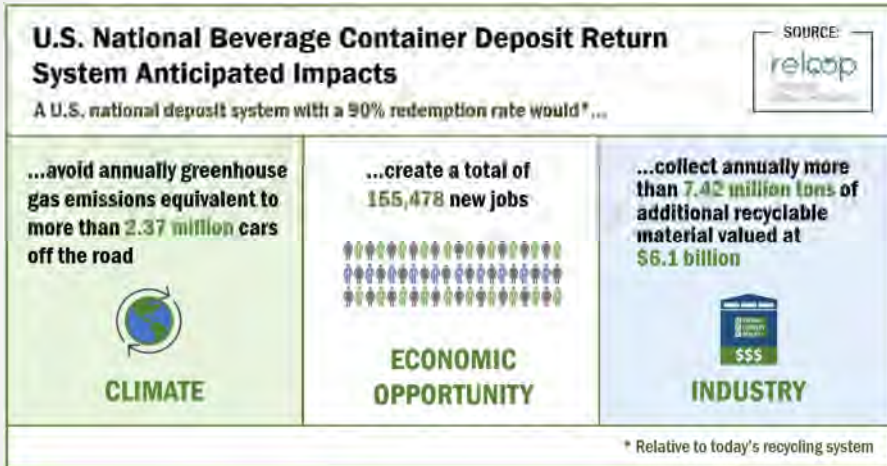
© Container Recycling Institute, 2022

40% of all aluminum beverage containers come from the 10 deposit states

VA DEQ Waste Diversion and Recycling Task Force



# Environmental and Economic Impact



More info at [ReLoop's fact sheet](#)

## Benefits for Virginia

**23% estimated recycling rate of aluminum cans versus Oregon's 80.8%**

**\$3.5 million a year on roadway litter cleanup**

- VDOT estimates 3/4 comes from conscious littering
- Keep America Beautiful estimates a 2:1 ratio of containers in litter between non-deposit and deposit states

**If Virginia had a 90% redemption rate?**

- 1.2 billion additional cans recycled
- \$19 million more revenue for recycling industry
- Energy saved would power 475 hundred million homes for one hour

# Deposits Can Save Municipalities Money

Fact Sheet  
Deposit Return Systems Generate Cost Savings for Municipalities  
February 2021



## Fact Sheet: Deposit Return Systems Generate Cost Savings for Municipalities

- Reloop analyzed 33 studies that examined the costs and benefits to municipalities of implementing (or expanding) a deposit return system for beverage containers. While different in scope, location, author, and year, **nearly every study reported significant net cost savings to municipalities.**

VA DEQ Waste Diversion and Recycling Task Force



# CMI Has Produced Thought Leadership on DRS and Has a Deposits Part of its Website



More info at  
[cancentral.com/deposits](https://www.cancentral.com/deposits)

VA DEQ Waste Diversion and Recycling Task Force



Principles for a Modern, Well-Designed Deposit System

- Single entity to manage the system that must meet performance targets
- Appropriate deposit values to avoid market distortion and catalyze high recycling rates
- Unredeemed deposits should enhance the recycling system
- Include all beverage types and containers
- Easy and convenient redemption
- Each material pays its own way
- Use technology and clear labeling to reduce fraud and unfairness

These components are found in HB 826 and should be considered in your final report

# Ongoing Stakeholder Conversations

Soft drink brands, beer and spirits industry, distributors, environmentalists, social justice activists, deposit program experts, plastic and glass container manufacturers

Two examples to share...

- Material Recovery Facilities
- Retailers

Virginia HB 826  
**Roles and Responsibilities in Beverage Container Deposit Return Systems**  
Various stakeholders would play a vital role in an efficient and effective deposit return system (DRS). The information below details how different stakeholders would participate in and contribute to a successful DRS.

<p><b>Beverage Brands/Fillers</b></p> <ul style="list-style-type: none"> <li>Label beverage containers with deposit mark indicating it is redeemable for a refund (ID costs for containers less than 24 oz and 15 cents for containers larger than 24 oz)</li> <li>Aluminum, glass, PET and HDPE plastic in program to start and all other material types added the following year. All beverage categories are in the program, except for infant formula, FDA-approved drugs or meal replacement liquids</li> <li>May be required to include a barcode for automated identification if required by the PRO</li> </ul>	<p><b>The Producer Responsibility Organizations (PRO)</b></p> <ul style="list-style-type: none"> <li>Charges the retailer the deposit and container recycling fee (CRF) on each container delivered. The CRF applies to packaging not made of aluminum, glass or certain plastic.</li> <li>PRO can receive CRF when materials increase and end-market demand is created</li> <li>Installs, operates and manages reverse vending machines and facilities and operates fast drop redemption centers to ensure consumer convenience options for redemption</li> <li>Keeps unredempted deposits to support program costs</li> <li>Owns material collected through redemption and decides which end market to sell the material</li> <li>Transfers 10% of scrap value to the Virginia Department of Environmental Quality (DEQ) during the first five years to support residential recycling initiatives</li> <li>Meets statutory redemption rate performance targets:             <ul style="list-style-type: none"> <li>75% by year three</li> <li>80% after year three</li> <li>90% starting year eight</li> </ul> </li> <li>Submits a plan to DEQ if targets are not met</li> <li>Posts its own annual performance reports on PRO website</li> <li>Responds to an Advisory Committee</li> </ul>
<p><b>Retailers Who Sell Beverages</b></p> <ul style="list-style-type: none"> <li>Charges the consumer the deposit and container recycling fee. The CRF is included on customer receipt</li> <li>Accept redeemable containers inside store, or:             <ul style="list-style-type: none"> <li>Provide the PRO space for outdoor redemption options</li> <li>Coordinate with the PRO on pickup/return options</li> </ul> </li> <li>Smaller retailers that primarily prepare food for sale or have small annual beverage sales or use vending machines only are exempt from redemption requirements</li> </ul>	<p><b>The Government (DEQ)</b></p> <ul style="list-style-type: none"> <li>Legislative obligation to oversee PRO operations</li> <li>May raise the deposit value if the redemption rate does not reach 85% in three consecutive years</li> <li>Takes control of PRO operations if performance targets are not met for five years</li> <li>Determines how to disperse the portion of the scrap value funds provided from the PRO during the first five years of the program to support the collection of household recyclables</li> <li>Enforces civil and criminal penalties for redemption fraud to the PRO, not resolving its obligations</li> </ul>

CAN MANUFACTURERS INSTITUTE | CAMSCENTRAL.COM/DEPOSITS

## ■ DRS + Curbside = Optimized Recycling Performance

- Highest recycling rates with both DRS and effective curbside programs
- Curbside recycling alone will not reach 90% container recovery
- DRS materials more likely to be recycled back into containers (closed loop)
- Benefits to recycling facilities by removing glass

## ■ Recyclers Need a Transition Plan to be Supportive

# MRF Operator Discussions

- Provide temporary, transitional funding to help MRFs adjust their business models to the new normal. There are several ways this could be achieved including:

- **HB 826 - 10% of scrap value to DEQ during the first five years of the program**

Other ideas...

- Allowing MRFs for a limited term to get part or even the entire deposit value of the containers that flow through the MRF based on:
  - Funding based on output quality that meets ISRI material specifications
  - Funding based on actual commodity price and market conditions



## Retailer Conversations

- Redemption options take up valuable space inside the store
- Empty beverage containers in the store can make it harder to keep the store clean
- Operating redemption options in the store detracts management from their core focus of selling goods in a safe, pleasurable environment
- Broken or inconvenient redemption options can cause consumer annoyance that can lead to them shopping elsewhere or having a negative view of the store.

## HB 826 – Retailer Approach

- Retailers can comply with deposit bill requirements simply by making space available to the producer responsibility organization (PRO) to install, service, and operate redemption options (e.g., RVMs, bag-drop locations)
  - This could include making some parking spots available far from the entrance for a bag-drop option
  - **As a result, the retailer can easily comply without needing to make space available in the store, devote any employees to the effort, or pay any money**

## Potential Benefits of a DRS for Retailers

After consumers return their containers, they now have new money to spend at the store

Almost three-quarters of Michigan consumers (73%) who participated in a survey said they spend their deposit refund at the store where they returned their containers

Shoppers returning containers across four European countries stated that they spent up to 50% more money during their store visit than those who did not return empty containers

## Wrap It Up

A well-designed program should have key elements outlined in the original VA deposit bill and should be included in the recommendations coming out of this task force

Attachment 5

Bottle Bill Handout

# Buy the Beverage, Borrow the Container: How a Beverage Container Deposit Return System Works

Well-designed deposit return systems are convenient for consumers and better for the environment because they encourage higher recycling rates, help reduce litter and community expenditures on trash cleanups, and curtail carbon emissions.



# Roles and Responsibilities in Beverage Container Deposit Return Systems

Various stakeholders would play a vital role in an efficient and effective deposit return system (DRS). The information below details how different stakeholders would participate in and contribute to a successful DRS.



## Beverage Brands/Fillers

- Label beverage containers with deposit mark indicating it is redeemable for a refund (10 cents for containers less than 24 oz and 15 cents for containers larger than 24 oz)
- Aluminum, glass, PET and HDPE plastic in program to start and all other material types added the following year. All beverage categories are in the program, except for infant formula, FDA -approved drugs or meal replacement liquids
- May be required to include a barcode for automated identification if elected by the PRO



## The Producer Responsibility Organizations (PRO)

- Charges the retailer the deposit and container recycling fee (CRF) on each container delivered. The CRF applies to packaging not made of aluminum, glass or certain plastic.
- PRO can remove CRF once material value increases and end-market demand is created
- Installs, operates and manages reverse vending machines and establishes and operates bag drop redemption centers to ensure consumers have convenient options for redemption
- Keeps unredeemed deposits to support program costs
- Owns material collected through redemption and decides which end-market to sell the material
- Transfers 10% of scrap value to the Virginia Department of Environmental Quality (DEQ) during the first five years to support residential recycling providers
- Meets statutory redemption rate performance targets:
  - 75% by year three
  - 85% after year four
  - 90% starting year eight
- Submits a plan to DEQ if targets are not met
- Posts its own annual performance reports on PRO website
- Responds to an Advisory Committee



## Beverage Distributors/Importers

- Distributors and importers of beverages into or within Virginia must join the Producer Responsibility Organization (PRO) or pay a nonparticipation fee to the PRO



## Retailers Who Sell Beverages

- Charges the consumer the deposit and container recycling fee. The CRF is included on customer receipt
- Accept redeemable containers inside store, or:
  - Provide the PRO space for outdoor redemption options
  - Coordinate with the PRO on deposit voucher options
- Smaller retailers that primarily prepare food for sale or have small annual beverage sales or use vending machines only are exempt from redemption requirements



## The Government (DEQ)

- Legislative obligation to oversee PRO operations
- May raise the deposit value if the redemption rate does not reach 85% for three consecutive years
- Takes control of PRO operations if performance targets are not met for five years
- Determines how to disperse the portion of the scrap value funds provided from the PRO during the first five years of the program to support the collection of household recyclables
- Enforces civil and criminal penalties for redemption fraud or the PRO not meeting its obligations

## Attachment 6

Plastic Waste Pollution Advisory Council Presentation.



# Plastic Waste Prevention Advisory Council

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Meghann Quinn  
Manager, Office of Pollution Prevention  
Virginia Department of Environmental Quality  
March 15, 2022

## PWPAC's Purpose

*The Plastic Waste Prevention Advisory Council (the Council) is established as an advisory council, within the meaning of § 2.2-2100, in the executive branch of state government. The purpose of the Council is to **advise the Governor on policy and funding** priorities to **eliminate plastic waste impacting** native species and polluting the Commonwealth's environment and to **contribute to achieving plastics packaging circular economy industry standards.***

<https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP0798>

## Council Members

### Legislative

- Delegate Kenneth Plum – Delegate for the 36<sup>th</sup> House of Delegates District
- Kathy Neilson – Designee of Senator Chap Petersen (34<sup>th</sup> Senate District)

### Non-legislative

- Dr. Rob Alexander – James Madison University
- Jennifer Cole – Clean Fairfax
- Anne Johnson, **Chair** – Resource Recycling Systems, Inc.
- Dr. Jennifer Russell – Virginia Polytechnic Institute and State University

### Ex-Officio

- Sharon Baxter – Designee of Director of Virginia Department of Environmental Quality (DEQ)
- Joseph Hilbert – Designee of State Health Commissioner/Virginia Department of Health (VDH)
- Brett Vassey, **Vice Chair** – Virginia Manufacturers Association (Alternate - Adam Peer)
- Morgan Guthridge – Designee of Virginia Chamber of Commerce President

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DEQ

## Council's Charge for its First Report

An enactment clause required that the initial report provide recommendations on legislation and other activities to **accelerate the elimination of plastic bags and polystyrene packaging** used or sold in the Commonwealth.

5

DEQ



## PWPAC in 2021

- 4 meetings
- Topics included:
  - Plastic pollution in Virginia
  - Plastic waste management in Virginia
  - Localities and litter enforcement
  - Recycling landscape in Virginia
  - Review of existing plastic bag and EPS bans
  - Overview of recent plastics-related legislation
  - Draft and finalize report

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DEQ

## Recommendations

- **Disposable Plastic Bag Tax**
  - Monitor and Report
  - Education and Outreach
    - Best practices for implementation
    - Guidance for use of revenues
    - Model ordinance language
- **State-wide Expanded Polystyrene (EPS) Ban**
  - Allocation of Fines
  - Tools and Resources
  - Procurement Alternatives
  - Education and Outreach
  - Monitoring and Reporting
  - Continuous Improvement
  - Resources



**Loudoun Adopts Plastic Bag Tax**

- Five cents per bag
- For purchases at grocery stores, convenience stores & drugstores
- Effective 7/1/2022



**Plastic Bag Tax**

As of January 1, 2022, a 5-cent plastic bag tax will be charged for every bag used in grocery stores, drug stores, and convenience stores.

You can help:

- Reduce waste
- Prevent litter
- Protect our waterways

Thank you for keeping our land and waterways clean and green.

BRING YOUR BAG  
KEEP YOUR CHANGE

5¢

Thank you for helping our bag. Reuse.

For more information, please visit [roanokeva.gov/2706/Plastic-Bag-Tax](https://roanokeva.gov/2706/Plastic-Bag-Tax)



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DEQ

## Recommendations

- **Waste Characterization Study** - The Council does recommend that the General Assembly authorize a statewide waste characterization study to define the volume and composition of both solid waste and recyclable material streams for the Commonwealth with specific details on the amount and types of plastic waste by resin type. This data is needed to establish and to understand the amount and character of plastic waste in Virginia and develop necessary baselines. To measure the performance of any interventions, comparable data will be needed on a regular basis to determine if recommended interventions are resulting in eliminating plastic waste and growing the circular economy.

## Recommendations

- **Waste Characterization Study** - The Council does recommend that the General Assembly authorize a **statewide waste characterization study to define the volume and composition of both solid waste and recyclable material streams** for the Commonwealth with specific details on the amount and types of plastic waste by resin type. This data is needed to establish and to understand the amount and character of plastic waste in Virginia and develop necessary baselines. To measure the performance of any interventions, comparable data will be needed on a regular basis to determine if recommended interventions are resulting in eliminating plastic waste and growing the circular economy.

