PUTNAM COUNTY, NEW YORK

LOCAL SOLID WASTE MANAGEMENT PLAN

2025-2034

Executive Summary

This Local Solid Waste Management Plan (LSWMP) is being submitted pursuant to 6 NYCRR Section 360-1.2(a)(11) and serves as a ten (10) year plan for future solid waste activities for the period 2025–2034. The Plan has been prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) Local Solid Waste Management Plan development strategies and guidance. The planning unit for this Plan is restricted to Putnam County, New York.

The County's solid waste and materials management system is administered through the Putnam County Department of Health within the Environmental Health Services Division. In 2025, for the first time, Putnam County created and filled a full-time Solid Waste Program Manager position to prioritize solid waste planning, education, program development, regulatory coordination, and long-term sustainability initiatives. This organizational advancement represents a significant milestone in rebuilding and modernizing the County's materials management practices and strengthening local oversight and coordination.

The department's goal is to evaluate waste generation trends, material recovery efforts, available facilities, regulatory conditions, and data collection practices throughout the planning unit to assess the performance of the County's current system. Local institutions, schools, healthcare facilities, agricultural operations, parks, and businesses play a vital role in advancing sustainable materials management practices. It is through this collaboration and community engagement that Putnam County will continue working toward practical and achievable solutions that protect public health, preserve environmental resources, and reduce the long-term impacts of solid waste on our communities.

Over the planning period, Putnam County will expand educational programming and technical assistance for municipalities, schools, businesses, institutions, and residents to encourage greater participation in waste reduction and recycling initiatives. The County will also evaluate opportunities to improve organics management, increase diversion of recyclable materials, support textile and special waste collection programs, and strengthen partnerships with regional facilities and organizations that advance sustainable materials management.

This plan provides a roadmap for building a more resilient and efficient local solid waste and materials management system for our residents over the next decade.

Wellness Always,

Rian Rodriguez MPH

Rian Rodriguez, MPH
Director of Public Health
Putnam County Department of Health

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Solid Waste Terms

Agricultural Wastes solid waste comprised of crop residues and animal manures resulting from agricultural operations and activities.

Biosolids consist of solid waste from wastewater treatment facilities. Sometimes referred to as ***Sewage Sludge***.

Bulk Items large waste materials such as furniture, mattresses, and appliances that are not collected through regular trash pickup.

Construction & Demolition (C&D) Debris is material that is generated through construction, repair, remodeling, and demolition of roads, homes, and buildings. This includes but is not limited to asphalt, brick, clean fill, concrete, land clearing debris, mixed, rock, roofing shingles, soil (clean), soil (contaminated), water contaminated with petroleum, wood (clean), and wood (contaminated).

Commingled Recyclables mixed recyclables collected together, including plastic, glass, and metal containers, later separated at a materials recovery facility (MRF). Also see ***Single Stream Recyclables***.

Community Drop-Off Center a location where residents can bring their waste and recyclables for proper disposal, especially useful in rural areas without curbside pickup.

Compost the end product of composting which can be added to soils to increase nutrient retention and soil fertility.

Composting the biological decomposition or organic wastes in controlled conditions. Aerobic conditions are required for composting to take place in an open pile (windrow) or in a container.

Contamination the commingling of garbage, or other materials that have unsuitable physical or chemical properties with recyclable materials or organic wastes ultimately rendering the recyclable materials or organic wastes unfit for future use, requiring processing prior to reuse or decreasing the value for reuse.

Corrective Action the action taken to investigate, describe, evaluate, and clean-up contamination or other acts in violation of the Solid Waste Code.

Diversion re-direction of recyclable materials from disposal by resource recovery.

Environmental Justice the fair distribution of environmental risks among socioeconomic groups.

E-Waste (Electronic Waste) discarded electrical or electronic devices, including computers, phones, and TVs, which require special handling due to toxic components.

Extended Producer Responsibility (EPR) a policy approach where producers are responsible for the post-consumer stage of a product's life cycle, including recycling and disposal.

Food Scraps organic waste generated from uneaten or spoiled food, targeted for composting or organic recycling.

Flow Control refers to the legal authority of a local government to direct where solid waste generated within its jurisdiction must be delivered for processing, recycling, or disposal. It allows the locality to designate specific facilities for handling waste in order to ensure environmental compliance, support public infrastructure, and achieve the goals of its solid waste management plan.

Food Residuals or Waste are the organic materials remaining after the preparation, consumption, or processing of food. They include items such as fruit and vegetable scraps, meat and dairy waste, coffee grounds, eggshells, and other biodegradable food by-products. Food residuals are a major component of the organic waste stream and can be diverted from disposal through composting, anaerobic digestion, or other recovery methods to reduce landfill use and support sustainable waste management practices.

Garbage putrescible solid waste; degradable organic waste like food scraps. Also referred to as ***refuse.***

Green Waste biodegradable waste from gardens or parks, including grass clippings, leaves, branches, and Christmas trees. See also ***Yard Waste***.

Hauler a company or entity permitted to collect and transport solid waste or recyclables. Also referred to as a ***waste transporter***.

Hazardous Waste is waste material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, poses a substantial threat to human health or the environment. It typically includes waste that are ignitable, corrosive, reactive, or toxic, as defined under federal and state regulations such as the Resource Conservation and Recovery Act (RCRA).

Household Hazardous Waste (HHW) is waste from residential sources that poses a risk to health or the environment, such as paint, batteries, pesticides, and chemicals; typically generated in small quantities.

Inactive Landfill A landfill that is no longer accepting waste but may still be monitored or capped to prevent environmental contamination.

Industrial Waste is any material, by product, or residue generated from manufacturing, production, or industrial processes that is discarded or no longer useful. (scrap metal, wood, plastic, paper, and packaging materials).

Leachate is a liquid that drains or 'leaches' from a landfill, potentially containing harmful substances, and requiring treatment.

Liner is a layer of synthetic material (flexible membrane made of plastic or composite liners made of both clay and synthetic liners) liners that is placed under and on the sides of a sanitary landfill that restricts the escape of leachate and landfill gas.

Materials Recovery Facility (MRF) a facility where collected recyclables are sorted and processed for resale and reuse.

Medical Waste materials generated by healthcare facilities and hospitals which includes infectious materials, human blood products, used sharps and other human pathological wastes.

Municipal solid waste (MSW) everyday waste from households and businesses, including food, packaging, clothing, and nonhazardous discarded items. Often referred to as ***MSW.***

Non-Putrescible waste waste that does not rot, decay, or decompose easily; or that does not contain organic matter, produce foul odors or attract pests.

Organic Recycling processing organic waste (e.g., food scraps, yard waste) into compost or other usable material to reduce landfill use.

Organic Waste solid wastes that contain carbon compounds that can be biologically degraded and includes paper, food residuals, wood/yard waste, and plant wastes that are not metals, plastic, or glass.

Pay-As-You-Throw (PAYT) a pricing system where residents are charged for waste disposal based on the amount they throw away, encouraging waste reduction.

PET an acronym for Polyethylene Terephthalate: which is a plastic that is commonly used to make containers such as soft drink bottles. These are identified by the number "1" inside the recycling arrows on the bottom of the container.

PFAS per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that include PHOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured in a variety of industries since the 1940s. These chemicals are persistent in the environment and in the human body because they do not break down over time. Exposure to PFAS can lead to adverse health effects.

Post Consumer describes the products purchased by the consumers which are then discarded or recycled.

Pre Consumer describes feedstock or materials used in the manufacturing, fabrication, or industrial production, then discarded and recycled. These are comprised of scrap, trimmings, cuttings, and other post-production discards such as overruns, over issue publications, and obsolete inventories.

Product Stewardship includes manufacturers, retailers, users, and waste managers sharing the responsibilities and costs of reducing the adverse environmental impacts of products. This includes actions taken to improve the design and manufacture of products to facilitate their reuse, recycling, or disposal, as well as actions to minimize resource consumption, prevent pollution throughout the product life cycle, and ensure that materials are managed in an environmentally responsible manner from production to end-of-life.

Putnam Recycles the county program for solid waste education, recycling, and public outreach managed by the Putnam County Department of Health (PCDOH).

Recyclables materials that can be processed and used again, including paper, plastic, glass, metal, and cardboard.

Recyclable Material refers to any substance or product that can be collected, processed, and remanufactured into new products after its initial use, rather than being disposed of as waste. These materials such as paper, glass, metals, plastics, and certain textiles retain useful properties that allow them to be reintroduced into the production cycle, conserving natural resources, reducing energy consumption, and minimizing environmental impacts.

Refuse all non-hazardous, solid, and semi-solid discarded materials resulting from residential, commercial, industrial, and community activities; primarily comprised of rubbish and garbage.

Request for Bids (RFB) is a formal solicitation issued by an organization inviting suppliers to submit competitive pricing and terms for specified goods or services. It focuses primarily on cost, with the contract typically awarded to the lowest responsible and responsive bidder meeting all requirements.

Resource Recovery is the process of extracting useful materials, energy, or resources from waste streams or discarded products to reduce the amount of waste sent to landfills and minimize environmental impact. It involves the collection, separation, and processing of waste materials such as metals, plastics, paper, organic matter, and energy-bearing residues for reuse, recycling, or conversion into valuable products like compost, fuel, or electricity.

Reuse using materials again without significant processing, reducing the need for new products and waste.

Resource Conservation and Recovery Act (RCRA) is a federal law enacted in 1976 that governs the management of solid and hazardous waste from generation to disposal. Administered by the U.S. Environmental Protection Agency (EPA), RCRA establishes a framework for proper waste handling, treatment, storage, and disposal, and promotes resource conservation, recycling, and environmental protection through responsible waste management practices.

Rubbish non-putrescible, dry materials like paper, plastics, wood, and metals.

Scavenging the theft of recyclable materials set out by generators prior to collection by the hauler; also, the uncontrolled and unsafe removal of recyclable materials from working areas (landfills, MRFs, Transfer Stations, or other Solid Waste Management Facilities).

Single-Stream Recycling a system where all recyclables are collected in a single bin by residents and later sorted at a facility.

Sewage Sludge semi-solid waste produced from industrial or municipal wastewater treatment processes.

Sharps discarded needles and syringes.

Solid Waste any garbage, refuse, sludge, or other discarded material from industrial, commercial, mining, and agricultural operations, and from community activities.

Solid Waste Disposal the discharge, deposit, injection, dumping, spilling, leaking, or placing of solid waste on or in the land or water

Source Separation sorting waste at the point of generation into categories such as recyclables, organics, and general waste.

Source Reduction actions taken to reduce the disposal or toxicity of solid waste include the redesign of products by manufacturers and management of products and packaging to extend the product life; the consumers reduced purchase and consumption that become waste; manufacturers and consumer's reuse of products.

Special Waste any waste that is determined not to be hazardous.

Take-Back Program initiatives where consumers return used products (e.g., electronics, paint, medications) to retail or collection locations for proper disposal or recycling.

Textile Recycling the process of recovering fiber from used clothing and fabrics to produce new materials or products.

Tipping Fee the charge levied upon a given quantity of waste received at a waste processing facility.

Transfer Station a facility where waste is temporarily held before being transferred to a final disposal site, such as a landfill or incinerator.

Universal Waste includes commonly generated items such as batteries, pesticides, mercury-containing equipment, and certain lamps. These wastes are regulated under streamlined rules to encourage proper recycling or disposal while protecting human health and the environment.

Waste Diversion activities that reduce or eliminate waste from being sent to landfills, including recycling, composting, and reuse.

Waste Generation is the process of producing or creating waste materials as a result of human activities, industrial processes, or consumption of goods and services. It encompasses all types of discarded materials, whether solid, liquid, or gaseous.

Waste Stream the complete flow of waste from generation to final disposal or recycling.

Waste Transporter any person, entity, or company that conveys discarded materials—such as municipal trash, recyclable materials, sludge, or hazardous substances—off-site from their point of generation to facilities where they can be processed, treated, recycled, or disposed of. Also referred to as a ***hauler***

White Goods large household appliances such as refrigerators, washing machines, and stoves that are often recycled or scrapped.