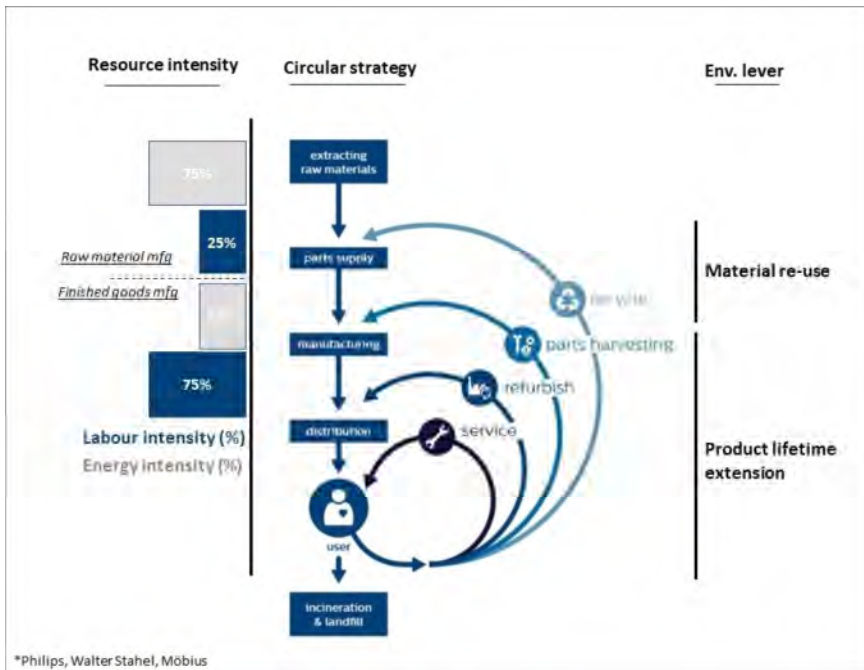
## PWPAC in 2022

- 5-6 meetings planned for 2022
- Topics will include:
  - Policy options
  - Non-policy options
  - Infrastructure for recycling
  - Assessment of Virginia
  - Draft and finalize report

## PWPAC in 2022

- 5-6 meetings planned for 2022
- Topics will include:
  - **Policy options**
  - Non-policy options
  - Infrastructure for recycling
  - Assessment of Virginia
  - Draft and finalize report

# The Circular economy is grounded on the principles of A “PERFORMANCE ECONOMY” articulated by Walter Stahel



Create greater value by re-circulating products and materials at highest value

Delink economic productivity from consumption of finite resources

Key enablers include:

- System thinking
- Design as critical lever
- New business models (e.g., products of service)
- Reverse logistics
- Collaboration

*From A. Johnson’s presentation at Feb. 25, 2022 PWPAC meeting.*

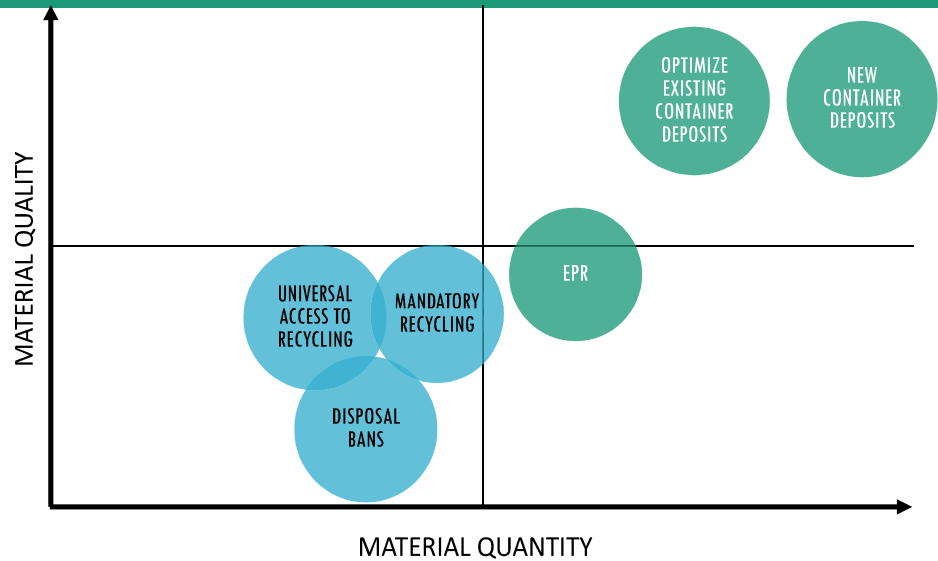
## Common State-Level Supply-Side Supportive Policies

POLICY TYPE	DESCRIPTION	IMPACT
<b>DISPOSAL BANS</b>	Prohibits disposal of designated items (e.g., beverage containers) with trash.	Can keep material out of disposal systems and drive consumer recycling participation when coupled with education, infrastructure, and enforcement.
<b>UNIVERSAL ACCESS TO RECYCLING</b>	Requires service providers (public or private sector) to offer recycling everywhere waste collection is provided.	Expands access to recycling, particularly in rural, multi-family, and away-from-home settings; requires processing infrastructure and end markets.
<b>MANDATORY RECYCLING</b>	Requires generators to recycle; requires haulers to provide recycling services; or requires local governments to implement recycling.	Can drive consumer recycling participation when coupled with education, infrastructure, and enforcement.
<b>EXTENDED PRODUCER RESPONSIBILITY (EPR)</b>	Requires producers/brands/retailers to cover some or all of the costs of recycling packaging.	Provides financial support and central coordination/management to recycling system; re-aligns incentives for product and packaging design to ease waste management challenges.
<b>BEVERAGE CONTAINER DEPOSITS</b>	Places a deposit on certain beverage containers that can be redeemed when returned for recycling.	Generates significant quantities of clean, high-quality aluminum, PET & glass that facilitates high-grade end use.

*From R. Dimino’s presentation at Feb. 25, 2022 PWPAC meeting.*

# Quantity/Quality Spectrum of Supply-Side Recycling Policies

- This matrix is intended to give a directional sense of the impact of different policy options; exact outcomes will depend on the state targeted and the policy details.



- Responsibility on Government/Public
- Responsibility on Industry

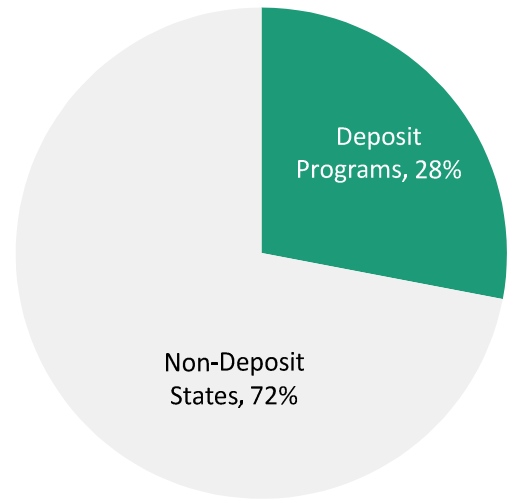
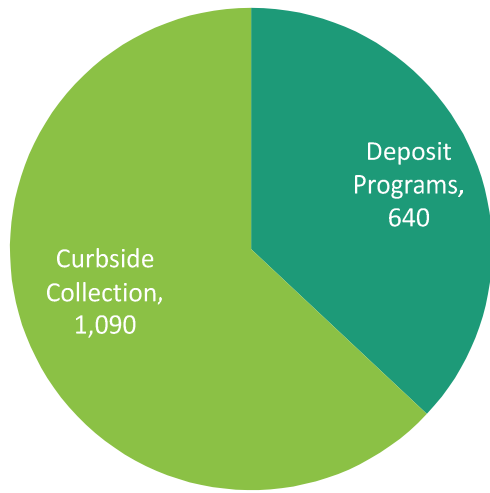
*From R. Dimino's presentation at Feb. 25, 2022 PWPAC meeting.*



## Beverage Container Deposit Return Programs

*From R. Dimino's presentation at Feb. 25, 2022 PWPAC meeting.*

# Impact of Deposit Programs on Collection of PET Stream



From R. Dimino's presentation at Feb. 25, 2022 PWPAC meeting.

## Materials Included in Each Deposit State

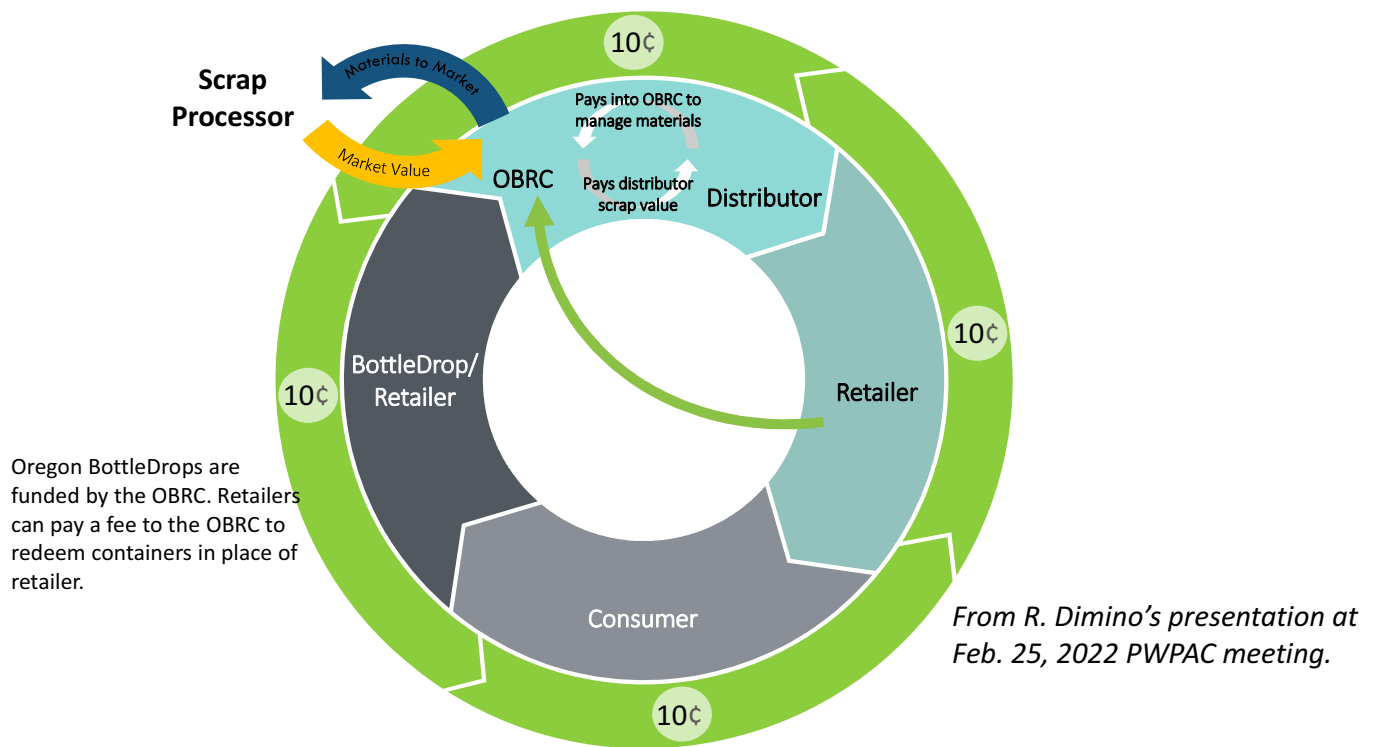
STATE	CSD	Beer & Malt Drinks	Sparkling Water	Non-sparkling Water	Sports Drinks	Energy Drinks	Juice	Tea & Coffee	Wine	Mixed Spirits	Spirits (Liquor)	% of PET Bottles on Deposit
ME	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	~75%
CA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		~75%
HI	✓	✓	✓	✓	✓	✓	✓	✓		✓		~75%
OR	✓	✓	✓	✓	✓	✓	✓	✓		✓		~75%
IA	✓	✓	✓						✓	✓	✓	~17%
VT	✓	✓	✓							✓	✓	~17%
NY	✓	✓	✓	✓						✓		~40%
CT	✓	✓	✓	✓								~40%
MI	✓	✓	✓							✓		~17%
MA	✓	✓	✓									~17%

TEA AND COFFEE ONLY REFERS TO READY-TO-DRINK PRODUCTS  
HARD CIDER NOT INCLUDED IN NEW YORK DEPOSIT

MAINE-MADE JUICE AND CIDER NOT INCLUDED IN DEPOSIT  
NO STATES INCLUDE MILK, DAIRY PRODUCTS, OR INFANT FORMULA IN DEPOSITS

From R. Dimino's presentation at Feb. 25, 2022 PWPAC meeting.

# Oregon Bottle Deposit System



## PWPAC in 2022

- 5-6 meetings planned for 2022
- Topics will include:
  - Policy options
  - **Non-policy options**
  - Infrastructure for recycling
  - Assessment of Virginia
  - Draft and finalize report

## PWPAC in 2022

- 5-6 meetings planned for 2022
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  - **Assessment of Virginia**
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## PWPAC in 2022

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- Topics will include:
  - Policy options
  - Non-policy options
  - Infrastructure for recycling
  - Assessment of Virginia
  - **Draft and finalize report**

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DEQ

## PWPAC Resources

- Link to 2021 report: <https://rga.lis.virginia.gov/Published/2021/RD628>
- Links for meeting minutes:
  - July 2021: <https://commonwealthcalendar.virginia.gov/Event/Details/52178>
  - Aug. 2021: <https://commonwealthcalendar.virginia.gov/Event/Details/52893>
  - Sept. 2021: <https://commonwealthcalendar.virginia.gov/Event/Details/53262>
  - Oct. 2021: <https://commonwealthcalendar.virginia.gov/File/Index/56004>
  - Feb. 2022: <https://commonwealthcalendar.virginia.gov/File/Index/57086>

23

DEQ

# Plastic Waste Prevention Advisory Council

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Meghann Quinn  
Manager, Office of Pollution Prevention  
Virginia Department of Environmental Quality  
March 15, 2022

## Shared Expectations

As a Council, we aspire to authentically listen to one another while responding honestly and directly, particularly when we have a conflict of ideas or values. We will practice systems thinking as we identify effective solutions pertaining to our charge with meaningful consensus. We create broad participation in our work through transparency and authentic stakeholder engagement.

## Decision-Making Rule

The Council decision rule requires a quorum present to vote which is a governance requirement. In the case of the PWPAC, this means having at least 6 members present. Presuming that a quorum is present for a vote, decisions are based on the support of a simple majority of the members present (i.e., 4 out of 6 or 6 out of 10). Upon request, the minority opinion is recorded and made part of the meeting record. Council members can only vote if present per state requirement. The decision-rule will be used for legislative and administrative recommendations for the reports.

## Attachment 7

Policies tied to Food Recovery Hierarchy Presentation



# Policies tied to the EPA Food Recovery Hierarchy

PRESENTED BY  
Samantha Goerger

March 15, 2022

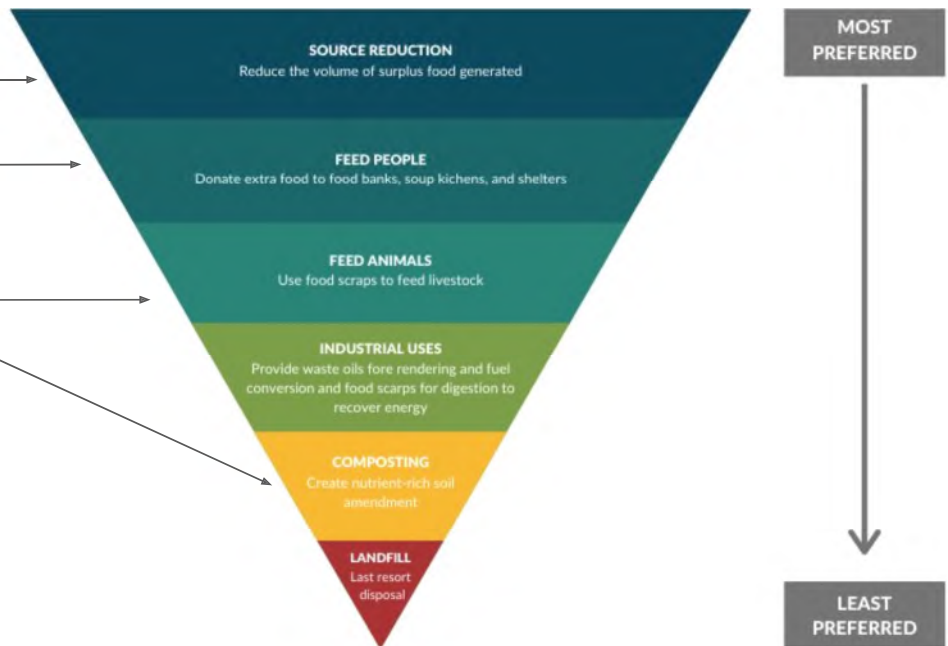


## EPA Food Recovery Hierarchy

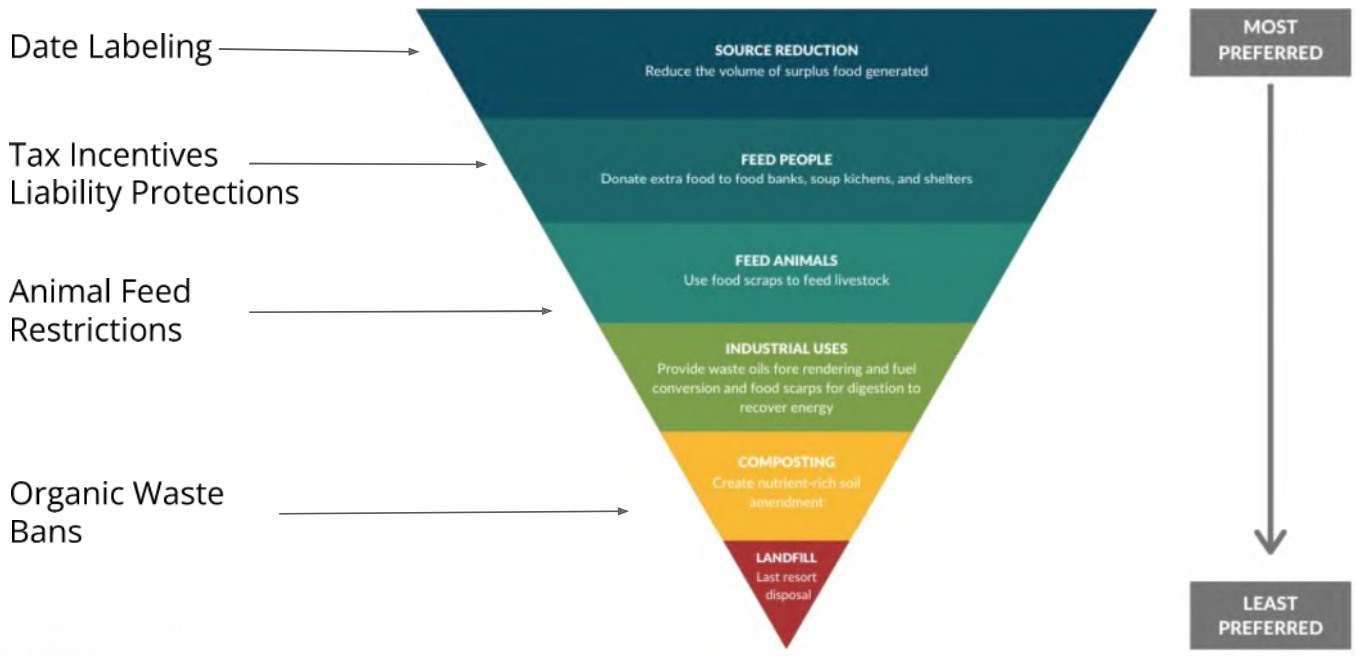
**Prevention**  
(Reduce)

**Rescue**  
(Reuse)

**Recycling**  
(Recycle)



# EPA Food Recovery Hierarchy



## ReFED Insights Engine: U.S. Food Waste Policy Finder (2022)

The screenshot shows the ReFED Insights Engine interface for the U.S. Food Waste Policy Finder. The header includes the ReFED logo and navigation tabs for STATE POLICY, FEDERAL POLICY, and ABOUT. A search bar allows users to explore food waste policy by state. The main content area features the ReFED logo, the title 'U.S. FOOD WASTE POLICY FINDER', and a brief description of the tool's purpose. A sidebar on the right displays 'PREVENTION POLICY' with a summary of policy changes related to date labeling and a link to 'View Date Labeling categories'.

Tracks five food waste-related policies at the federal and state levels.

### Sample Use Cases:

- **State Policy Makers** can find examples of policies passed in other states that better reduce food waste.
- **Food Businesses, Solution Providers, and Advocates** can read about policies that may affect their operations across several states with the Policy Matrix and Score Sheet.
- **Consumers** can learn about how policies in their own state aid in reducing waste.

# Prevention



## Food Waste Policy Types

### Prevention

#### *Date Labeling*

---

Quality Date:  
"Best if Used By"

Safety Date: "Use By"



# Model Policy: Date Labeling

## California

Cal. Food & Agric. Code § 82000-1 offers guidance on standardizing date labels, but implementation is voluntary.

## NJ S418

If passed, would standardize date labels and require an education campaign within New Jersey

## Federal Food Date Labeling Act

If passed, would standardize date labels and require a national education campaign



### Annual Impact Potential \*

- Net Financial Benefit  
\$ 2.41 billion
- Food Waste Diversion  
582k Tons
- Emissions Reduction  
2.73M Metric Tons CO2e
- Water Savings  
162B gallons

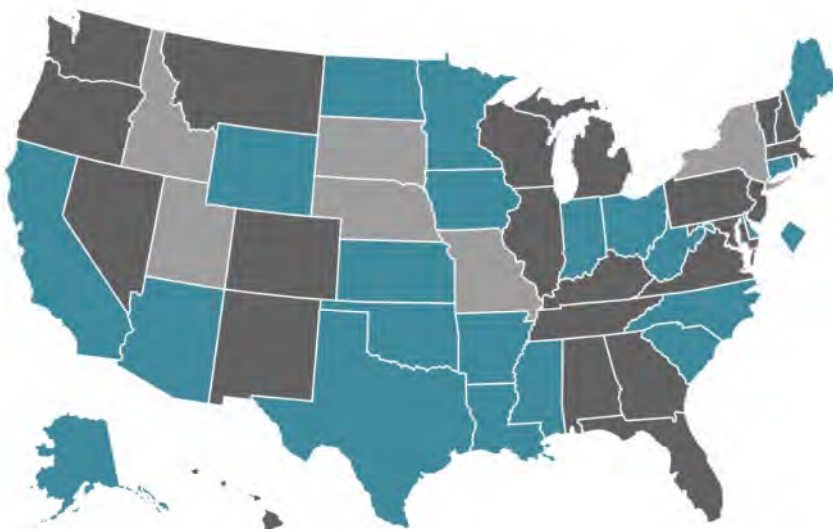
\* Incremental potential in addition to what is already happening currently

### Annual Investment Required



- Public**
  - Government Grants: \$ 1.62M
- Philanthropic**
  - Non-Government Grants: \$ 1.62M
- Private**
  - Corporate Finance & Spending: \$ 4.86M

# Food Waste Policy Types: Date Labeling



**LEVEL OF STATE DATE LABELING REGULATIONS**  
Under federal law, date labels are almost entirely unregulated. States have filled the void with a wide variety of regulations that often fail to reflect the distinction between food safety and food quality.

Legend: Negative policy, No policy, Moderate policy, Strong policy

**PREVENTION POLICY**

Policy changes related to date labeling have the potential to prevent 582,000 tons of waste each year.

- Reveal case studies
- Date Labeling  
Reveal state policies that hinder food waste prevention.  
[View State Labeling Policy Types](#)
- Negative Policy  
The date requires date labels for certain foods and prevents or limits the sale, consumption of food after its label date.
- No Policy  
There are no laws pertaining to date labels on food products.
- Moderate Policy  
The label requires date labels for certain foods but does not restrict or limit the sale or consumption of food after its label date.
- Strong Policy  
The date requires date labels for certain foods and restricts or limits the sale or consumption of food after its label date, and the state has issued some permission to provide alternative labeling data.

**RESCUE POLICY**

**RECYCLING POLICY**



# Rescue



## Food Waste Policy Types

### Prevention

### Rescue

*Date Labeling*

*Liability Protection*

Quality Date:  
"Best if Used By"

Direct Donations  
Nominal Fee Paid  
Past-Date Donations

Safety Date: "Use By"



# Model Policy: Liability Protection

## New Jersey: N.J. Stat. Ann. § 24:4A-1–A5

New Jersey Good Samaritan Laws protect food donors and distributors in all three aspects beyond the Bill Emerson Good Samaritan Food Donation Act.

## Other Recent State Bills

- **Virginia (past-date)**
- **Washington (all areas)**
- Pennsylvania (direct donations & past-date)

## Federal Food Donation Improvement Act

If passed, the Food Donation Improvement Act would improve upon the Bill Emerson Good Samaritan Food Donation Act by extending protections in two of the three desired areas - direct donations and those in which recipients pay a nominal fee.



\*Donation Education

### Annual Impact Potential \*

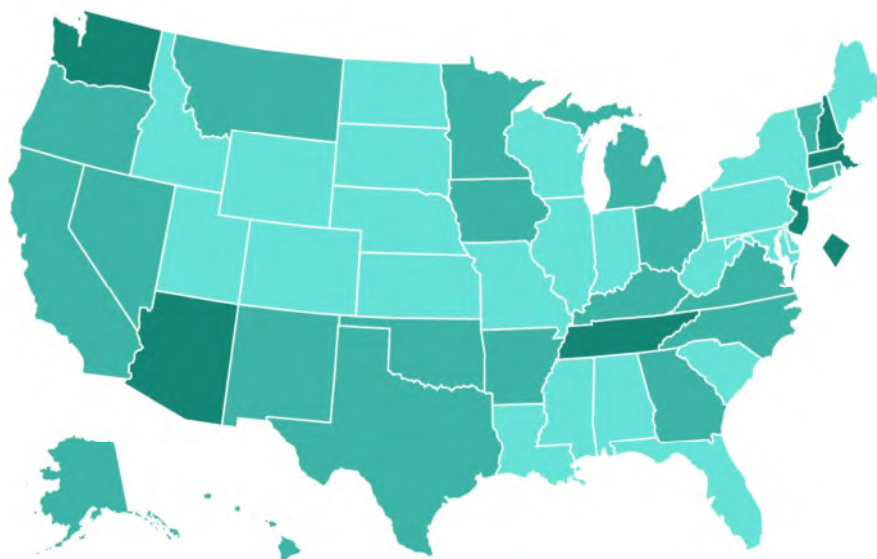
- Net Financial Benefit  
\$ 4.52 billion
- Food Waste Diversion  
1.1M Tons
- Emissions Reduction  
894k Metric Tons CO2e
- Water Savings  
135B gallons
- Meals Recovered  
1.84B
- Jobs Created  
4.11k

\* Incremental potential in addition to what is already happening currently

### Annual Investment Required



# Food Waste Policy Types: Liability Protection



**LEVEL OF STATE LIABILITY PROTECTION FOR FOOD DONATION**  
FEDERAL POLICY provides a strong baseline of donation liability protection. States shaded above offer additional liability protections within the state (darker shading indicates a greater number of additional protections).



### PREVENTION POLICY

#### RESCUE POLICY

States have the opportunity to spur greater food rescue by enacting stronger policies in both areas.

#### Best-practice Policies

#### Liability Protection

Reveal states that offer liability protection.

[View Liability Protection categories](#)

#### Weak Policy

State-based liability protections for food donation exist but are no broader than the federal-level protections.

#### Moderate Policy

State-based liability protections cover donations directly to needy individuals, or cover donations that are eventually supplied for a small fee, or are otherwise slightly more expensive than the federal-level protections.

#### Strong Policy

State-based liability protections are significantly more protective than the Bill Emerson Good Samaritan Food Donation Act, and apply to donations directly to needy individuals as well as donations that are supplied to the final consumer for a small or nominal fee.

#### Tax Incentives

Reveal states that offer additional tax incentives beyond federal incentives.

[View Tax Incentives categories](#)

### RECYCLING POLICY

# Food Waste Policy Types

Prevention	Rescue	
<i>Date Labeling</i>	<i>Liability Protection</i>	<i>Tax Incentive</i>
Quality Date: "Best if Used By"	Direct Donations Nominal Fee Paid Past-Date Donations	Credit not Deduction Covers Transportation
Safety Date: "Use By"		



## Model Policy: Tax Incentives

### California

#### **CAL. REV. & TAX. CODE § 17053.12**

Taxpayers engaged in the business of processing, distributing, or selling agricultural products are eligible for a tax credit valued at 50% of transportation costs of donated crops to eligible nonprofits.

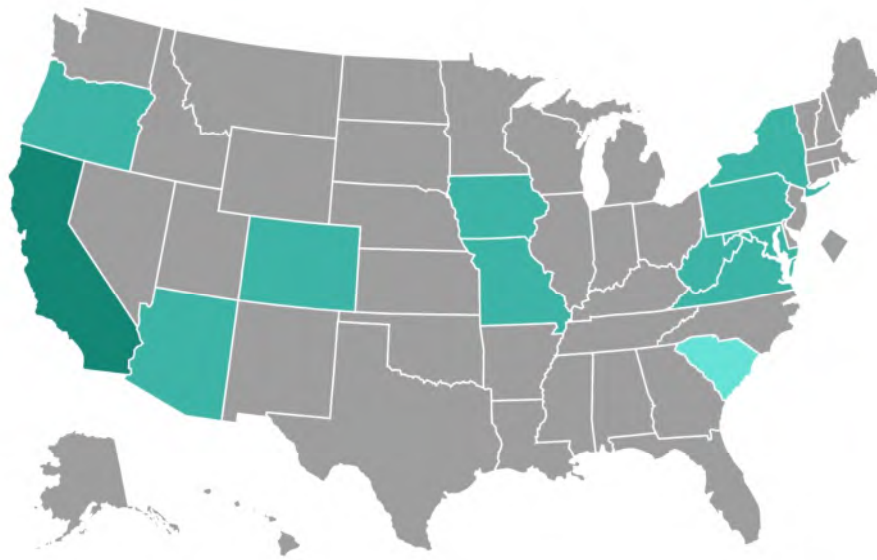
#### **CAL. REV. & TAX. CODE § 17053.88.5**

CAL. REV. & TAX. CODE § 17053.88.5 allows qualified taxpayers to claim a tax credit worth 15% of the wholesale market price of donated produce, raw agricultural products, and processed foods to Californian food banks. Qualified taxpayers include farmers and any person responsible for packing, or processing a qualified donation item, provided that person is not a retailer.

### Recommendations

- Offer a tax credit rather than a tax deduction.
- Place only reasonable limits on the amount that a business can claim through the tax incentive each year.
- Provide the tax incentive even when nonprofit food recovery organizations charge needy individuals for food.
- Tailor the tax incentive to support donations of the types of foods, or from the types of entities, most applicable to the state.
- Offer additional tax credits for transportation and processing costs associated with donating food.

# Food Waste Policy Types: Tax Incentive



## STATES OFFERING ADDITIONAL TAX INCENTIVES FOR FOOD DONATION

Federal policy provides businesses with a tax incentive for food donations. States shaded above offer additional tax incentives for food donations.



## PREVENTION POLICY

### RESCUE POLICY

States have the opportunity to spur greater food rescue by enacting stronger policies in both areas.

#### Best-practice Policies

**Liability Protection**  
Reveal states that offer liability protection  
[View Liability Protection categories](#)

#### Tax Incentives

Reveal states that offer additional tax incentives beyond federal incentives  
[View Tax Incentives categories](#)

- No Policy**  
There are no tax incentives for food donation.
- Weak Policy**  
The state offers a very limited tax incentive relevant to donating only one or a very small number of food products.
- Moderate Policy**  
The state offers a tax incentive for donating food.
- Strong Policy**  
The state offers tax deductions or tax credits for donating food that offset the costs associated with donation, including transportation.

## RECYCLING POLICY

# Recycling

# Food Waste Policy Types

Prevention	Rescue	Recycling
<i>Date Labeling</i>	<i>Liability Protection</i>	<i>Tax Incentive</i>
Quality Date: "Best if Used By"	Direct Donations Nominal Fee Paid Past-Date Donations	Credit not Deduction Covers Transportation
Safety Date: "Use By"		Animal Feed
		No further restrictions on feeding animals food scraps



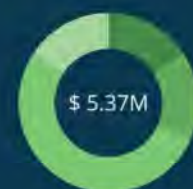
**Model Policy: Animal Feed**  
 States can most effectively maximize feeding animals over sending scraps to compost or industrial uses by not restricting the feeding of food scraps to animals further than federal regulations. States which do not further regulate animal feed include: **Alaska, Utah, and Washington, D.C.**

## Annual Impact Potential \*

- Net Financial Benefit  
\$ -1.5 million
- Food Waste Diversion  
60.4k Tons
- Emissions Reduction  
-817 Metric Tons CO2e
- Jobs Created  
91.6

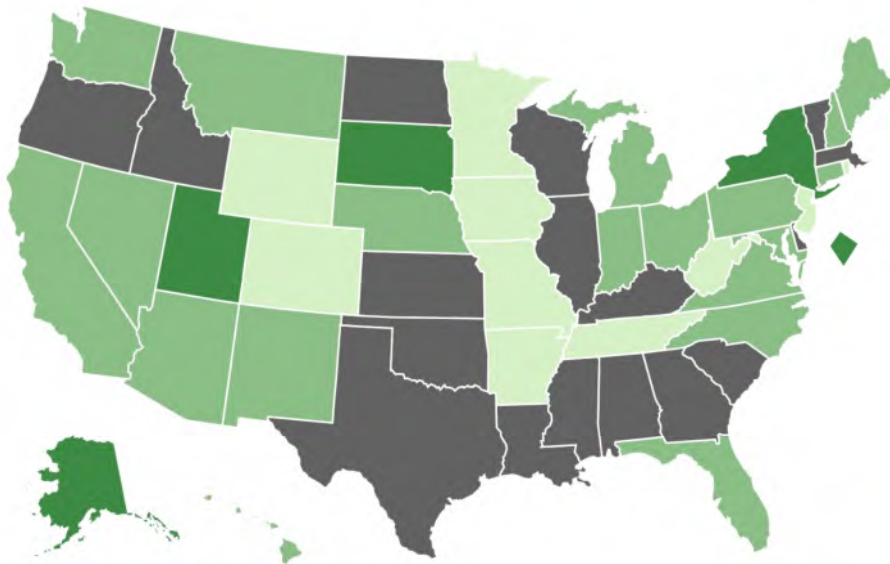
*\* Incremental potential in addition to what is already happening currently*

## Annual Investment Required



- Private**
- Venture Capital: \$ 848k
  - Private Equity: \$ 848k
  - Corporate Finance & Spending: \$ 2.83M
  - Commercial Project Finance: \$ 848k

# Food Waste Policy Types: Animal Feed



**PREVENTION POLICY**

**RESCUE POLICY**

**RECYCLING POLICY**

Increased food scrap recycling can be incentivized by these state and local policies.

**Best-practice Policies**

**Animal Feed**  
 Reveal state policies that hinder food waste recycling  
[View Animal Feed categories](#)

- Negative Policy**  
 The state prohibits feeding animal and/or vegetable waste matter to livestock.
- Weak Policy**  
 The state allows the feeding of animal and vegetable food scraps to animals but requires heat treatment for both animal and vegetable food scraps.
- Moderate Policy**  
 The state does not restrict the feeding of vegetable scraps. Animal-derived food scraps can be fed to animals but must be heat treated, and a state permit for heat treating or for feeding treated animal-derived food scraps must be obtained.
- Strong Policy**  
 The state does not restrict the feeding of food scraps to animals beyond what is required in federal regulations. Under federal law, food scraps can generally be fed to animals, so long as food scraps with animal-derived by-products are heat-treated by a licensed facility before being fed to swine, food scraps containing animal-derived by-products may not be fed to ruminants.

**Organic Waste Bans & Waste Recycling Laws**  
 Reveal states and municipalities that have enacted Organic Waste Bans & Waste Recycling Laws.  
[View Organic Waste Bans & Waste Recycling Laws categories](#)

# Food Waste Policy Types

Prevention	Rescue	Recycling		
<i>Date Labeling</i>	<i>Liability Protection</i>	<i>Tax Incentive</i>	<i>Animal Feed</i>	<i>Waste Ban</i>
Quality Date: "Best if Used By" Safety Date: "Use By"	Direct Donations Nominal Fee Paid Past-Date Donations	Credit not Deduction Covers Transportation	No further restrictions on feeding animals food scraps	Includes all generators, including individuals



# Model Policy: Organic Waste Bans

## Vermont

All persons and business entities must separate and recycle organic waste.

## California

- All jurisdictions will need to provide organic waste collection services to all residents and businesses.
- Single-family and multifamily complexes are required to recycle both green waste and food waste, as well as other organic waste materials.
- Some food service businesses must donate edible food to food recovery organizations with others starting in 2024.
- Goals
  - Reduce organic waste disposal 75% by 2025.
  - Rescue at least 20% of currently disposed surplus food by 2025 for people to eat.