Zero Waste is a philosophy and approach aimed at eliminating waste by redesigning products and systems so that all materials are reused, recycled, or composted, minimizing or completely avoiding disposal in landfills or incinerators.

Chapter 1: Planning Unit Description[1]

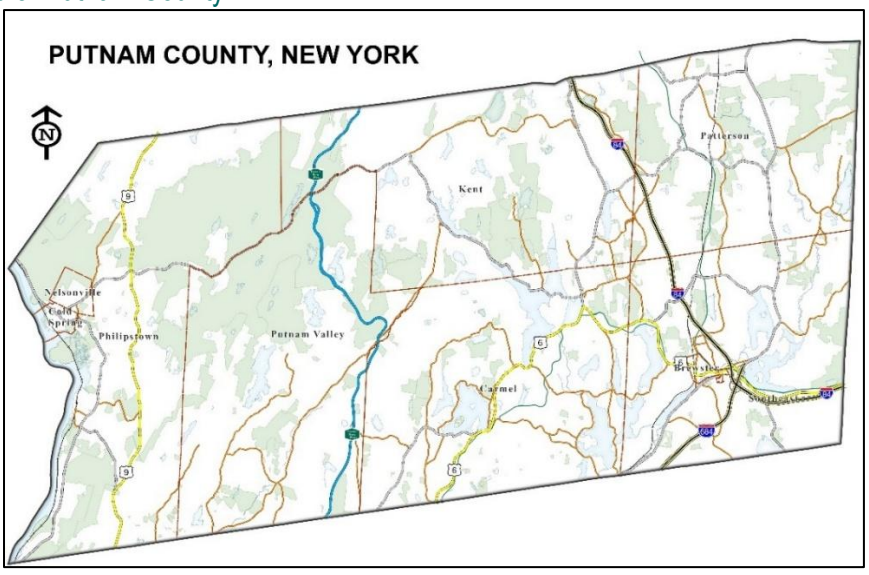
Size and Geographic Location

Putnam County, which is located about 58 miles North of New York City, is situated in the southeastern part of New York State and is comprised of 147,200 acres. It is bordered by the Hudson River to the west (making this area of the county a part of the Hudson Highlands), the State of Connecticut to the east, Dutchess County to the North and Westchester County to the South. Putnam County is known for its scenic landscapes, reservoirs, and outdoor recreation areas. The counties seat is located in Carmel.

Infrastructure

Two interstate highways pass through Putnam County; the east-west Interstate-84 (I-84) runs north-to-south in Putnam coming from the north near Ludingtonville and connects to Interstate-684 (I-684) southbound in the Town of Southeast toward the Connecticut State border. The Taconic State Parkway runs north-south through central Putnam County; US Route 9 runs north-south in the western part of the county and is parallel to NY Route 9D along the Hudson River; these two routes are connected by NY-403 near Garrison. NY Route 22 runs north-south in the eastern part of the county while Route 301 runs east-west from Cold Spring to Carmel. NY Route 52 enters Putnam alongside I-84 from Dutchess County to end at US Route 6 south of Carmel, east of Brewster, and joins Route 202 leaving the county and state concurrently.

Figure 1.1 – Map of Putnam County



Population Served and Population Density

The county's 246 square miles is made up of six towns, three villages, and no cities: the Towns of Carmel (including Mahopac), Kent (including Lake Carmel), Patterson, Putnam Valley, Southeast (including the Village of Brewster), and the Town of Philipstown (including the Villages of Cold Spring and Nelsonville).

[1] N.Y. Comp. Codes R. & Regs. tit. 6, § 366-2.1 (2025), https://govt.westlaw.com/nycrr/Document/Id4d803b2dfe911e7aa6b9b71698a280b?viewType=FullText.

The Town of Carmel is home to more than one-third of the 98,060[2] Putnam County residents. Putnam County's population density breakdown is 64.98% urban and 35.02% rural[3].

Table 1.1 – Population/Demographic Summary by Municipality in Putnam County, NY

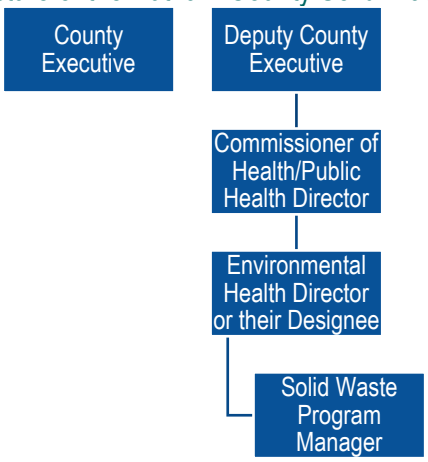
Municipality	Population Size[3]	Total Area (sq.mi) *
Putnam County	*97,668*	*246*
Town of Carmel	33,879	40.7
Mahopac		
Kent	12,844	43.33
Lake Carmel		
Patterson	11,555	32.9
Putnam Valley**	11,722	43
Southeast	18,199	35
Village of Brewster		1.5
Philipstown	9,861	51.6
Cold Spring		
Nelsonville		1.0

**Total sq mi. represents land and water combined*
***Lake Peekskill Improvement District population is included in the total population for Putnam Valley.*

Administrative and Financial Structure of Solid Waste in Putnam County

The Putnam County Solid Waste Program is unique in that it is housed at the Putnam County Department of Health in the Environmental Health Services Division (EHS). The health department staff identified in Figure 1.2 represent the staff who work collaboratively with the county Executive to advise our solid waste goals. The Solid Waste Program oversees permitting haulers, local refuse and recycling laws, enforcement, and education with assistance from subject matter experts within the health department's other divisions.