\*Centralized Composting

### Annual Impact Potential \*

- Net Financial Benefit  
\$ 49.4 million
- Food Waste Diversion  
13.8M Tons
- Emissions Reduction  
4.94M Metric Tons CO2e
- Jobs Created  
14.2k

\* Incremental potential in addition to what is already happening currently.

### Annual Investment Required

**Public**

- Government Project Finance: \$ 431M
- Government Grants: \$ 431M

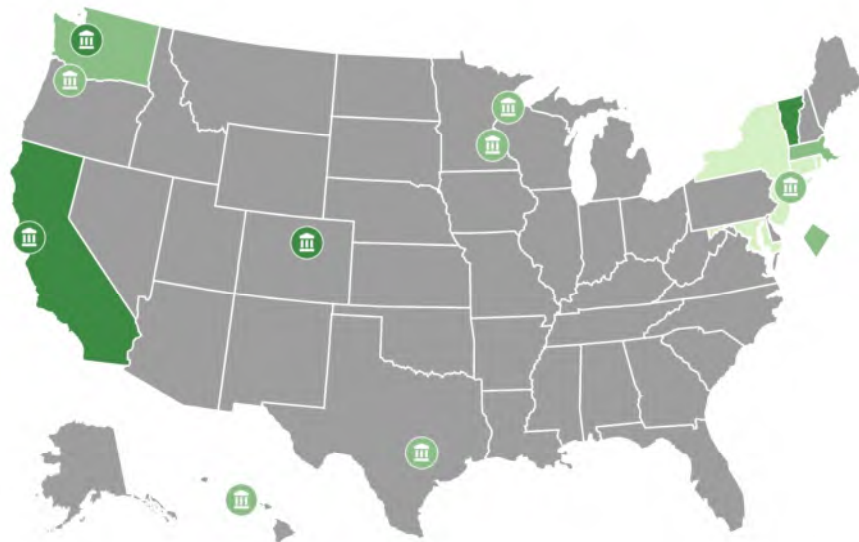
**Philanthropic**

- Non-Government Grants: \$ 43.2M
- Impact-First Investments: \$ 43.2M

**Private**

- Venture Capital: \$ 43.2M
- Corporate Finance & Spending: \$ 129M
- Commercial Project Finance: \$ 215M

# Food Waste Policy Types: Waste Ban



STATES AND MUNICIPALITIES THAT HAVE ORGANIC WASTE BANS & WASTE RECYCLING LAWS



Policy Matrix

**PREVENTION POLICY**

**RESCUE POLICY**

**RECYCLING POLICY**

Increased food scrap recycling can be incentivized by these state and local policies.

- Best-practice Policies**
- Animal Feed**  
Reveal state policies that hinder food waste recycling  
[View Animal Feed categories >](#)
- Organic Waste Bans & Waste Recycling Laws**  
Reveal states and municipalities that have enacted Organic Waste Bans & Waste Recycling Laws.  
[View Organic Waste Bans & Waste Recycling Laws categories >](#)
  - No Policy**  
No organics disposal bans or mandatory organics recycling laws for food waste has been enacted, and there is no financial incentive structure to encourage food donation or waste diversion.
  - Weak Policy**  
Organic waste bans or mandatory organics recycling laws have been enacted but are ineffective due to distance exceptions, limited scope, and/or lack of guidance.
  - Moderate Policy**  
Organic waste bans or mandatory recycling laws are imposed on select commercial generators, with few exceptions.
  - Strong Policy**  
Organic waste bans or mandatory recycling laws for food waste are enacted and enforced for all commercial generators and all individuals with few exceptions.

# Downloadable Policy Handouts

## States Regulating Date Labeling

State	Perishable Foods	Potentially Hazardous Foods	Milk/ Dairy	Meat/ Poultry	Shellfish	Eggs	Other
Alabama		x		x			x
Alaska					x		
Arizona						x	
Arkansas					x		
California			x		x		
Colorado						x	
Connecticut			x				
Delaware					x		
District of Columbia*							
Florida			x		x		
Georgia		x	x		x	x	x
Hawaii			x				
Idaho							
Illinois						x	
Indiana					x	x	
Iowa						x	
Kansas						x	
Kentucky			x		x		
Louisiana						x	
Maine					x		
Maryland			x				
Massachusetts	x	x	x	x	x	x	x
Michigan	x		x	x			
Minnesota	x		x		x	x	
Mississippi					x		
Missouri							
Montana			x				

## State Laws for Feeding Food Scraps to Swine\*

State	Specific Food Bans		Heat-Treatment Requirements		Licensure Requirements		Individual Use Regs.
	Full prohibition on veg. waste	Full prohibition on animal waste	Veg. waste must be treated	Animal waste must be treated	To treat waste	To feed waste to swine	May feed household garbage to own swine
Alabama	x	x					x
Alaska**							x
Arizona						x	x
Arkansas			x	x		x	x
California				x		x	x
Colorado			x	x		x	x
Connecticut					x	x	x
Delaware		x					x
District of Columbia**							x
Florida				x		x	x
Georgia	*	*				x	x
Hawaii				x		x	x
Idaho		x					x
Illinois	x	x					x
Indiana				x	x	x	x
Iowa			x	x		x	x
Kansas		x					x
Kentucky	x	x					
Louisiana	x	x					
Maine				x		x	x
Maryland				x		x	x
Massachusetts		*		x		x	x
Michigan				x		x	
Minnesota			x	x		x	x
Mississippi	x	x					x

# Policy Finder Demo

[policyfinder.refed.org](http://policyfinder.refed.org)

## Tool Resources

- State and Federal Policies
- State Policy Summary Sheets
- Municipal Waste Bans
- Additional Resources





# EPA Food Recovery Hierarchy

## Date Labeling

Measurement/Reporting  
Incentives  
Technical Assistance/PPPs  
Public education

## Tax Incentives

## Liability Protections

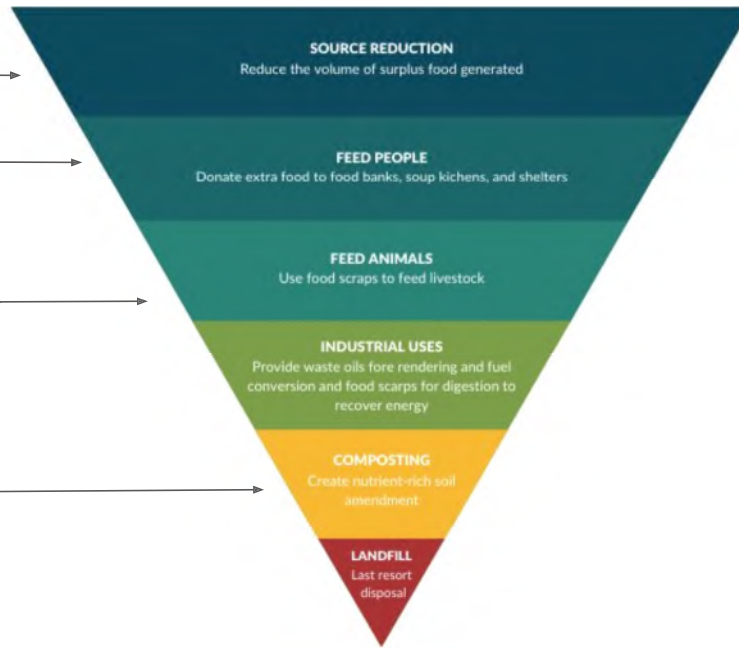
Farm surplus purchasing  
Grant programs/Infrastructure

## Animal Feed

## Restrictions

## Organics Bans

Holistic food waste laws  
Grant programs  
Compost use directives



MOST  
PREFERRED



LEAST  
PREFERRED



## Your Source for Data and Solutions

A knowledge hub for food loss and waste, designed to provide anyone interested in food waste reduction with the information they need to take meaningful action.

Insights Engine tools let users:

- **Understand the problem:** Find out how much food is being wasted in the US, learn why it's happening, and see where it goes.
- **Explore Solutions:** Learn which food waste reduction solutions are the most relevant for meeting specific goals.
- **Find Solution Providers:** Explore our database of 700+ organizations offering products and services to help you reduce food waste.
- **Impact Calculator:** Calculate the environmental and social impacts of wasted food.

Launch the Insights Engine



# A Blueprint for Action

The *Roadmap to 2030* looks at the entire food system and provides a framework to focus waste reduction efforts. Powered by the Insights Engine, the *Roadmap to 2030* is an indispensable resource for reaching our 2030 goal.

7 ReFED outlined seven key action areas for the food system to focus its efforts over the next ten years to *prevent*, *rescue*, and *recycle* food at risk of going to waste.

## PREVENTION

## RESCUE

## RECYCLING



Optimize The Harvest



Enhance Product Distribution



Refine Product Management



Maximize Product Utilization



Reshape Consumer Environments



Strengthen Food Rescue



Recycle Anything Remaining



Roadmap to 2030: Reducing U.S. Food Waste by 50% | Find Details on Each Solution in the ReFED Insights Engine | [insights.refed.com](https://insights.refed.com)

**Action Areas**

- OPTIMIZE THE HARVEST**  
Avoid over-production, then harvest as much as possible. For wild caught products, source only what is needed.
- ENHANCE PRODUCT DISTRIBUTION**  
Leverage technology to create smart systems that help efficiently move products to maximize freshness and selling time.
- REFINE PRODUCT MANAGEMENT**  
Align purchases with sales as closely as possible and find secondary outlets for surplus. Build out systems and processes for optimal on-site handling.
- MAXIMIZE PRODUCT UTILIZATION**  
Design facilities, operations, and menus to use as much of each product as possible. Upcycle surplus and byproducts into food products.
- RESHAPE CONSUMER ENVIRONMENTS**  
Drive consumers towards better food management and less waste by creating shopping, cooking, and eating environments that promote those behaviors. Shift culture to place more value on food and reduce waste.
- STRENGTHEN FOOD RESCUE**  
Further the rescue of high-quality, nutritious food by increasing capacity, addressing bottlenecks, and improving communication flow.
- RECYCLE ANYTHING REMAINING**  
Find the highest and best use for any remaining food or food scraps in order to capture nutrients, energy, or other residual value.

Modeled Solutions

Unmodeled Solutions

Best Practices

OPTIMIZE THE HARVEST	ENHANCE PRODUCT DISTRIBUTION	REFINE PRODUCT MANAGEMENT	MAXIMIZE PRODUCT UTILIZATION	RESHAPE CONSUMER ENVIRONMENTS	STRENGTHEN FOOD RESCUE	RECYCLE ANYTHING REMAINING
Buyer Spec Expansion	Decreased Transit Time	Assisted Distressed Sales	Active & Intelligent Packaging	Meal Kits	Donation Coordination & Matching	Centralized Anaerobic Digestion
Gleaning	First Expired First Out	Decreased Minimum Order Quantity	Manufacturing Byproduct Utilization (Upcycling)	Buffer Signage	Donation Education	Community Composting
Imperfect & Surplus Produce Channels	Intelligent Routing	Dynamic Pricing	Manufacturing Line Optimization	Consumer Education Campaigns	Donation Storage Handling & Capacity	Centralized Composting
Partial Order Acceptance	Temperature Monitoring (Pallet Transport)	Enhanced Demand Planning	Edible Coatings	K-12 Lunch Improvements	Donation Transportation	Co-digestion at Wastewater Treatment Plants
Field Cooling Units	Reduced Warehouse Handling	Increased Delivery Frequency	Improved Recipe Planning	Package Design	Donation Value-Added Processing	Home Composting
In-Field Sanitation Monitoring	Advanced Shipment Notifications	Markdown Alert Applications	In-House Repurposing	Portion Sizes	Blast Chilling to Enable Donations	Livestock Feed
Innovative Grower Contracts	Early Spoilage Detection (Hyperspectral Imaging)	Minimized On-Hand Inventory	Precision Food Safety	Small Plates	Donation Reverse Logistics	Waste-Derived Agricultural Inputs
Labor Matching	Inventory Traceability	Temperature Monitoring (Foodservice)	Discount Meal Plates	Standardized Date Labels	High-Frequency Reliable Pickups	Insect Farming
Smaller Harvest Lots	Modified Atmosphere Packaging System	Waste Tracking (Foodservice)	Employee Meals	K-12 Education Campaigns	Established Relationships with Businesses	Rendering
Improved Communication for Planting Schedules	Vibration & Drops Tracking	Low Waste Event Contracts	Larger Quantities for Take Home	Trayless	Culling SOPs	Waste-Derived Processed Animal Feed
Sanitation Practices & Monitoring	Optimized Truck Packing, Loading & Unloading (e.g., Cross-Docking)	Direct to Consumer Channels	Small and Versatile Menus	Home Shelf-life Extension Technologies		Waste-Derived Bioplastics
Optimized Harvesting Schedules	Enforcing Cold Chain SOPs	Online Marketplace Platform	Sous-Vide Cooking	Smart Home Devices		Waste-Derived Biomaterials
On-Farm / Near-Farm Processing	Regular Maintenance on Refrigerated Trucks	Online, Advanced Grocery Sales		Waste Conscious Promotions		Enabling Technologies (e.g. depackaging and pre-treatment)
Local Food Systems	Cross-Docking	Precision Event Attendance		Frozen Value-Added Processing of Fresh Produce		Separation & Measurement
Clear Product Ownership		Repackaging Partially Damaged Products		Customizable Menus/Options		Relationships with Waste Haulers
		Retail Automated Order Fulfillment		To-Go Offerings		Waste Audits by Waste Haulers
		SKU Rationalization		Free Items Offered Upon Request (e.g., bread, chips)		
		Markdowns		Storytelling (e.g. product impact, source, upcycled ingredient components)		
		Optimal Storage				
		Reduced Displays				
		Optimized Walk-In Layouts				

# Stay Connected



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insights.refed.org



## Attachment 8

EPA Food Waste Resources, Food Waste work in Region 3 Presentation

# EPA Feedback on WDRTF Brainstorming Activities Related to Food Waste and Organics Recycling

Virginia Waste Diversion and  
Recycling Task Force Meeting



Presented By Melissa Pennington, EPA Region 3 on March 15, 2022

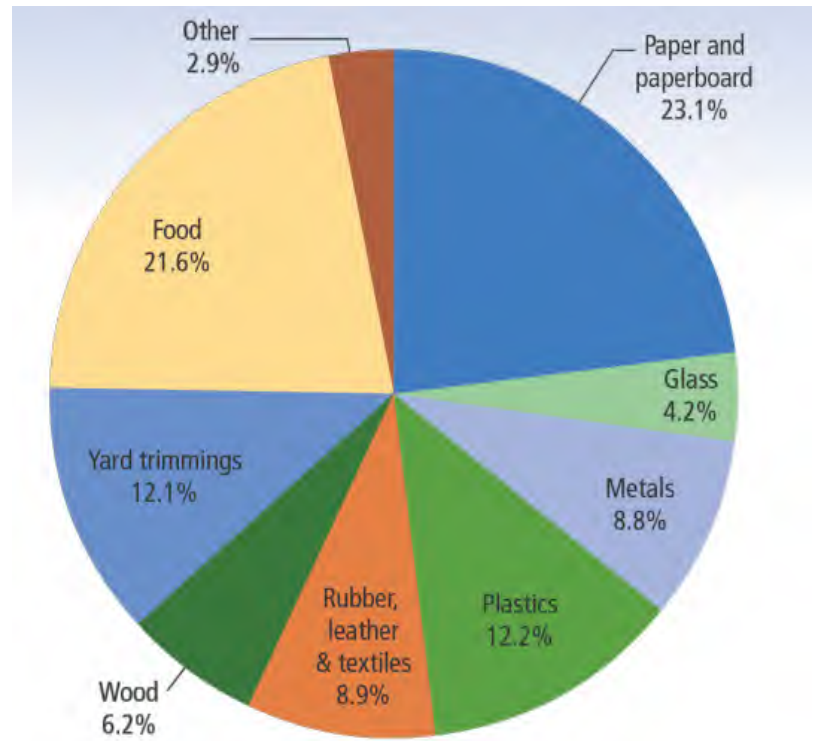
## Increase Mandated State Recycling Rate



- VA's Current Recycling Goal = 25%
- National Recycling Goal = 50% by 2030
- How do recycling goals impact organics diversion?

# Total MSW Generation (by material)

EPA Facts and Figure Report  
December 2020  
2018 Data



## State Recycling Rate Calculation for CY2020

Principal Recyclable Materials (PRM) Tons			
PRM Material	Tons Recycled	Credits	Tons Recycled
Paper	782,184	Recycling Residue	596,014
Metal	949,151	Solid Waste Reused	14,851
Plastic	63,415	Non-MSW Recycled	797,373
Glass	30,780	<b>Total Credits</b>	<b>1,408,238</b>
Commingled	842,020		
Yard Waste	596,784	<b>MSW Disposed</b>	<b>Tons</b>
Waste Wood	289,235	Household Waste	4,169,182
Textiles	32,154	Commercial Waste	1,477,348
Waste Tires	61,627	Institutional Waste	87,567
Used Oil	43,314	Other	2,592
Used Oil Filters	3,769	<b>Total MSW Tons</b>	<b>5,736,688</b>
Used Antifreeze	4,449		
Batteries	25,692	<b>Source Reduction Credits</b>	0.93%
Electronics	7,081		
Inoperative Motor Vehicles	1,751		
Other	165,925		
<b>Total PRM in Tons</b>	<b>3,899,330</b>		

What's missing here?

# Yard Waste Composting – Path to Food Waste Composting?



## BEST MANAGEMENT PRACTICES (BMPs) FOR INCORPORATING FOOD RESIDUALS INTO EXISTING YARD WASTE COMPOSTING OPERATIONS



THE U.S. COMPOSTING COUNCIL  
RONKONKOMA, NEW YORK, USA



**US** Composting  
Council

# Successful Composting Networks are Comprised of Varying Scales



## Assistance for Development of New Composting Infrastructure through Grants

- Grant \$\$\$ for New Facilities
- Funding VADEQ Grant Programs
- Infrastructure Investment and Jobs Act (IIJA):
  - New Federal Grant Programs
  - Eligibility = States, Tribes and Local Govts
  - SWIFR:
    - \$55M/yr for 5 years (total \$275M) – nationally



# Infrastructure Investment and Jobs Act (IIJA) Grant Funding

## Solid Waste Infrastructure for Recycling (SWIFR):

- Total \$275M – nationally
- \$55M/yr for 5 years

## Education and Outreach (E&O):

- Total \$75M – nationally
- \$15M/yr for 5 years
- Model Recycling Program Toolkit to be Developed for States, Tribes and Local Govts



**Contact Info: Melissa Pennington**  
**U.S. EPA Region III**  
**Sustainable Food Management Program**  
[pennington.melissa@epa.gov](mailto:pennington.melissa@epa.gov)

## Attachment 9

### Priority Ranking Slides

## Priorities for Future Meetings: Top Ranking Items

### Reduction & Diversion

- Capacity Analysis for waste and diversion systems
- Move Commonwealth to EPR framework

### Recycling

- Statewide education campaign / website
- NVWMB Proposed Policy Solutions [EPR + State & Regional Planning Leadership]
- Statewide bottle recycling infrastructure
- Infrastructure tax reimbursements (machinery & tools)

### Litter Grant

- Expand Grants – food waste prevention, compost/AD, deconstruction
- Examine other state grant sources
- Increase Tire Disposal Fee

6

DEQ

## Priorities for Future Meetings: Top Ranking Items

### Food

- Modify §35.1-14.2 to allow non-profit entities and faith-based organizations to donate food to the food-insecure
- DEQ Organics Recycling Coordinator, DEQ Report on Composting / AD / food waste processing vendors
- Mandatory composting for large generators
- Require compost in construction & road work

### EV Batteries

- Grant incentives (public & private), for localities to develop public outreach campaigns
- Don't limit to EV batteries, address all batteries, other hard to recycle materials (e.g. solar panels)
- Ban irresponsible disposal
- Extended producer responsibility (EPR)

7

DEQ

## Meeting Minutes

**WASTE DIVERSION AND RECYCLING TASK FORCE**  
**DEQ Central Office, Bank of America Building 3<sup>rd</sup> Floor Conference Room**  
**1111 East Main Street, Richmond, Virginia**  
**June 14, 2022**

Members Present: Michael Hatfield, Tad Phillips, Robbie Pecht, Morgan Guthridge, Jim Taylor, Joe Lerch, Debbie Spiliotopoulos, Craig Coker, James Gestrich, Greg Evanylo, Jared Stoltzfus, Kenneth Dunford, Kim Hynes, Helen Lee, and Rick Galliher.

Members Absent: Kristi Rines, Mike O'Connor, Brian Sernulka, Joe Benedetto, Mitchell Smiley, John Harbin, Rob Laurent, Rhonda Russell, Dale Bennett, and Tom Benevento.

Other Attendees: Scott DeFife (alternate for Brian Sernulka), Bonnie Mahl, Katie Register, Lauren Schmitt, Gustavo Angeles, and Cristi Lawton.

DEQ Staff Attendees: Kathryn Perszyk, Craig Nicol, Janet Weyland, Sanjay Thirunagari, Gary Graham, Prina Chudasama, Melinda Woodruff, Meghann Quinn, and Sharon Baxter.

The meeting convened at 10:06 a.m.                      The meeting adjourned at 3:38 p.m.

A quorum of task force members (or their alternates) was present for this meeting.

### **1. Welcome, Group Reminders** [Kathryn Perszyk, DEQ; Craig Nicol; DEQ]

- a. The meeting agenda (Attachment 1), Executive Order 17 (Attachment 2), Litter Grant Program Summary (Attachment 3), and DEQ-LPR-2: Guidelines for the Virginia Litter Prevention and Recycling Grants (Attachment 4) were sent to the members prior to the meeting. Copies were available for other attendees at the meeting.
- b. Ms. Perszyk reviewed the final agenda and presented a meeting introduction (Attachment 5) that:
  - i. Reminded members of the responsibilities of participating in a public body subject to FOIA, and
  - ii. Reviewed the consensus process in the context of Task Force decision making.

### **2. Litter Board Recommendations** [Mike O'Connor, Virginia Petroleum and Convenience Marketers Association (VPCMA) and Litter Control and Recycling Fund Advisory Board (LCRFAB); Bo Wilson and Kate Register, LCRFAB].

- a. Ms. Perszyk reminded the task force about the Senate Resolution 42 requests regarding the litter and recycling grant program (Attachment 6). Mr. O'Connor and Mr. Wilson, presenting remotely, presented a statement prepared by the Litter Control and Recycling Fund Advisory Board (Attachment 7).
- b. Discussion of the statement:
  - i. The 1100% return on funds invested represents the matching funds allocated by localities beyond the \$1.8-2.4 million investment that DEQ makes.
  - ii. A question was asked about how Virginia compared to other states for litter funding. The LCRFAB doesn't look at others states, but it was stated that Virginia is 28% below the other states; most states do not have a litter fund.
  - iii. Board is not saying that no funding/program improvements are needed. Litter Board is accomplishing its goals using the funds provided.

- iv. Ms. Register will look into other mechanisms of other revenue sources, such as litter abatement fees.

**3. Facilitated Discussion & Group Recommendations** [Kathryn Perszyk, Craig Nicol, Janet Weyland].

- a. Ms. Perszyk presented top ranking items regarding litter grant improvements from the first meeting's brainstorm, as well as specific feedback previously provided from the Hampton Roads Planning District Committee (Attachment 8)
- b. Facilitated Discussion.
  - i. Make the tax for the fund proportional to the store/industry/facility size.
  - ii. Allow grants the flexibility to address unforeseen events (e.g., inflation, diesel shortages, pandemic) to improve resiliency and allow emergency funding.
  - iii. Specify that tax or fees and increases to go to the litter fund.
  - iv. Be creative in finding additional ways can you add to the fund besides the drink tax, e.g., boxes and bags.
  - v. Find a way to collect and provide the data for the program benefits and what litter are being prevented, e.g., better data that accounts for the types of litter, its value and volume, toward calculating how much reduction has occurred
  - vi. Look at the entire program system and find ways to deal with additional recycling issues such as dumpster hygiene, shopping carts in the stream; etc.
  - vii. Increase the tire disposal fee and ensure that it is used for tire management.
  - viii. Verify (and enforce) that fast food restaurants pay the litter/container tax.
  - ix. More emphasis on food waste recycling and composting, either through the litter or a separate fund and educational means.
  - x. Give more emphasis on Electric Vehicle battery disposal, safety, and hazardous effects on groundwater before it becomes an emergency.

**4. Executive Order 17 (EO17) – Encouraging Recycling Related Businesses to locate in Virginia** [Kathryn Perszyk, DEQ]. Ms. Perszyk provided an overview of Governor Youngkin's EO17 (Attachment 9) and reviewed its request of the Task Force. Industry representatives on the Task Force were invited to share their recommendations to encourage new recycling related businesses, including collection, processing and manufacturing facilities, to locate in the Commonwealth.

- a. Presentation on glass: [Scott DeFife, Glass Packaging Institute].
  - i. Establish locations where source separation of glass occurs and help move it; then transport glass to a processing facility within 50 miles of aggregation;
  - ii. Size the processing facilities properly; see how much glass is collected and then determine how large of a facility you would need for that region.
  - iii. Pursue grants: EPA is putting out for grants for glass recycling; another education grant coming from the Fed govt. as well.
  - iv. Collect glass in a different way to improve the 25-50% non-glass residue in the loads from VA.
  - v. Policy, siting, and permitting assistance is needed from the State.

- b. Presentation on MRF recycling [Tad Phillips, Virginia Waste Industries Association].
  - i. Single stream recycling is the most efficient way to get the recyclables.
  - ii. A critical mass is necessary - if you don't have critical mass of material collected for recycling, then it is not economical to build a processing facility. Rural areas and multi-family areas (apartments) need other solutions.
  - iii. Processing has to be scalable to the volume available, which is also an urban versus rural issue.
  - iv. Contamination is not necessarily a bad thing; it can be anticipated and the necessary processing technology can be built into the facility.
  - v. Virginia needs to provide economic development and the information necessary to locate existing MRFs and site new ones.
  - vi. Virginia should provide incentives for packages proposed by Economic Development;
- c. Task Force EO17 recommendations [Kathryn Perszyk, DEQ].
  - i. Ms. Perszyk offered a summary of actions proposed by Task Force members for meeting the EO17 tasking (Attachment 10).
  - ii. Ms. Perszyk also offered an example of proposal topics, and acknowledged that all topics are not yet represented on the slide, e.g., food waste and various non-traditional recycling such as EV batteries and solar panels, among others (Attachment 11).
  - iii. More discussion and a decision is needed on how to respond to the EO17 tasking. One more meeting is all the time left to respond to the EO17 tasking and to discuss the task force report that will be drafted before the next meeting.

**5. WDRTF Report [Kathryn Perszyk, DEQ; Craig Coker, Jared Stoltzfus].**

- a. Ms. Perszyk provided an overview of the report template (Attachment 12) that had been provided earlier to Mr. Coker and Mr. Stoltzfus, who had volunteered at the last meeting to be the primary authors of the Task Force's Report. Ms. Perszyk walked the members through the report template.
- b. Discussion:
  - i. Recognize that minutes of all meeting, including all attachments, will be included in the appendices to the report.
  - ii. The report needs to be able to capture the passion level of the task force.
  - iii. The need for additional funding needs to be included in the report
  - iv. A tight Executive Summary will be needed that includes the Task Force's recommendations.
  - v. A recommendation as to whether or not the Task Force should be continued should be included. There are other things in the legislative tasking that have not been discussed yet
  - vi. Does Virginia need to contract out a concentrated survey more detailed focus or analysis through a contractor?

**6. Next Steps & Future Meetings [Craig Nicol and Janet Weyland, DEQ].**

- a. Timeline requirements and limitations:

- i. Report has to go to DEQ Policy by September 15.
  - ii. Need a report draft distributed to the task force August 1.
  - iii. Need to have meeting 4 of the Task Force in the mid-August timeframe, to review, discuss and edit the draft as a group in order to give the DEQ facilitators the necessary time to fine tune the report by their September 15 deadline.
  - iv. Must have a quorum (at least 13 members) at that August meeting in order to make those decisions.
  - v. The week of August 17 is a recycling conference, so that week is not a candidate for a meeting.
- b. Other Considerations
- i. A decision is needed as to whether to recommend that the Task Force should be continued. If so, goals for those meetings need to be included in this report.
  - ii. Need more information on Extended Producer Responsibility (EPR) programs for this report. Send information to Gary Graham (or his designee after August 1) for distribution to Mr. Coker and Mr. Stolzfus.
- c. EPR Summary [Scott DeFife, Glass Packaging Institute]. Mr. DeFife provided an overview of extended producer responsibility, and talked about the programs established for packaging materials in Oregon, Maine, and Colorado.

**Attachments:**

1. Agenda
2. Executive Order 17
3. Litter Grant Program Summary
4. DEQ-LPR-2: Guidelines for the Virginia Litter Prevention and Recycling Grants
5. Introduction Presentation
6. Litter Grant Program Introduction
7. Litter Control & Recycling Grant Program Advisory Board Memo
8. Litter Grant Program Feedback
9. Executive Order 17 Introduction
10. Executive Order 17 Feedback from Task Force Members (table)
11. Executive Order 17 Feedback Categorization
12. Task Force Report Overview

**WASTE DIVERSION AND RECYCLING TASK FORCE  
Bank of America Building 3<sup>rd</sup> Floor Conference Room  
1111 East Main Street, Richmond, Virginia**

**June 14, 2022**

- 10:00**      **Welcome, Group Reminders**  
Kathryn Perszyk / Craig Nicol
- 10:15**      **Litter Board Recommendations**  
Mike O'Connor, Virginia Petroleum and Convenience Marketers Association &  
Litter Control and Recycling Fund Advisory Board Member
- 10:30**      **Facilitated Discussion & Group Recommendations**  
Craig Nicol / Janet Weyland
- 11:15**      **EO17 – Encouraging Recycling Related Businesses to locate in Virginia**  
[Executive Order 17: Recognizing the Value of Recycling & Waste Reduction](#)  
Kathryn Perszyk / Invited Speakers
- 11:45**      **LUNCH BREAK (on your own)**
- 1:00**      **Extended Facilitated Discussion & Group Recommendations**  
Craig Nicol / Janet Weyland
- 2:15**      **WDRTF Report**  
Kathryn Perszyk / Craig Coker & Jared Stoltzfus
- 3:45**      **Next Steps & Future Meetings**  
Craig Nicol / Janet Weyland
- 4:00**      **ADJOURN**



Executive Order 17



*Commonwealth of Virginia  
Office of the Governor*

## *Executive Order*

### **NUMBER SEVENTEEN (2022)**

#### **RECOGNIZING THE VALUE OF RECYCLING AND WASTE REDUCTION**

By virtue of the authority vested in me as Governor, I hereby issue this Executive Order to recognize the value of recycling, to help create new clean technology jobs, and to help stop food waste.

#### **Importance of the Initiative**

Americans today recycle less than they did a generation ago, yet there are more opportunities for post-consumer recycled products than ever before. Recycling and reuse activities account for over 750,000 jobs nationwide. Food waste comprises the single largest category of waste by volume disposed of in landfills. We need to conserve our natural resources, reduce the amount of recyclable materials and waste that goes into landfills, and promote new clean energy jobs here in Virginia. Recognizing and promoting the importance of recycling has the potential to positively impact the Commonwealth's environment, providing cleaner air and water, as well as create new clean technology jobs.

#### **Directive**

Accordingly, pursuant to the authority vested in me as the Chief Executive Officer of the Commonwealth, and pursuant to Article V of the Constitution of Virginia and the laws of the Commonwealth, I hereby order my administration to take the following actions to address our ideals of environmental stewardship:

## **1. Recognition of the Value of Recyclable Material**

### **A. State Agency Initiative to Encourage Recycling**

It is the policy of the Commonwealth, and all executive branch state agencies, including state institutions of higher education, and their concessioners (Agency or Agencies) to increase awareness of the importance of recycling and better capture recyclable material, as well as encourage the use of post-consumer recycled (PCR) products and biodegradable materials.

In accordance with the State Agency Recycling Initiative, employees of the Commonwealth should be notified of the recyclable material collection areas, including, but not limited to, newspapers, office papers, corrugated boxes, folding cartons, glass containers, plastic bottles, plastic containers, plastic film, and metal cans through clearly visible signage posted in recyclable material collection areas. The signage should include information regarding the value of waste diversion.

It shall be the official responsibility of Agencies to work with the Department of General Services, or building property owners and local waste management companies and recycling facilities, as appropriate, to ensure access to recycling programs that accept all Agency collected materials. .

### **B. Virginia State Parks Plan**

The Department of Conservation and Recreation, shall report to the Secretary of Natural and Historic Resources with an assessment plan for a Virginia State Parks Campaign in accordance with the State Agency Recycling Initiative to determine the necessary resources to increase the capacity to capture recyclable materials, including increasing the recycling receptacles in Virginia's State Parks and necessary requests for resources to implement the Virginia State Parks Plan. The campaign should be developed in partnership with the Virginia Green Travel Alliance to promote the parks' recycling initiatives to the public.

## **2. Making Virginia Home to New Clean Technologies**

A. The Waste Diversion and Recycling Task Force shall discuss ways to encourage new recycling related businesses, including collection, processing and manufacturing facilities, to locate in the Commonwealth and include any recommendations in their next report.

B. Within 12 months the Department of Environmental Quality, in conjunction with the Department of Commerce and other stakeholders as appropriate, will produce a report outlining opportunities for attracting PCR product business entities to the Commonwealth. The report shall identify:

1. The waste-stream requirements for PCR companies to locate within the Commonwealth.
2. Identify incentives offered to PCR companies in other States and identify feasible options in the Commonwealth.

3. Identify potential geographic areas within the Commonwealth to focus on new clean technology business development, with particular emphasis in rural areas.

### **3. Stopping Food Waste**

Food waste is the single largest substance by volume sent to solid waste sites across Virginia and the United States. While Virginia families are struggling to put food on the table and our farmers are struggling to feed their livestock and fertilize their crops we must divert this waste stream to benefit people and farmers in need.

The Department of Environmental Quality in conjunction with the Department of Agriculture and Consumer Services shall work in partnership with large-scale suppliers of food such as food manufacturers, grocery retailers, sports arenas, schools, hotels and banquet facilities to identify appropriate strategies to reduce food waste in their respective sectors by encouraging donations to needy individuals, food for animals or for composting purposes.

### **4. Annual Report to Increase Transparency**

The Department of General Services shall catalog the metric tonnage of the state's recycling program and establish goals by December 31, 2022 for each succeeding year for state agency recycling through 2025.

The Department shall report to the Governor and the Chairs of the House Agriculture, Chesapeake, and Natural Resources Committee and the Senate Agriculture, Conservation, and Natural Resources of the progress of the State Agency Recycling Initiative by no later than December 1, 2022, and each succeeding year.

### **5. Exclusions**

Nothing in this Order shall restrict any Agency from using any items as necessary to respond to any executive action declaring a state of emergency or order of public health emergency that would otherwise be restricted in use by this Order.