Figure 1.2 The Organizational Structure of the Putnam County Solid Waste Program



[2] U.S. Census, Putnam County, NY, July 2020, https://data.census.gov/all?q=Decennial+Population+Putnam+County,+NY

[3] United States Census, County-level urban and Rural Information for the U.S, Puerto Rico, and Island Areas sorted by state and county FIPS codes, 2020, https://www2.census.gov/geo/docs/reference/ua/2020_UA_COUNTY.xlsx

Planning Unit Members

The planning unit members include the Putnam County Department of Health's (PCDOH) staff. Specifically, the Solid Waste Program Manager (SWPM) who currently reports to an Associate Public Health Sanitarian who is acting as the Environmental Health Director Designee, and the Public Health Director. The Public Health Director communicates with the County Executive with the SWPM as the subject matter expert. The Putnam County Planning Department, Putnam County Department of Public Works, and all Towns and Villages located in Putnam County support the implementation of the Local Solid Waste Management Plan (LSWMP) to ensure a coordinated and effective approach to waste management and sustainability. Additionally, the planning unit works closely with each of the school districts within the county, two local organizations dedicated to promoting environmental stewardship and sustainable practices: Sustainable Putnam and the Cornnell Cooperative Extension (CCE). By fostering communication and shared initiatives among these entities, the planning unit will continue to work to enhance waste reduction, recycling programs, and long-term planning efforts that align with state and regional environmental goals.

Changes to the Planning Unit

In 2025, for the first time, a full-time Solid Waste Program Manager position was created and filled. With this position, the roles, responsibilities, and priorities for the solid waste program are in-house instead of being assessed and evaluated by an outside consulting agency, which has been common practice since 1992. The SWPM is responsible for writing this plan and working with all county agencies, municipalities and stakeholders whose work will be impacted by this plan.

Neighboring Planning Units and Other Neighboring Jurisdictions

Dutchess County[4]

The Dutchess County Government is the planning unit for Dutchess County's 30 incorporated municipalities and the primary agency working on the composition of the LSWMP in tandem with the Dutchess County Division of Solid Waste Management who formulate and implement programs for the collection and disposal of solid waste generated within their county in a collaborative and cooperative manner to protect the health, safety and welfare of residents through waste management practices.

Westchester County[5]

The Westchester County Solid Waste Commission oversees the planning for all of Westchester County. Westchester County is comprised of Refuse Districts that hold Intermunicipal Agreements for the proper disposal of municipal solid waste at county-owned transfer stations or disposal facilities.

The State of Connecticut

The State of Connecticut has a Solid Waste Advisory Committee (SWAC) to assist with the implementation of their Comprehensive Materials Management Strategy (previously the State Solid Waste Management Plan), identifying emerging issues and solutions, and participate in any plan revisions. Membership of this advisory committee is open to all who may be interested.

[4] Dutchess County Solid Waste Management Plan 2012-2022, https://extapps.dec.ny.gov/fs/projects/lswmp/Dutchess_County_LSWMP_2012-2022.2016-10-27.pdf

[5] Westchester County Solid Waste Management Plan 2011, https://environment.westchestergov.com/images/stories/pdfs/Westchester_County_2010_SWMP_Update_Rev_062111.pdf

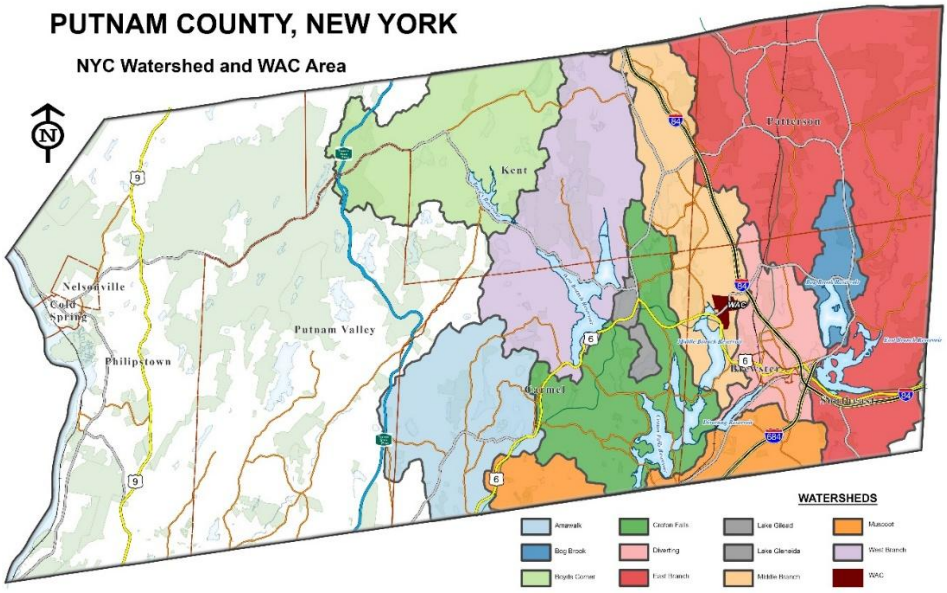
Watershed Agricultural Council (WAC)[6]

The WAC is an internationally recognized public-private partnership that oversees regulations of the New York City (NYC) Watershed specific to farms and forest landowners to address water pollution concerns in the Croton and Catskill/Delaware watersheds. The WAC partners with local Cornell Cooperative Extensions, county Soil and Water Conservation districts, and the USDA Natural Resource Conservation service to address surface-water quality and the economic viability of agriculture and forestry through several water-quality improvements and land conservation techniques. Since 2006, Putnam County has been in a partnership with the WAC to maintain a conservation easement on the Tilly Foster Farm property to regulate the activities that take place on this land that may impact the water quality.

The NYC Watershed

Putnam County is known for the many reservoirs that make up a portion of the Croton Watershed which is a part of the NYC drinking water supply system. Of the five Putnam towns in the NYC Watershed from the six major municipalities, Patterson is the only town that is located entirely in the watershed, Carmel, Kent, and Southeast have a percentage of land located in the watershed; the only town not located in the watershed is the Town of Philipstown. Restrictions regarding development within the watershed are dictated by Article 96, Section 18 of the Rules and Regulations for the Protection from Contamination, Degradations and Pollution of the New York City Water Supply and its Sources. New York City Department of Environmental Protection regulates the design, construction, implementation, and maintenance of some activities, such as land clearing, construction of impervious surfaces, site grading for management of stormwater runoff, and subsurface sewage treatment systems.

Figure 1.3 – Map of Watershed Agricultural Council (WAC) and NYC Watershed Areas located in Putnam County.



[6] Watershed Agricultural Council, 2023, https://www.nycwatershed.org/about-us/

Significant Commercial Activities and Industries

The following sections represent the special characteristics of Putnam County and have a substantial impact on the volume and composition of waste generated by this planning unit. Each location has a specific and unique impact on the generation of waste and materials recovery and program implementation.

Agricultural Activities

Agriculture in Putnam County is characterized by small-scale, family-run farms with a strong focus on crop production, particularly forage, oats, vegetables, and nursery and greenhouse products. The predominance of smaller farms, averaging 59 acres, reflects the county's limited agricultural space and its proximity to urban areas, which influences land use patterns. Livestock farming, though present, remains secondary, with modest populations of poultry, horses, sheep, and cattle. These agricultural activities contribute organic waste, including plant debris, manure, and unused crops, which require proper management to minimize environmental impact. Factors such as farm closures, shifts in crop production, or increased reliance on greenhouse agriculture could significantly alter the county's agricultural waste stream, affecting composting needs, organic recycling efforts, and overall waste management strategies.

Institutions and Large Employers

Ace Endico

Ace Endico is a premier fine food purveyor and distributor headquartered in Brewster, NY. The company serves a diverse clientele across the Northeastern United States, including restaurants, hotels, healthcare facilities, and educational institutions. Ace Endico boasts a workforce of approximately 650, they continue to play a vital role in the regional economy, contributing to the growth and sustainability of the food service sector. Ace Endico operates from a state-of-the-art facility encompassing over 200,000 square feet, featuring advanced logistics systems and multiple temperature-controlled zones to ensure product freshness. There is also a grocery store on premise called 'The Market Place" that is open to the public daily. Ace Endico is listed as one of the county's top food scrap generators[7] and represents an opportunity for an organic materials management/composting program and is a strong candidate for cardboard and plastic film recycling.

Arms Acres

Arms Acres is a 191-bed licensed inpatient treatment facility located on a serene 54-acre campus in Carmel, Putnam County, New York providing comprehensive, evidence-based care for individuals struggling with substance use disorders and co-occurring mental health conditions. With a dedicated staff of approximately 230 employees, Arms Acres offers a range of services. As a significant employer in the region, Arms Acres plays a vital role in both public health and the local economy. This facility generates medical waste and presents an opportunity to participate in an organic materials management/composting program.

New York Electric & Gas (NYSEG)

NYSEG, a subsidiary of AVANGRID, operates a regional office in Brewster, NY, located at 35 Milan Road. This office serves as a local hub for customer service and utility operations, supporting NYSEG's mission to deliver reliable electricity and natural gas to residents and businesses across its service area with approximately 79 employees and services 35,000 customers in the counties of Dutchess, Putnam, and

[7]NYSDEC, 2024 List of Designated Food Scrap Generators, 2024 https://dec.ny.gov/sites/default/files/2024-01/dfsglist2024.pdf

Westchester. This Brewster location focuses on significant infrastructure upgrades to enhance the grids capacity and reliability.

Putnam County Government

Putnam County Government is one of the largest employers in the county, with approximately 794 employees across a wide range of departments and services. As a major public sector organization, the county provides essential services that support the health, safety, infrastructure, and quality of life for residents and businesses. The workforce includes professionals in law enforcement, public health, social services, transportation, planning, environmental conservation, finance, administration, and more. With a strong commitment to community service, Putnam County Government offers stable employment, opportunities for growth, and the chance to make a meaningful impact in the community. The Putnam County Government can model the zero-waste practices and continue to improve public education on waste management practices.

Putnam Hospital Center

Putnam Hospital Center (PHC) is one of seven community hospital and outpatient facilities in the Nuvance/Northwell Health network. It is a 164-bed, acute-care hospital offering innovative technologies with approximately 650 employees. The largest producer of medical waste, single-use practices, and food waste; PHC can participate in an organics management/composting program.

Putnam County Jail and Sheriff's Office

The Putnam County Jail (PCJ) located in Carmel, NY houses up to 128 inmates and a minimum of 76 employees including maintenance, food service, and medical staff. Located at 3 County Center, it serves as a key part of local law enforcement and is attached to the Putnam County Sheriff's Office which oversees the Putnam County Jail. PCJ generates a large volume of food waste and general and textile refuse, making it an excellent institution to participate in an organics management/composting program, textile recycling, and other population specific recycling programs.

Putnam County School Districts

Putnam County is home to several key public-school districts that serve as both educational pillars and major employers in their communities. The county has six public school districts: Brewster, Carmel, Garrison, Haldane, Mahopac and Putnam Valley. The Mahopac Central School District is the largest school district in the county with three elementaries school, a middle school, and a high school; with approximately 773 faculty/staff. Close behind, the Carmel Central School District employs about 712 faculty/staff. The Brewster Central School District employs around 652 faculty/staff. The Putnam Valley Central School District, with 299 faculty/staff, and the Haldane Central School District in Cold Spring, though smaller employees approximately 155 faculty/staff. Together, these districts not only educate the county's youth but also represent a significant portion of the region's workforce. Schools generate a large volume of food waste and are excellent candidates for student driven recycling and composting programs, educational outreach, and recycling competitions.

State Parks and Local Parks

State parks generate seasonal waste from visitors, including litter, bottles, food wrappers, and maintenance debris. Materials recovery can include recycling receptacles for bottles and cans and composting of organic landscape waste. When large events are hosted, recycling and composting can be incorporated into park facilities and events with clear signage, waste sorting stations and volunteer involvement to enforce program implementation.

Donald J. Trump State Park
This 436-acre undeveloped state park spans Yorktown and Putnam Valley. Donated by Donald Trump in 2006, it has seen little maintenance since 2010. It is managed by the New York State Office of Parks.

California Hill State Park
Located in Kent and Putnam Valley, this 982-acre state forest offers trails for hiking, biking, and seasonal hunting. It includes Lake Waywayanda and Pudding Street Pond and supports a variety of wildlife. The area was created by merging three forest tracts in 2007.