This Executive Order rescinds and replaces Executive Order No. 77 (2021) issued by Governor Ralph S. Northam.

**Effective Date**

This Executive Order shall be effective upon its signing and shall remain in full force and effect unless amended or rescinded by further executive order.

Given under my hand and the Seal of the Commonwealth of Virginia this 7<sup>th</sup> day of April 2022.



A handwritten signature in black ink, reading "Glenn Youngkin".

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Glenn Youngkin, Governor

Attest:

A handwritten signature in black ink, reading "Kay Coles James".

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Kay Coles James  
Secretary of the Commonwealth

Litter Grant Program Summary



## LITTER GRANT PROGRAM

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DEQ awards non-competitive and competitive grants to Virginia localities for local litter prevention and recycling program implementation activities.

### **Non-Competitive Litter Grants:**

Since 1980, non-competitive litter grants have been awarded annually to localities for litter prevention and recycling program implementation, continuation and/or expansion. The grant program awards are based on population and road miles. All Virginia localities are eligible if they have eligible litter prevention and/or recycling program. The grant applications are due to DEQ by June 30<sup>th</sup> each year. The accounting and performance reports for the grant awarded in the preceding year are due by August 1<sup>st</sup> each year.

An eligible program must include at least two of the following elements to have a comprehensive program:

- planning and organization,
- recycling,
- youth education,
- cleanups,
- law enforcement,
- public communication,
- Adopt-A locality-sponsored programs.

To date, Virginia businesses, who pay into the Litter Control and Recycling Fund, have contributed over \$67 million to support those local government litter control and recycling programs. The amount of funds available for this grant program is approximately 90% of the net resources allocated for the Litter Fund. This grant funding is to be used primarily for educational activities that support anti-littering and pro-recycling efforts. Towns usually receive the smallest grant amount in an approximate range of \$800 to \$1,000.

For the 2021 grant year (same as fiscal year), \$1,708,156 was disbursed among 187 applicants.

### **Competitive Litter Grants:**

Since 2017, competitive litter grants have been awarded to Virginia localities for a variety of litter prevention and recycling projects. All localities currently receiving the non-competitive litter grant are eligible to apply for the competitive litter grant. The competitive grant funds can be used for developing and implementing statewide and regional litter prevention and recycling educational programs and special/pilot projects. The competitive grant applications are due to DEQ by July 15<sup>th</sup> each year. The accounting and performance reports for the grants awarded in the preceding year are due by August 1<sup>st</sup> each year. The grant applications are reviewed by the Litter Control and Fund Advisory Board and the recommendations are submitted to DEQ for final approval.

The amount of funds available for this grant program is approximately 5% of the net resources allocated for the Litter Fund. For the 2021 grant year, \$95,035 was disbursed among 13 localities.

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

**DEQ Summary Report:**

DEQ provides an annual summary report on the litter grant to the public and stakeholders. This report summarizes the litter prevention and recycling program expenses and activities conducted in the previous fiscal year by the local government recipients of the annual litter and recycling grants.

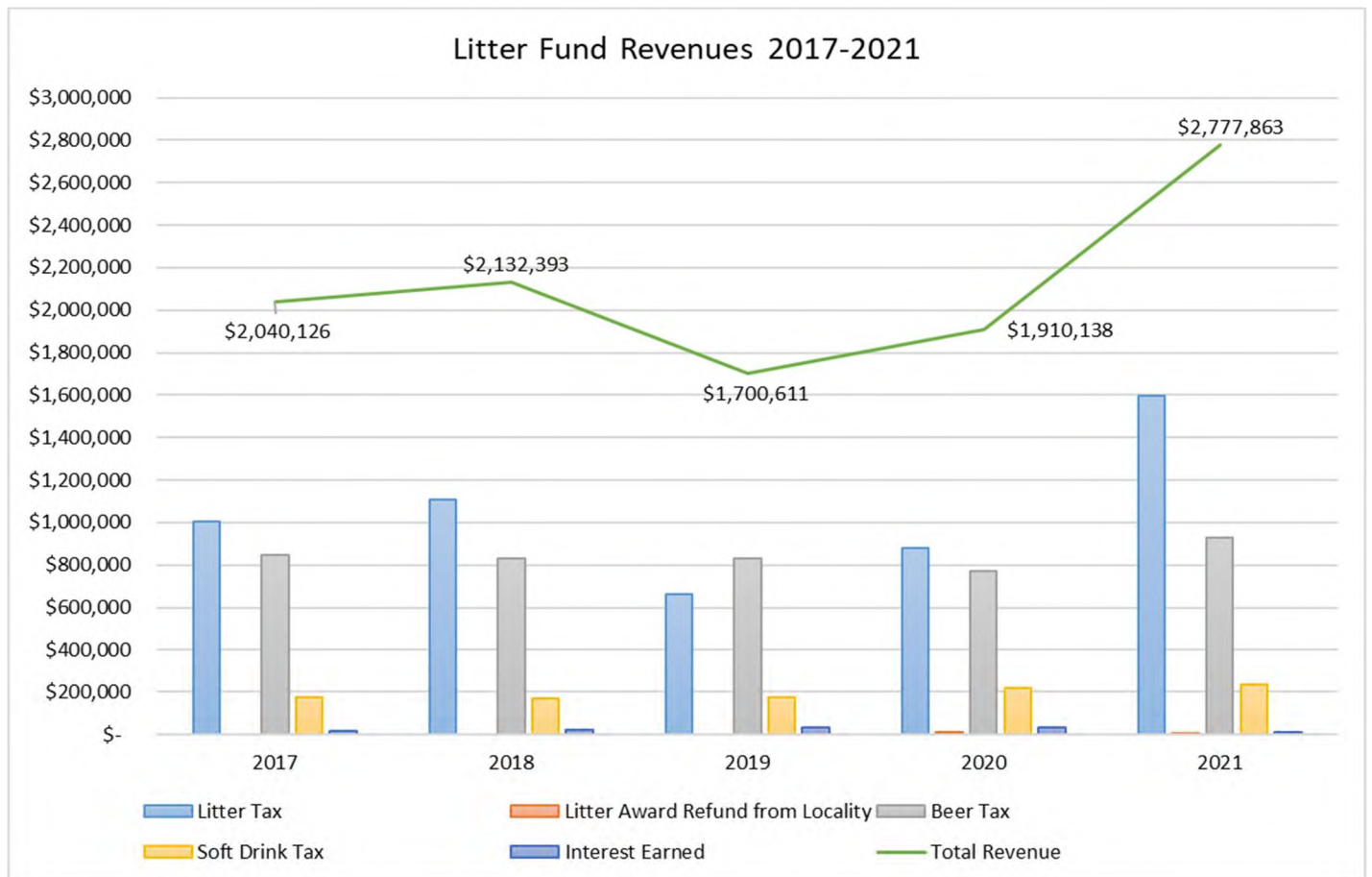
**Litter Control and Fund Advisory Board:**

The Litter Control and Fund Advisory Board is appointed by the Governor and consists of five members as follows: one representative for each of the three types of entities required to pay the litter taxes, one local litter or recycling coordinator and one member from the general public. The Litter Control and Fund Board meets annually to track the status of the Fund and the progress of the annual grant programs.

**Litter Control and Recycling Fund & Changes:**

The Code of Virginia provides for the following annual litter taxes to be collected and deposited in an interest earning account - the Litter Control and Recycling Trust Fund (Fund). Figure 1 below shows the litter fund revenues from 2017 to 2021.

**Figure 1: Litter Fund Revenues from 2017 and 2021**



**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.



The 2021 General Assembly made changes to the [statute](#) and added a requirement for operation of public information campaigns to discourage the sale and use of expanded polystyrene products and to promote alternatives to expanded polystyrene. Also, statutory changes were made to fund the public information campaign by allowing use of litter funds up to a maximum of five percent.

- **Litter Control and Recycling Fund (Section 10.1-1422.01)** - Provides formula for allocation of funds, amended by legislation in 2008 and effective July 1, 2009.
- **Litter Tax (Section 58.1-1707)** - \$20 per year for each location of manufacturers, wholesalers, distributors or retailers of consumer products and an additional \$30 per year, per location where groceries, soft drinks and beer are sold.
- **Excise Tax on Soft Drinks (Section 58.1-1702)** - A gross-receipts tax on wholesalers.
- **Excise Tax on Beer and Wine Coolers (Section 4.1-235 & 4.1-236)** - 2% of the taxes collected go to the Fund.

#### **Information Links:**

- Litter Grant Online Application: <https://portal.deq.virginia.gov/>
- Statute: <https://law.lis.virginia.gov/vacode/title10.1/chapter14/section10.1-1422.01/>
- DEQ Litter Grant Guidelines:  
[https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\440\GDoc\\_DEQ\\_2282\\_v5.pdf](https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\440\GDoc_DEQ_2282_v5.pdf)
- GY2020 Annual Performance and Accounting Summary Report available at:  
<https://www.deq.virginia.gov/home/showpublisheddocument/8257/637680040846072667>

**Note:** This summary is intended for the purpose of the Waste Diversion & Recycling Task Force. This summary does not represent the full program details.

DEQ-LPR-2: Guidelines for the Virginia Litter Prevention and Recycling Grants

**Commonwealth of Virginia**  
**Department of Environmental Quality**

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**SUBJECT: Division of Land Protection & Revitalization Guidance  
Document No. DEQ-LPR-2 — GUIDELINES FOR THE VIRGINIA  
LITTER PREVENTION AND RECYCLING GRANTS**

**TO: Applicants Receiving Litter Prevention & Recycling Grants – Virginia  
Localities**

**FROM: Kathryn Perszyk**   
**Director, Land Protection & Revitalization Division**

**DATE: March 17, 2022**

**Summary:** The Code of Virginia, § 10.1-1422.04, directs DEQ to award grants to localities that apply for local litter prevention and recycling grants and meet the eligibility requirements established in the Department's Guidelines for Litter Prevention and Recycling Grants (DEQ-LPR-2).

The Guidelines were updated to include the funding per § 10.1-1422.01 for the operation of public information campaigns to discourage the sale and use of expanded polystyrene (EPS) products. The updated Guidelines were approved by the Litter Fund Board at their December 2021 public meeting.

**Electronic Copy:** Once effective, an electronic copy of this guidance will be available on the Virginia Regulatory Town Hall under the Department of Environmental Quality at <https://townhall.virginia.gov/L/gdocs.cfm?boardid=53>

**Contact Information:** Please contact Sanjay Thirunagari at (804) 659-1532 or [sanjay.thirunagari@deq.virginia.gov](mailto:sanjay.thirunagari@deq.virginia.gov) with any questions regarding the application of this guidance.

**Certification:** As required by Subsection B of § 2.2-4002.1 of the APA, the agency certifies that this guidance document conforms to the definition of a guidance document in § 2.2-4101 of the Code of Virginia.

**Disclaimer:** *This document is provided as guidance and, as such, set forth standard operation procedures for the agency. However, it does not mandate or prohibit any particular action not otherwise required or prohibited by law or regulation. If alternative proposals are made, such proposals will be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.*



## GUIDELINES FOR THE VIRGINIA LITTER PREVENTION AND RECYCLING GRANTS (DEQ-LPR-2)

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**Note:** Section 1 includes the current guidelines for DEQ non-competitive grants, Section 2 for competitive grants, and Section 3 for the operation of public information campaigns to discourage the sale and use of expanded polystyrene products.

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Funding is available to Virginia localities from the Litter Prevention and Recycling Fund as non-competitive grants based on population and road miles, *if* the locality has an eligible program as identified in Section I.B and C below.

These grants are provided by funds generated by taxes enacted under Section 58.1-1700 to 58.1-1710 of the Code of Virginia and through authority granted to the Department of Environmental Quality (DEQ) under Section 10.1-1422 of the Code of Virginia. These guidelines supersede all previous regulations and guidelines relating to these grant funds.

### 1. **DEQ NON-COMPETITIVE GRANTS:**

#### I. **ELIGIBILITY**

- A. All cities, counties, and incorporated towns in Virginia are eligible if they have eligible litter prevention and/or recycling program.
- B. An eligible program must include at least **two** elements of a **comprehensive program**. The elements of a comprehensive program are:
  - i. Planning and Organization
  - ii. Recycling
  - iii. Youth Education
  - iv. Cleanups
  - v. Law Enforcement
  - vi. Public Communication
  - vii. "Adopt-A" Programs sponsored by the locality
- C. An eligible program may also include any of the non-disposal elements of waste management (source reduction, reuse, and recycling) in the locality's approved Solid Waste Management Plan. Procurement of recycled goods may also be included.
- D. All completed forms must be received by their corresponding deadlines by DEQ for grants to be paid. Non-competitive litter grant applications for the upcoming grant year are due by **June 30<sup>th</sup>** of the current year. Non-competitive litter grant accounting and performance reports for funds awarded in the preceding year are due by **August 1<sup>st</sup>** of the current year.
- E. Localities may apply singly or as a participant in a Cooperative Program. A Cooperative Program consists of two or more localities joining together and combining grant funds to implement one program. One application form is submitted for the Cooperative Program by a Coordinating Agency, which may be one of the participating localities or a non-governmental

agency. The Coordinating Agency submits an executed original application that lists each participating locality. Also, the Coordinating Agency will be responsible for submitting the required Performance and Accounting Report on behalf of the participating localities.

- F. For Cooperative Programs among units of local governments only, the Coordinating Agency shall affirm that a written Agreement with each participating locality is on file. Such Agreement shall expressly authorize the Coordinating Agency to apply on behalf of each participating locality.
- G. For Cooperative Programs implemented by a non-governmental agency, the Coordinating Agency shall include, in addition to the Application, written evidence that the Coordinating Agency is acting for and accepting funds on behalf of each participating locality. This evidence shall include one of the following:
  - i. copies of the Agreements that originally established the Coordinating Agency by the participating local governments;
  - ii. signature by each locality's manager on the Application form itself; or,
  - iii. any other applicable documentation which indicates the localities' desire for the non-governmental agency to accept funding and provide services on their behalf.
- H. Applications shall be submitted by individual authorized to request such funding and who is responsible for documenting its use in support of the litter prevention and recycling program efforts. For individual locality applications, this is the County Administrator, City Manager, or Town Manager. For Coordinating Agencies that are non-governmental, the application shall be signed by the Coordinating Agency's Executive Director, and include documentation specified in II.G above.
- I. Application forms must include the correct Federal Identification Number (FIN) and Federal Information Processing Standards (FIPS) numbers for the locality designated to receive the grant amount. Application forms for Cooperative Programs must include only the FIN and FIPS numbers of the Coordinating Agency. Missing or incorrect FIN or FIPS numbers on the Grant Application form may result in a delay in awarding the grant amount.

## **II. FUNDING PROCESS**

- A. The grant amount will be sent directly to each locality. For localities participating in a Cooperative Program, the total grant amount will be sent directly to the Coordinating Agency designated on the application form. Notifications of the award will be sent electronically to the authorized Signatory on the grant application unless another email address is provided.
- B. Any unexpended funds at the end of the previous grant year will be deducted from the new grant amount that is to be awarded in the current grant year.
- C. If a locality receives money from a previous year but does not submit a Performance Report and an Accounting Report, the Fund Board may request that DEQ submit an invoice to those localities for their unreported funds.
- D. Funds will not be released/awarded to the locality/applicant unless a completed Performance Report and Accounting Report for the previous grant program year is submitted by the proper authority, and accepted by DEQ.

- E. Awards will be processed out as funds are released to DEQ by the Treasurer. This occurs after the close of the Commonwealth's Fiscal Year, and reconciliations by the Treasurer. Until the funds are released, no grant payments can be processed. Grants are typically awarded beginning in September of each year.

### III. AUTHORIZED USES OF FUNDS

- A. The grant shall be used for litter prevention and recycling program implementation, continuation, and/or expansion. Authorized uses of the grant funds include:
  - 1. Salaries, wages, or other personnel costs
  - 2. Office supplies, postage, telephone
  - 3. Printing and program materials
  - 4. Travel expenses
  - 5. Locally conducted meetings, workshops, and awards
  - 6. Audiovisual material on litter or recycling
  - 7. Equipment such as: educational, litter receptacles, recycling, source reduction and reuse equipment, audiovisual, safety, and the renting of such equipment
  - 8. Award materials
  - 9. Cleanup supplies
  - 10. Annual dues for solid waste related associations (Maximum cap of \$100)
  - 11. Litter collection and/or recycling collection contracts
  - 12. Solid Waste Disposal fees, fuel, and transportation ONLY ASSOCIATED with a volunteer cleanup

#### B. Grant Fund Expense Categories:

- 1. Salary, Wages, and Fringe Benefits
- 2. Supplies
- 3. Contractual Services
- 4. Travel
- 5. Other

*The non-competitive litter prevention and recycling grant funds are to be used ONLY to support the educational activities of the litter and recycling programs in the localities. Funding is to be used for educational activities that support anti-littering and pro-recycling efforts. Purchasing equipment such as computers, cell phones, desks, etc. is no longer permissible because it is possible for this type of equipment to be used to support programs other than just the litter and recycling program. If a litter program manager wants to spend funding in a way that is not addressed by the guidelines, or he/she believes that a purchase should be justifiable as an essential supply; he/she may contact DEQ. DEQ will consider the request and will inform the locality on the decision.*

**Salary, Wages and Fringe Benefits:** Money paid to support the litter and recycling program managers.

**Essential Supplies:** Includes office supplies, postage and telephone expenses necessary to administer the program, premiums to promote the litter and recycling program. Essential supplies can include litter and recycling materials and supplies such as litter grabbers, trash can liners and lids, premiums and any other expendable supplies used solely in the litter and recycling program that are deemed as essential for educating the

public about litter prevention and recycling. Non-essential items such as food, t-shirts, ponchos, etc. are **not** considered essential and the grant funds may not be used for non-essential items. Trash cans and recycling bins may be purchased if they are part of your anti-littering campaign and they serve to educate the public as to how and where to appropriately dispose of litter.