Fahnestock State Park
Covering over 14,000 acres across Putnam and Dutchess Counties, this park offers a wide range of recreation including hiking, camping, fishing, and winter sports. Highlights include Canopus Lake Beach, the Taconic Outdoor Education Center, and a section of the Appalachian Trail. This park's vast landscape significantly impacts the geography of the county, promoting a major challenge in planning.

Hudson Highlands State Park
Spanning over 8,000 acres from Peekskill to Beacon, this preserve offers 70 miles of scenic trails and diverse habitats. It's popular for hiking, birdwatching, and exploring the Hudson River's natural beauty. The park is just 50 miles from NYC.

Wonder Lake State Park
This 1,145-acre park in Kent and Patterson features nearly 9 miles of trails and protects part of the Great Swamp watershed. Originally landlocked, it now connects with other public lands and offers scenic loops around Wonder Lake and Laurel Pond.

Putnam County Veterans Memorial Park
Located near the Kent/Carmel border, this 200-acre park includes a lake for swimming, trails for hiking, a dog park, and military memorials. It hosts events such as the 4-H Fair and the Daniel Nimham Pow Wow. It's a popular spot for fishing, hiking, and family gatherings.

Wildlife Management and Conservation Areas
These areas have minimal impact on waste generation with mostly trail litter, and maintenance debris and are excellent locations for passive education and recycling program enforcement through signage.

The Cranberry Mountain Wildlife Management Area
This 1,085-acre Wildlife Management Area in Patterson is managed for conservation and public recreation like hunting, fishing, and wildlife viewing. The forest includes uplands, fields, and ponds, offering varied habitats. It's overseen by the New York State Department of Environmental Conservation's (NYSDEC) Division of Fish and Wildlife.

Fred Dill Wildlife Sanctuary
A 163-acre preserve in Carmel, this site includes trails, educational stations, and a picnic pavilion. Once home to a fairground and racetrack, it's now ideal for hiking and biking. The sanctuary honors Fred Dill, who donated the land.

The Great Swamp
Spanning over 6,000 acres, the Great Swamp is one of NY's largest freshwater wetlands and plays a vital

role in water purification and flood control. It supports rare species and offers 14 miles of paddling water. Designated a Class I wetland and conservation priority since 1992.

The Ice Pond Conservation Area

This 104-acre area in Patterson features a historic ice pond, forests, and wetlands. It's popular for hiking, birdwatching, and shore fishing. The site is owned by the Putnam County Land Trust and connects to neighboring preserves.

The Michael Ciaiola Conservation Area

Putnam County's largest conservation area spans over 800 acres in Patterson and is home to diverse wildlife and scenic spots like the Great Gorge Waterfall. It offers a trail network with parking at two access points. The land is managed by the county's Parks Department.

Recreational and Commercial Activities

Mostly generating litter-like waste, food waste, and food and beverage packaging waste, and seasonal waste, these generators are excellent candidates to attain sustainability commitments from management to support program implementation.

Mahopac Golf and Beach Club

Founded in 1898, Mahopac Golf and Beach Club is a historic gem on Lake Mahopac's north shore. Its 6,523-yard, par-70 golf course offers tree-lined fairways, bunkers, and challenging greens for all skill levels. The area's only white sandy beach provides a perfect spot for relaxation, boating, and family fun.

Putnam National Golf Course

Located in Mahopac, NY, Putnam County Golf Course offers a challenging 6,800-yard, par 71 layout designed by William F. Mitchell. This 18-hole public course also hosts live events, including concerts, holiday buffets, dinner theaters, comedy nights, and summer BBQs, and serves as a wedding and event venue.

Thunder Ridge Ski Area

Located in Patterson, Thunder Ridge offers 23 trails, including seven black diamonds, and snowmaking on 95% of its terrain. It caters to locals and NYC visitors, with shuttle access from the Metro-North station. It's a convenient and popular winter sports destination.

Manufacturers

The following companies are responsibly mainly for packaging waste and are hazardous materials generators and require compliance with environmental standards and logistical planning of in-house recycling.

Brewster Plastics

Located in Patterson, NY, is a plastic fabrication company using injection molding technology to produce volumes as low as 100 pieces to one million plus parts.

Hudson Machine Works

Located in Brewster, it is a trusted leader in manufacturing railroad industry parts.

Putnam Materials Corp.

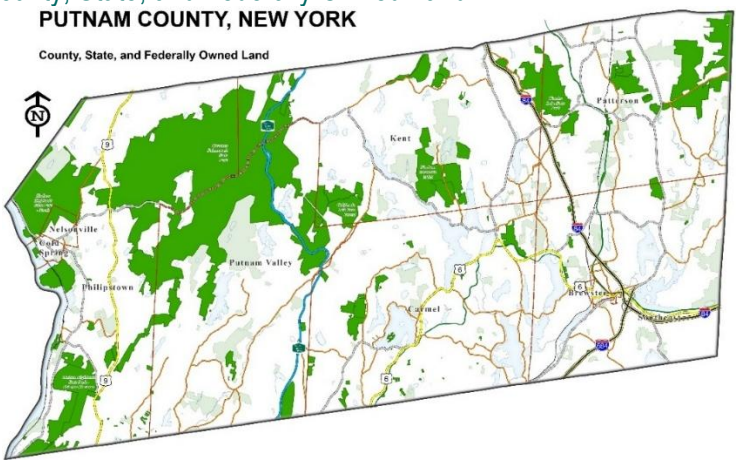
Located in Patterson, NY, there is an active Limestone quarry producing, and distributing construction materials.

Putnam Precision Products
Located in Brewster, NY, manufactures medical devices.

Dairy Conveyor Corporation
Located in Brewster, NY, is an international leader in the design, engineering, manufacturing, installation, and service of conveyor systems for the food and beverage industries.

Additional Parcels
An additional 17 parcels totaling 413.9 acres are held by the Putnam County land trust and are preserved as open space.

Figure 1.4 – Map of County, State, and Federally Owned Land



Materials Recovery and Program Implementation

History of Putnam County Solid Waste Management – The 2012-2021 LSWMP
The 2012-2021 Putnam County Solid Waste Management Plan prioritized waste reduction and standardized waste management. Universal curbside pick-up with variable pricing was deemed the most effective solution, though Pay-As-You-Throw (PAYT) was not feasible for most towns. Based on the evaluations conducted and discussed, many residents lack cost awareness due to waste fees in property taxes, reducing incentives for waste reduction despite mandatory recycling laws. With all the waste exported, an in-county disposal facility was ruled out due to cost and watershed constraints. The plan emphasized recycling education, stricter hauler enforcement, and community initiatives like repair cafés, litter cleanups, and collection events to promote sustainability. A Solid Waste Management Focus Group comprised of representatives from all the towns and villages located in Putnam County, and key agencies such as tourism and economic development contributed to the renewal of the Solid Waste Management Plan beginning in 2021 to develop an LSWMP that is reflective of the needs and opportunities within each community to be used as the valuable tool that it is.

Community Drop-off Centers
In Putnam County, community drop-off centers provide an alternative means for residents to handle solid waste and recyclables, particularly in rural areas. One located in the Town of Kent, one in the Town of

Philipstown (including the Villages of Cold Spring and Nelsonville), and in the Town of Patterson allows residents to dispose of bulk waste and recyclables. The County does not operate transfer stations, and the volunteer-run Kent Recycling Center is the only facility of its kind that hosts a weekly residential MSW drop-off day in addition to recyclables. The Town of Philipstown has a recycling center that accepts white goods such as clothing washers and freon-containing appliances. The idea of requiring each town to open a drop-off center was rejected due to concerns about inconvenience and low use rates, as well as the additional costs associated with keeping facilities open more frequently.

Current Status of Putnam County Solid Waste Management Practices

All municipalities located in Putnam handle solid waste in different ways and in compliance with State and County regulations, however these practices do not encourage businesses and residents to reduce the waste they generate or to recycle more. The current practices are also a significant challenge to county-wide education and technical assistance for enforcing the solid waste programs. As continuous work progresses, the Putnam County solid waste program is being revamped to provide more sustainable, environmentally conscious data collection mechanisms to support and implement education and programs to promote waste reduction behaviors. To manage specific waste streams, the county organizes two Hazardous Waste Drop-Off Days annually, facilitating the safe disposal of items like paints, and other household chemicals. Additionally, medication drop boxes are available throughout the county to prevent improper disposal of pharmaceuticals. These initiatives underscore Putnam County's commitment to responsible waste management and environmental stewardship.

Solid Waste Management Facilities

There are several inactive landfills located throughout the county, including in the Towns of Carmel, Kent, Patterson, Philipstown, Mahopac, and Putnam Valley. There are not current solid waste management facilities that handle municipal solid waste or recycling in Putnam County. The facilities located in Putnam County that are registered with the NYSDEC can be found in Chapter 3.

Waste Generation and Composition Changes

Based on a Hudson Valley Regional Council study on lessons from the COVID-19 pandemic, the population declined by 2.0% between 2010 and 2020, while the number of establishments rose by 2.1% from 2019 to 2021. The NYSDEC also uses the same value for population change. The Village of Cold Spring, accessible via the Metro-North train and known for Breakneck Ridge and its Civil War era industrial history, has become a popular day-trip destination. As visitor numbers have surged, the Village increased refuse collection from three to six days per week to manage the weekend waste generated.

Chapter 2: Waste Generation and Materials Recovery Data[8]

The Waste Stream

The waste generated in Putnam County is directed to private transfer, processing, storage or disposal facilities that are located outside of the county since there are no active landfills operating locally; thus, the planning unit does not have flow control. The planning unit oversees the disposal of all non-hazardous solid waste and septic waste generated in Putnam County and is separated into four categories: municipal solid waste (MSW), construction and demolition (C&D), industrial waste, and biosolids. MSW and C&D debris, and industrial waste fall under solid waste and biosolids under septic waste.

Solid Waste

Municipal Solid Waste refers to waste materials generated by households, commercial establishments, institutions, and similar sources. This typically includes everyday items such as packaging, food scraps, yard waste, furniture, clothing, appliances, and recyclables such as cardboard, plastic and glass containers, aluminum and tin cans, batteries, scrap metal, household hazardous waste (HHW) and tires.

Construction and Demolition Debris is material that is generated through construction, repair, remodeling, and demolition of roads, homes, and buildings. This includes but is not limited to asphalt, brick, clean fill, concrete, land clearing debris, mixed, rock, roofing shingles, soil (clean), soil (contaminated), water contaminated with petroleum, wood (clean), and wood (contaminated).

Industrial Waste is any solid byproduct of industrial activities including manufacturing and/or agriculture that is no longer useful. This category includes a variety of non-hazardous and hazardous materials such as scrap metal, wood, plastic, paper, packaging materials, chemical residues, oil-contaminated materials, and paint.

Septic Waste

Biosolids consist of solid waste from wastewater treatment facilities.

Within Putnam County's eight towns and three villages, 2024, residents and businesses generated a diverse range of waste types according to hauler-reported totals collected through the Putnam County Solid Waste and Septic Waste Hauler Permit Application and Renewal Application. The largest volume of disposed material was biosolids, with a septage totaling over 5.5 million gallons and Wastewater Treatment Plant (WWTP) sludge at 3.43 million gallons, MSW totaling 78,822.02 tons and C&D debris following at 12,478.68 tons. The planning unit is not currently collecting data for all types of industrial waste and will create a mechanism to identify, quantify, and determine the industrial waste generation and disposal within the planning unit. The waste stream generation is aggregated by subsection in Table 2.1 and is reflective of the county's residential and commercial producers. The amount of biosolids generated in Putnam County is included in Table 2.1 as reported by Septic Waste haulers in the permit application and is an aggregate of septage, sewage, and sludge. Tables throughout Chapter 3 reflect the volume of waste by type generated by Putnam County as reported by haulers based on the transfer facilities it was received by.

[8] N.Y. Comp. Codes R. & Regs. tit. 6, § 366-2.2 (2025), https://govt.westlaw.com/nycrr/Document/Id4d803b2dfe911e7aa6b9b71698a280b?viewType=FullText.