**Contractual Services:** Funding to support the litter and recycling program. Includes contracts to groups/individuals/businesses for conducting litter cleanups, household hazardous waste day collections, tire amnesty programs, arrangements made with groups to conduct litter cleanups or sorting of recycling. Contractual services may include payments for school programs such as assemblies with litter and recycling themes and payment for printing educational materials. Although the litter and recycling money cannot be used for payment of ongoing waste disposal fees; if the waste disposal fee is directly related to a volunteer litter cleanup, the money may be used for the disposal of the collected litter. Contractual Services may also include the rental of backhoes or dump trucks in association with volunteer litter cleanups only.

**Travel:** Includes registration for litter and recycling conferences and workshops including mileage, lodging and meals. All travel related expenditures are required to meet state guidelines. Refer to the state guidelines for reimbursable mileage rates for use of vehicles.

**Other:** Any other expenses associated with the litter and recycling program that are allowable in the guidelines. For questions about whether or not an item may or may not be included; contact the litter prevention and recycling grant coordinator at (804) 698-4000 or at [va-landr@deq.virginia.gov](mailto:va-landr@deq.virginia.gov).

#### **IV. UNAUTHORIZED USES OF GRANT FUNDS**

Grant funds shall not be used for the following:

- A. Meals associated with award events. Applicants are encouraged to use other sources of funds for such purposes.
- B. Purchase of mass media time or space over \$500.
- C. For any project or item not directly related to litter prevention or recycling, including (but not limited to):
  1. Beautification projects, landscaping, purchase of trees or shrubs, or lawn services.
  2. Purchase of equipment for lawn maintenance or for collection, transportation, and disposal of solid waste.

#### **V. GENERAL ACCOUNTABILITY: PERFORMANCE AND ACCOUNTING REPORTS**

The Applicant shall keep accounting records for the grant funds. A [Performance Report](#) (electronically via Survey Monkey) and an [Accounting Report](#) (via mail) for the previous grant program year shall be submitted to **DEQ no later than August 1<sup>st</sup>**. Subsequent grants shall not be approved until the Performance Report and Accounting Report Form for the previous grant program year have been received by DEQ. **The Performance Report and Accounting Report must be signed by the County Administrator, City Manager, Town Manager or the locality's or Coordinating Agency's Chief Financial Officer.** For a non-governmental agency, the Performance Report and Accounting Report form shall be signed by the agency's Executive Director or Chief Financial Officer.

**VI. RETURN OF GRANT FUNDS**

Funds not used or accounted for in compliance with these Guidelines and the Application shall be returned by the Applicant to DEQ. A locality participating in a Cooperative Program shall be liable for its pro rata share of the total liability.

**2. DEQ COMPETITIVE GRANTS:**

**I. ELIGIBILITY**

- i. All cities, counties, and incorporated towns in Virginia are eligible if they receive the DEQ litter prevention and recycling non-competitive grant.
- ii. An eligible program must use the funds to develop and implement statewide and regional litter prevention and recycling educational programs and pilot projects.
- iii. The grant applications will be reviewed by the Board and its recommendation will be submitted to the Director of DEQ for final approval.

**II. FUNDING PROCESS**

- A. The amount of the funds available for this grant program is expected to be 5% of the net resources allocated for the Litter Control and Recycling Fund (Fund).
- B. Grants will be awarded annually following the distribution of the tax money to the Fund.
- C. Each recipient will receive 100% of the awarded amount from DEQ, following the announcement of the grant being awarded.

**III. APPLICATION REQUIREMENTS AND DEADLINE**

- A. Use only the DEQ grant application form.
- B. All applications must be postmarked by **July 15<sup>th</sup>** of the current year.
- C. The tentative date for the announcement of the applications approved for funding is November 15<sup>th</sup> or earlier.

**IV. UNAUTHORIZED USES OF GRANT FUNDS**

Grant funds shall not be used for the following:

- A. Purchase of mass media time or space over \$500.
- B. Leasing or building any real estate.
- C. Salary and wages.

**V. PERFORMANCE AND ACCOUNTING REPORTS**

- A. The Applicant shall keep performance and accounting records for the grant funds used.
- B. At the end of the project, the Final Performance Report and Accounting Report shall be submitted to DEQ no later than **August 1<sup>st</sup>** of the current year.



- C. The Performance Report and Accounting Report must both be signed by the County Administrator, City Manager, Town Manager or the locality's or Coordinating Agency's Chief Financial Officer. For a non-governmental agency, the Performance Report and Accounting Report form shall be signed by the agency's Executive Director or Chief Financial Officer.
- D. All remaining unspent competitive grant funds at the end of the previous grant year will be will be deducted from future non-competitive grants.

**3. FUNDING FOR PUBLIC INFORMATION CAMPAIGNS:**

Funding for the operation of public information campaigns to discourage the sale and use of expanded polystyrene products.

**I. ELIGIBILITY**

- i. The 2021 General Assembly allocated up to 5% of the net resources allocated for the Litter Control and Recycling Fund (Fund) for the operation of public information campaigns to discourage the sale and use of expanded polystyrene products and to promote alternatives to expanded polystyrene in the Commonwealth.
- ii. Localities applying for the non-competitive litter grant and opting to implement this campaign will receive additional funds for this purpose. The campaign should be targeted to achieve the goals and work with the food vendors in accordance with Section 10.1-1424.3 of code of Virginia.

**II. REPORTING**

Localities shall provide the status on the public information campaign along with the other information as part of the non-competitive litter grant reporting.

**4. SUBMISSION**

**Mail completed forms to:**

Virginia Department of Environmental Quality  
Litter Prevention and Recycling Grants Program  
P.O. Box 1105  
Richmond, VA 23218

**For Certified Mail, send completed forms to:**

Virginia Department of Environmental Quality  
Litter Prevention and Recycling Grants Program  
1111 East Main Street, Suite 1400  
Richmond, VA 23219

For more information, contact the DEQ litter prevention and recycling grant coordinator at **(804)698-4000** or via email at [va-landr@deq.virginia.gov](mailto:va-landr@deq.virginia.gov).

Please contact DEQ before the deadline if you have questions.

**Revision Date:** March 2022

Introduction Presentation



## Waste Diversion & Recycling Task Force Meeting 3

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Kathryn J. Perszyk  
Director, Land Protection & Revitalization Division  
Virginia Department of Environmental Quality  
June 14, 2022

### Agenda

**10:00 Welcome, Group Reminders**

Kathryn Perszyk / Craig Nicol

**10:15 Litter Board Recommendations**

Mike O'Connor, Litter Control and Recycling Fund Advisory Board Member

**10:30 Facilitated Discussion & Group Recommendations**

Craig Nicol / Janet Weyland

**11:15 EO17 – Encouraging Recycling Related Businesses to locate in Virginia**

Kathryn Perszyk / Invited Speakers

**11:45 LUNCH BREAK (on your own)**

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## Agenda (afternoon)

**1:00 Extended Facilitated Discussion & Group Recommendations**

Craig Nicol / Janet Weyland

**2:15 WDRTF Report**

Kathryn Perszyk / Craig Coker & Jared Stoltzfus

**3:45 Next Steps & Future Meetings**

Craig Nicol / Janet Weyland

**4:00 ADJOURN**

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## WDRTF = Public Body

- All meetings of the group are public meetings, subject to FOIA
- TF goal is to reach a *consensus* on recommendations
- *Consensus* is defined as a willingness of each member of a group to be able to say that he or she can live with the decisions reached and will not actively work against them outside of the process

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Litter Grant Program Introduction

## Litter Board Recommendations

Mike O'Connor

Bo Wilson

Katie Register

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### SJ42: Litter Control & Recycling Fund Grant Program

- Potential improvements in goals and efficiency of the grant program
- Advisable amendments to 10.1-1422.01 and 10.1-1422.04
- Allocation formula:
  - Codifying and increasing the % of grants awarded to localities on a competitive basis **[currently 5%]**
  - Reallocating funds for funding regional recycling programs,
  - Additional grants for educational programs,
  - Imposing constraints on amount of funds used for personnel salaries and wages,
  - Funding for additional collection points for recyclables
  - Other?

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Litter Control & Recycling Grant Program Advisory Board Memo

TO: Waste Diversion and Recycling Taskforce

FROM: Bo Wilson  
Chairman, Litter Control Recycling Fund Advisory Board

DATE: May 20, 2022

RE: **Litter Control and Recycling Fund Advisory Board Annual Report**

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Members of the Litter Control and Recycling Fund Advisory Board wanted you to have the attached copy of our most recent "Annual Performance and Accounting Summary Report."

We are extremely proud of what our report shows. Some highlights include:

- 305 localities participating in the program
- Over an 1100% return on the funds invested
- 3400 cleanup efforts
- Almost 32,000 volunteers involved
- Youth programs
- Public education

The Board feels as though our program is working positively and is appropriately funded to execute its objectives.

If you have any questions, please feel free to reach out to the DEQ staff which handles our program or to the Board members for additional information.



Litter Grant Program Feedback

## Original Brainstorm Top Ranking Items

### Create Grant Subcategories

- Food waste prevention, Compost & AD Grants
- Deconstruction Grant Program

### Increase Funding

- Examine Other State Grant Sources
- Integrate Federal BIL / IJA Funding

### Tires

- Increase Tire Disposal Fee

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## HRPDC Beautification & Recycling Committee Feedback

- Noncompetitive grant awards are insufficient to cover programming needed to meet recycling goals and objectives
- Greater flexibility in how noncompetitive funds may be used
- Allow regional bodies to serve as an applicant / recipient for competitive grants
- Allow localities to submit for an individual competitive grant if they are also part of a regional competitive grant application
- Provide greater support and resources for waste that is difficult to dispose of (e.g., e-waste)

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Executive Order 17 Introduction

# EO17: Recognizing the Value of Recycling & Waste Reduction

Scott DeFife, Glass Packaging Institute  
Tad Phillips, TFC Recycling, VWIA Representative

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## Executive Order No. 17

- Recognizing the Value of Recycling & Waste Reduction
  - Recognition of the Value of Recycling
  - Making Virginia Home to New Clean Technologies
  - Stopping Food Waste
  - Annual Report to Increase Transparency (about state agency recycling)
- Rescinded Northam's EO77 – single use plastics

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DEQ

## **Executive Order No. 17**

### Making Virginia Home to New Clean Technologies

The Waste Diversion and Recycling Task Force shall discuss ways to encourage new recycling related businesses, including collection, processing and manufacturing facilities, to locate in the Commonwealth and include any recommendations in their next report.

Executive Order 17 Feedback from Task Force Members

## WDRTF Suggestions RE EO17 – Encouraging Recycling Businesses to Locate in Virginia

<p><b>Support Needed to Promote the Benefits of Single Stream Recycling Programs.</b> The Commonwealth should consider providing incentives to municipalities and regional planning units to attract single stream recycling service providers in areas not currently served. This could also be an opportunity for manufacturers of packaging and end-users of recycled materials to participate in promotion of single stream recycling throughout the state by providing grant money to help localities jump-start programs. Too many packaging companies are in a race to show their products are “recyclable”, confusing residents and encouraging “wishful” recycling. For example, about 95% of all post-consumer plastic bottles are either PET (#1) or HDPE (#2). Producers and manufacturers of the other #3 to #7 plastic containers thus account for the other 5%, meaning there is not enough critical mass to make these materials economic to recover, and end-user markets are scarce. While EO17 is promoting the availability of recycling at state facilities and institutions, the messaging should focus on the materials end-users want, those who meet the critical mass concept.</p>
<p><b>Virginia Needs to Become a Leader in Glass Recycling Capacity.</b> Glass by weight makes up around 16% to 20% of the single stream materials collected in residential recycling programs. Currently only a handful of MRF’s actually recycle glass in Virginia, and most MRF glass is disposed as residue or used as “daily cover” in landfills, which under DEQ regulations qualifies as “recycling” for the purpose of meeting the state-mandated recycling rate. Virginia has two glass manufacturing facilities which cannot get enough recycled cullet (the term for beneficiated MRF glass). The closest glass recycling plant is located in Wilson, North Carolina, about 150 miles south of downtown Richmond. The Commonwealth should consider economic incentives to encourage a glass recycler to locate in Virginia. Alternatively, these incentives could help establish intermediate glass processing facilities which could consolidate glass from the current MRF’s in the state and “pre-process” and upgrade the glass to ship a higher quality product at a higher value to Wilson. These economic incentives could include participation by NGO’s who are glass bottle producers and wholesalers using grants, etc.</p>
<p><b>Reform glass recycling in the State of Virginia.</b> According to studies the Glass Packaging Institute (GPI) conducted in 2020, and enhanced analysis in 2021, the Virginia economy generates over 300k tons of consumer container glass each year, and as much as 330k tons, but roughly only 15 percent of that is recycled into beneficial use and less than 10 percent making it back into glass container manufacturing, despite two container manufacturing plants in the State. In addition to a key policy change that would inhibit sending glass to landfill, the primary barrier is a lack of glass cleaning equipment at most MRFs in the state (no facility in the state sends the majority of its glass stream to processing), and the lack of a processing facility in the State. While a bottle bill would produce the highest volume of clean valuable material, significant progress can be made without such legislation. The glass industry recommends a series of options, including separate glass curbside pickup programs, commercial bar and restaurant/hospitality collection programs combined with a handful of regional hub and spoke aggregation centers, as well as cleaning equipment at MRFs to reduce contamination in the glass commodity stream. A new processing facility handling anywhere from 60k to 120k tons per year could be sited in the state that could draw glass from the major population centers, with the rural areas feeding into the hub and spoke system. Such a facility would be ideally situated with freight rail access and truck transportation that can reach west to Roanoke and Charlottesville and East to the Tidewater area, as well as draw from Northern VA and Richmond.</p>
<p><b>PaintCare, to address waste paint could support current and invite additional industry to the Commonwealth.</b> PaintCare from other states, rely on a Virginia materials processing firm, and the program has met with success in the states (including DC) that use PaintCare.</p>
<p><b>The state should explore business opportunities and economic development related to construction debris.</b> Northern Virginia and other state CDD landfills are reducing capacity, while building and construction continues. There are opportunities for reuse, recovery of soils and construction demolition and debris materials that should be explored. This is a construction industry and infrastructure issue that should be addressed. Limitations on landfills has registered with dumping in our region and creating a business model for recovery and management represents an opportunity in the state, preserving landfill space as well.</p>
<p><b>The state has lost their waste tire processor, and there is an increased need to support tire recovery and reuse markets.</b> In addition, the current tire fund is too low to address any kind of benefit for haulers and processors. US Tire Manufacturers and scrap associations have made recommendations that Virginia could apply. DEQ and VDOT are working on some innovative pilot applications related to used tires in asphalt roads.</p>
<p><b>Virginia should address challenging/difficult to dispose of materials/ newer waste streams,</b> (such as solar panels, gas tanks, EV batteries, plastic), as an economic opportunity to develop markets, new technologies, and support EPR. Doing so would strengthen Virginia’s economic and environmental resiliency and leadership.</p>
<p><b>Establish a Recycling Business Assistance Center (RBAC)</b> to conduct periodic recycling impact studies, develop a One-Stop Permit Shop, coordinate information on funding opportunities, provide tools and conduct research on recycling markets, work one-on-one with companies to assess needs and provide assistance, and provide news releases to public media about companies’ successes and publications pertinent to the recycling industry.</p>

## WDRTF Suggestions RE EO17 – Encouraging Recycling Businesses to Locate in Virginia

<p><b>Seek legislative authority to impose a \$2.00 per ton surcharge on all MSW</b> generated in Virginia and either landfilled or incinerated on-site (potentially producing \$5.75 million in surcharge revenues) that go into a “lockbox” trust fund and used to provide incentive grants to public and private entities to expand the diversion and recycling infrastructure for capital expenses such as collection containers and vehicles, processing equipment (both stationary and mobile) and building/site upgrades and improvements, not for acquisition of land or for operating expenses.</p>
<p><b>Seek legislative authority to expand eligible expenses and criteria for the recycling equipment tax credit</b> from 20% to 50% of capitalized cost, increase the ceiling from 40% to 70% of the Virginia income tax liability, and allow applicants for certification to apply for equipment purchased up to three years prior.</p>
<p><b>Seek legislative authority to reimburse Virginia local governments for any property tax exemptions</b> they agree to issue for DEQ-certified recycling equipment, facilities and devices, and to reimburse local governments for agreeing to waive Machinery and Tools taxes for any DEQ-certified recycling equipment.</p>
<p><b>Work with the Virginia Economic Development Partnership and local Economic Development Authorities to develop tools</b> to assist industries in evaluating options for locating in Virginia, such as developing a web-based Geographic Information Systems (GIS) model of the recycling and diversion infrastructure in Virginia to include locations, contact information, materials handled, etc.; developing a Model Zoning Ordinance; and developing a GIS model of sites that meet the siting criteria in the Virginia Solid Waste Management regulations (9VAC20-81-320)).</p>
<p><b>Work with State agencies to modify their procurement practices to use more recycled-content materials.</b> Work with the Department of General Services to identify goods and commodities purchased by Virginia state agencies that could be sourced from vendors providing a higher “recycled content” in those goods and commodities (e.g. office/copier paper made from 100% recycled fiber); work with Virginia Transportation Research Council to revisit the conclusions of earlier studies of incorporating recycled glass into asphalt-concrete mixes and other suitable materials for road sub-base paving; publish a web-based directory of recycled-content goods and commodities that could be available to local jurisdictions’ purchasing departments and encourage them to use those goods, and seek legislative authority to reimburse Virginia colleges and universities who switch from disposable to compostable servingware in their dining establishments .</p>
<p><b>Work with the Virginia Department of Conservation and Recreation to establish guidelines for the use of compost, and compost-based soils,</b> made from the recycled organic fraction of solid wastes, for use as a soil amendment in new or substantially-modified construction to raise soil organic matter levels, to increase the amount of rainfall infiltrated into soils (thus reducing the quantity of storm water runoff) with corresponding benefits to receiving streams water quality, and to potentially increase carbon dioxide sequestration in soils. Fund the research to demonstrate that the use of compost amendments in soils has long-lasting effects in reducing storm water runoff so that users can apply for and receive credits on their local storm water management fees. Promote the Virginia Tech Soil Profile Rebuilding protocol and the Arlington County land disturbance revitalization program state-wide.</p>
<p><b>Address recycling in the commonwealth.</b> In our county we have over 100 schools and out of that number we have only 6 partaking in food waste to compost as a pilot program. I asked why only 6 at a meeting the answer was 'cost'. Secondly, reading about the need to recycle more and to bring in businesses to the commonwealth brings several questions such as: "what are we doing currently in this area?" "How are we educating the public and businesses on HOW to recycle and do it efficiently?" Lastly, "What incentives is the commonwealth willing to provide to lure the businesses to the commonwealth considering the political atmosphere?". Locally, I have suggested we need to educate and motivate with incentives to elementary, middle and high schools in recycling as well as involving colleges in the study of environmental needs to mentor high school students to utilize the landfills as a classroom for these initiatives. Cost and coordination of this was an issue.</p>
<p>According to the US EPA, approximately 28% of the total material stream is composed of food scraps and yard trimmings (organic waste). Virginia should consider ways to <b>support efforts by public and private entities to compost or anaerobically digest (form of recycling) organic waste as well as supporting the creation of end markets for the distribution and marketing of that compost back to consumers.</b> Maryland has a great example of this. The Prince George's County Organics Compost facility is run by Maryland Environmental Service. They collect food, leaf, and yard waste from the DC, MD, VA and turns it into Leafgro® compost which is a rich soil amendment for sale across the region at retailers such as Home Depot, Lowes, nurseries, and more. The facility is able to generate revenue both from the processing cost per ton, but also the sale of the finished compost. One of the first steps that Virginia can take is banning or requiring mandatory separation of collection of yard trimmings which is the case for 27 states in the country. Additional organics processing facilities and organics transfer stations across the state with lower the cost of disposal of food and organic waste at compost or anaerobic digestion facilities vs. waste-to-energy facilities or landfills would make it economical for municipalities, private entities, and others to separate the materials.</p>
<p><b>Pass a Beverage Container Deposit Law.</b> All other states that have a beverage deposit law have significant gains in economic activity - someone must collect, sort, haul, process, clean and remanufacture new containers. This can be largely paid for by the unredeemed deposits - those that don't recycle pay for those that do recycle. Oregon has almost 400 jobs paid for by their bottle bill, with ZERO DOLLARS of taxpayer money. Virginia has twice the population, so we'd be roughly twice</p>



## WDRTF Suggestions RE EO17 – Encouraging Recycling Businesses to Locate in Virginia

that amount. They also opened up a plastic bottle processing factory that flakes and cleans the returned bottles - the plant only has one customer - the Oregon Bottle Recycling Cooperative. This is a new plant developed just for Oregon.

**Increase the Recycle Rate from 25% to 80% for Large Solid Waste Districts.** The recycle rate was established 20 years ago and hasn't changed since. Because Fairfax and most other large districts exceeded 25% 19 years ago, there isn't any new development of recycling methods. Lots of little around the edge's changes, but we are missing out on the natural growth of new ideas and ACTIONS (ACTIONS = MONEY) that having to meet an increased goal would bring. Simply put, there isn't a whole lot of time and money spent on new recycling ideas because there is no mandate for change. No goal, no plan, no action, no growth. Because the goal doesn't have a penalty, even an aspirational goal would provide incentive, without the need to create new taxes. What we are looking for is for something to drive innovation. A phased in aspirational goal would only help.

**Require the Large-Scale Producers of Organic Waste to Compost.** We could start with State run facilities, and loop in Counties and schools, but really it would be nice to require all large-scale organic waste producers (hotels, grocery stores, restaurant districts, schools) to compost. This would increase the need for large commercial grade/scale compost facilities and hundreds of small haulers.

**Study EPR laws:** If activity = money and more activity is more economic growth, there are plenty of EPR laws that would reduce municipal money spent on trash and divert it to recycling activity. [Mattresses](#), [paint](#), [batteries](#), e-waste and other hard to dispose of items are all industries that have existing infrastructure to recycle their products. All those products need to be collected, sorted, hauled, and recycled within Virginia, so it's an economic gain. **Make the consumer responsible for recycling their stuff – not municipalities.**

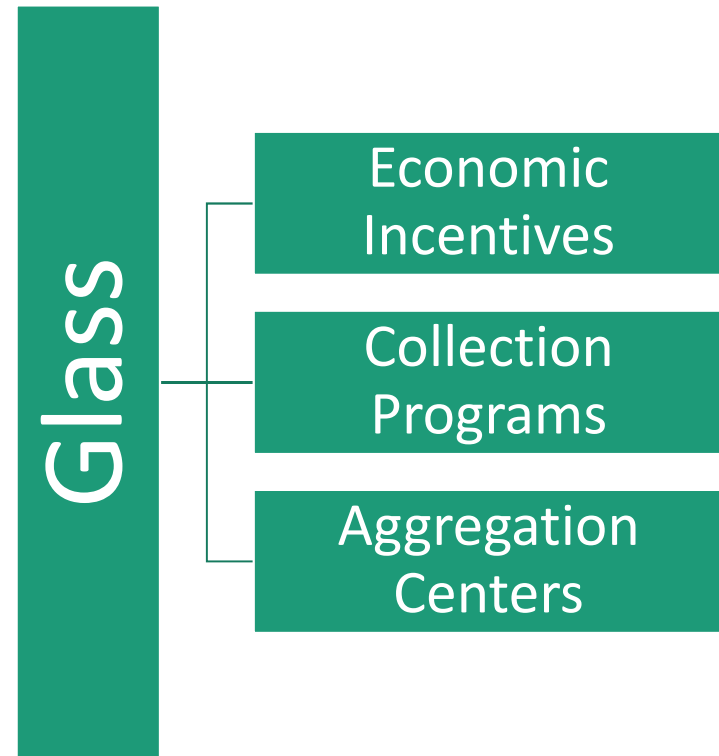
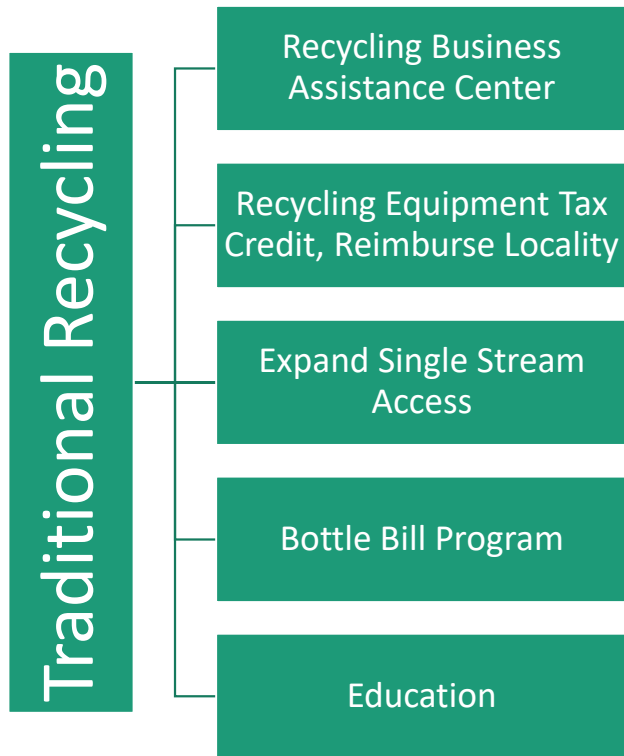
**Support a new business model collecting glass from restaurants** (see [Chicago Project](#)). They would collect, haul and recycle bottles from restaurants to be made into new bottles. This just needs to be organized into a pilot project. The pilot in Chicago is free for now, but they are betting the restaurants would be able to pay the \$200 monthly fee for the service. This would dovetail nicely with the existing "Purple Can Club" in Northern Virginia, where the Counties already have dumpsters set out as public drop off points for glass recycling. The material is sold to Strategic Materials to be made into new bottles. Even if we limited the service to restaurant dense areas of major urban areas, this is a lot of hauling and sorting that needs to be done. Good medium wage jobs, lots of benefits for the environment.

[DeliverZero](#) is a New York City based company that **offers food delivery services and restaurants a system for using, tracking and retrieving reusable take out containers.** They want to come to Virginia, but it would be faster if the State reached out and assisted them. The environmental benefit would be huge - cutting down on all those single use plastics and Styrofoam containers currently in use. DeliverZero is a merchant and platform agnostic network of returnable reusable containers. We make it easy for restaurants and delivery platforms to offer customers the option to receive takeout and delivery in reusable containers they can return at their door or at any return point on our network. Over 200 billion single-use containers are thrown out every year in the US. Most of those are used for just 30 minutes before they end up in a landfill, because even if they're designed to be recycled or composted, the infrastructure to recycle or compost most single-use takeout packaging does not exist. Recent studies show that in the US, just 5% of its plastic waste is actually recycled, and only a few industrial composting facilities accept takeout packaging. According to [Upstream's Reuse Wins](#) report, reusable food service containers beat single-use alternatives through every environmental measure, including climate pollution, energy use, water use, resource extraction, waste, and plastic pollution. Our tech-enabled solution makes reuse accessible to both customers and merchants at scale.

[Lifecycle Sherlock](#) is a small business that does **computer recycling.** Virginia can always use help with e waste solutions. Executive Order 17 did not include a primary solid waste that is a major contributor to landfill...electronic and equipment waste. Diverting e-waste from landfill not only reduces Greenhouse Gas emissions and improves ESG metrics, but it also plays a role in improving cybersecurity because cyber thieves pick up discarded IT and IoT devices from landfills and steal data from hard drives and data storage devices. LifeCycle Sherlock would be helped by the Youngkin administration if they updated state policies to include any of the following: (a) 3<sup>rd</sup> party verification of ESG, Sustainability metrics claimed by companies in their public documents (K10, shareholder report...), (b) policy to require businesses to dispose of any surplus/end of life assets by using a R2V3/ISO 15001 certified asset disposal process or certified provider, (c) policy that requires weight diverted from landfill metrics be certified (e.g. proven recycling/reuse of assets) for companies with 50+ employees operating in Loudoun County, (d) energy policy needs to have clear language on data sanitization of any "end of life" assets that may have sensitive data, network configurations, etc., and (e) companies with over 50 employees doing business with the Commonwealth of VA to be required to provide a PE/CEM certified carbon footprint report each year to demonstrate ESG/Sustainability improvements are being made by the company.

Executive Order 17 Feedback Categorization

# EO17 Suggestions




Task Force Report Overview

# WDRTF Report

Craig Coker & Jared Stoltzfus

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## Template Report

- Executive Summary
  - Background & Process
  - Summary of Meetings
  - Recommendations
  - Attachments
- 
- Waste Reduction & Diversion
  - Improve Recycling
    - Bottle Bill Discussion
  - Litter Grant
  - Food Donation & Composting
  - Electric Vehicle Batteries
  - Ways to Encourage New Recycling Related Businesses (EO17)

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DEQ

# WASTE DIVERSION AND RECYCLING TASK FORCE

## MEETING #4 NOTES,- FINAL

TUESDAY, AUGUST 16, 2022

DEQ CENTRAL OFFICE, BANK OF AMERICA BUILDING  
3<sup>RD</sup> FLOOR CONFERENCE ROOM  
1111 EAST MAIN STREET, RICHMOND, VIRGINIA

### Meeting Attendees

WD&R TASK FORCE WORK GROUP MEMBERS (QUORUM – 13)	
Craig Coker – Coker Composting	Mike O’Connor – Virginia Petroleum and Convenience Marketers Association
Kenneth Dunford – Tazewell County	Robbie Pecht – Virginia Beer Wholesalers Association
Rick Galliher – Virginia Bottle Bill Organization	Tad Phillips – Virginia Waste Industries Association
James Gestrich – Landfill Advisory Board Prince William County	Kristi Rines – City of Virginia Beach
Morgan Guthridge – Virginia Beverage Association	Debbie Spiliotopoulos – Northern VA Regional Commission
John Harbin – Hampton Roads Planning District Commission	Jared Stoltzfus – James Madison University
Michael Hatfield – Wise County	James (Jim) Taylor – WestRock
Kim Hynes – SWANA/Central VA Waste Management Association (CVWMA)	

**NOTE: WD&R TASK FORCE WORK GROUP Members NOT in Attendance:** Joe Benedetto – Virginia Recycling Association; Tom Benevento – Virginia Council on Environmental Justice; Dale Bennett – Virginia Trucking Association; Greg Evanylo – Virginia Tech; Rob Laurent – Community Member; Helen Lee – City of Alexandria; Joe Lerch – Virginia Association of Counties; Rhonda L. Russell – Charles City County; Brian Sernulka – O.I. Glass; Mitchell Smiley – Virginia Municipal League

PUBLIC/INTERESTED PARTIES	
Trever Moacusa – Commonwealth Strategies	Erik Rison – West Rock
Katie Register – Clean Virginia Waterways of Longwood University	

TECHNICAL ADVISORS AND DEQ STAFF	
Prina Chudasama - DEQ	Sanjay Thirunagari - DEQ
Morgan Goodman - DEQ	Janet Weyland - DEQ
Bill Norris - DEQ	Melinda Woodruff - DEQ
Kathryn Perszyk - DEQ	

The meeting convened at 10:10 a.m. and adjourned at 3:51 PM:  
A quorum of task force members (or their alternates) was present for this meeting.

**1. Welcome/Work Group Reminders – Kathryn Perszyk/Janet Weyland – DEQ:**

- a. The meeting agenda and the draft Task Force Report were sent by email to the members of the Task Force prior to the meeting. An updated version of the report was provided at the meeting.
- b. Ms. Perszyk and Ms. Weyland reviewed the agenda and presented a meeting introduction that:
  - Reminded members of the responsibilities of participating in a public body subject to FOIA, and
  - Reviewed the consensus process in the context of Task Force decision making.
  - Reviewed the plan for the meeting.

**2. Agenda Item 2: Overview of Draft Report - Kathryn Perszyk/Janet Weyland – DEQ& Craig Coker/Jared Stoltzfus – Co-Authors of the Draft Report:**

- a. Ms. Perszyk provided a brief overview of the Draft Task Force Report that had been authored by Task Force Members Craig Coker and Jared Stoltzfus. She noted that the goal for today’s meeting is to get feedback on what goes into the final report and to make “live” updates to the report so that at the end of the day that we can have a version that has been agreed to by the Task Force members. She noted that Melinda Woodruff will be taking first chair today and will be taking the comments from the group and making “live” edits for consideration during our discussions.
- b. Mr. Coker and Mr. Stoltzfus briefly discussed how the report was organized and how they approached the compilation of the report.
  - They noted that the Task force had three meetings previous to this one, two of which were focused on getting into the details of the report recommendations.
  - The idea was that instead of making very specific actionable recommendations for legislation, that we could identify what the group has learned about what is economically viable, what waste streams are most important to divert and have the most potential for large scale diversion and make recommendations that additional groups work with these specific topics to get the “nitty gritty” done by bringing in more stakeholders with more expertise and providing a little more time than this task force has had to work on these issues.
  - The report also needs to take into consideration that any recommendations made needed to keep in mind that not all parts of Virginia are the same, so we can’t have the same expectations for the less densely populated areas and more rural areas of the Commonwealth.
  - Also, any opportunities that arise for new recycling industries are made available to the rural localities.
  - It was noted that an Environmental Justice representative was not present at any of the Task Force meetings so that we need to be aware that any recommendations made need to take into consideration equities among other groups of people.
  - Consensus may not always be possible, but the hope is that we can say that this is a recommendation and something that we have learned and it should be looked into more. A

few lines of justification and concerns regarding the recommendations should also be reported.

- The other point that needs to be taken into consideration in the development of the Task Force Recommendations is that they need to be brief and to the point, because a legislative assistant in the General Assembly should be able to read this quickly and decide what parts they need to take to their boss for consideration and possible action.

**3. Agenda Item 3/4: Facilitated Discussions to finalize Recommendations for the Draft Report –: Kathryn Perszyk/Janet Weyland – DEQ & Craig Coker/Jared Stoltzfus – Co-Authors of the Draft Report:**

**The Task Force reviewed and discussed all of the recommendations presented in the draft report document and reached a final general consensus for the wording of the recommendations to be included in the final report.**

**4. Public Comment: Comments from the Interested Public was received during the course of the meeting.**

**5. Agenda Item 5: Wrap Up & Next Steps**

Ms. Perszyk thanked the members of the Task Force for their dedication and participation in this process. Staff will work to address the items that were agreed to by the Task Force and will get a copy of the edited “Final Task Force Report: back out to the group. The members of the Task Force were asked to provide comments back on any information or recommendation that were not in keeping with the discussions of the group.

**6. Adjournment: The Meeting was adjourned at 3:51.**