Data Gaps and Other Informational Needs

A significant data gap in the Putnam County Solid Waste Program arises from inconsistent reporting by private haulers during the annual permit application and renewal process. This inconsistency makes it difficult to accurately track the volume and composition of waste generated and disposed of within the planning unit, limiting the county's ability to evaluate progress toward waste reduction goals and target areas for improvement. To address this, the county will implement improvements over the planning period, including clearer reporting guidelines and additional definitions of waste types (such as industrial waste), streamlined data collection tools, and increased oversight to ensure more accurate and consistent hauler data. Additional data gaps may exist at the municipal level, such as inconsistent tracking of recycling rates, limited documentation of illegal dumping, and a lack of standardized reporting on public education and outreach efforts. Variations in record-keeping across municipalities hinder effective assessment and regional coordination. To close these gaps, the planning unit will work to standardize communication and data collection protocols, enhancing the overall efficiency and accountability of the solid waste management practices.

Table 2.1 Putnam County Material Totals for 2024

Material Type	2024 Tonnage	Unit
Municipal Solid Waste	78,822.02	T
Comingled Recyclables (metal, plastic, glass)	1,392.76	T
Commingled Paper (all grades/cardboard)	1,149.05	T
Corrugated Cardboard	881.57	T
E-Waste	13.45	T
Leaves/Grass/Stumps/Brush (incl. Christmas Trees)	443.75	T
Metal Recycling - Scrap Metal (from residents)	80.83	T
Mixed Material Recycling - Single Stream	3,031.39	T
Food Scraps	13.00	T
Textiles	3.41	T
Bulk Metal	4,794.91	T
C & D - All (asphalt, brick, concrete, land clearing debris, soil [clean & contaminated], roofing shingles, wood [clean and contaminated], other)	269,070.36	T
Fats, oils, and grease	231,902.00	Gal
Land clearing debris (not included in organics)	200.00	T
Non-Hazardous Waste – Other	3,549.00	T
Oil Soaked Debris (Solids)	1.30	T
Oil Contaminated (Liquids)	2,087.00	Gal
Regulated Medical Waste	280.84	T
Scrap Metal (from residents)	5,235.25	T
Tires	6.33	T
Used Motor Oil	25,805.00	Gal
Waste Oil	3.64	Gal
White Goods (appliances)	1.34	T
Biosolids - WWTP – Sludge**	3,430,000.00	Gal

***Note**: The blue highlighted types are diverted waste*
**Includes Bulk Items - Furniture, Other Large Items*
***This total includes septage, sewage, and sludge which are data points submitted by permitted Septic Waste Haulers/Transporters.*

Projections for MSW

Between 2021 and 2024, the planning unit generated an average of 63,000 tons of solid waste (including recyclables) annually. Due to the data gaps and other informational needs identified, the planning unit intends to work with haulers to foster better education on the utility of waste disposal amounts for solid waste management planning purposes for more accurate representation of the waste stream. To project the numbers for the planning period, the NYSDEC's Population and Municipal Solid Waste Composition Calculator[9] will be used and can be found in Chapter 7 of this plan. It is anticipated that increased recycling educational programs at the county-level, efforts and participation on the part of residential and commercial waste generators, as well as increased involvement of the municipalities, will result in a reduction in the amount of MSW sent out of the county for disposal. If the volume of recycled material collected increases, identifying and expanding markets for those items will increase in importance. More effort will need to be expanded to identify the best financial return for the county while ensuring, as is possible, for the responsible disposal of any hazardous components.

[9] NYSDEC Tools for LSWMP Development, https://www.dec.ny.gov/fs/docs/spreadsheets/popandmswcompcalc.xlsm

Chapter 3: Existing Solid Waste Management System[10]

Facilities by Type

C&D Debris Handling and Recovery Facilities Located in the Planning Unit

Mike's Blue Wheel Service Inc.

Mike's Blue Wheel Service Inc., located at 160 Bryant Pond Rd in Mahopac NY, is a registered C&D handling and recovery facility that receives waste from inside and outside of the planning unit. In 2024 received 130 tons of unadulterated wood from Westchester County and the tonnage of materials received by Putnam County and managed by Mike's Blue Wheel Service Inc. in 2024 is reflected in Table 3.0, as reported in the annual report to the NYSDEC.

Table 3.0 Material Received and Managed by Mike's Blue Wheel Service Inc. from outside of the planning unit

Material Received	2024 Tonnage
Unadulterated wood	250
Soil or Fill types F1 to F3	92
Brush/Leaves	155
Horse manure	80

Liberty Bell Trucking Co, Inc.

Liberty Bell Trucking Co, Inc. is a registered C&D handling and recovery facility located at 1341 Route 52 in Carmel, NY. Table 3.1 reflects the material types and tonnages received from outside of the planning unit as reported in the annual report to the NYSDEC.

Table 3.1 Material Received by Liberty Bell Trucking Co, Inc from outside of the planning unit

Material Received	Source	2024 Tonnage
Concrete	Direct Haul (Dutchess)	805.93
Concrete	Direct Haul (Orange)	20.22
Asphalt Pavement	Direct Haul (Dutchess)	20.35
Asphalt Pavement	Direct Haul (Orange)	122.21
Asphalt Millings	Route 22 (Dutchess)	390

Peckham Materials Corp.

Peckham Materials Corp.'s Carmel Facility is located at 1811 US-6 in Carmel, which is a registered C&D handling and recovery facility that receives waste from inside the planning unit. This facility does not accept waste from outside of the planning unit. The data for this facility was included in the C&D Waste types in Table 3.1 reflects the material types and tonnages received from inside of the planning unit as reported in the annual report to the NYSDEC.

Table 3.2 Material Received by Peckham Materials Coro., Inc from inside of the planning unit

Material Recovered	Source	2024 Tonnage
Asphalt Millings	Direct Haul (Putnam)	23,045

[10] N.Y. Comp. Codes R. & Regs. tit. 6, § 366-2.3 (2025), https://govt.westlaw.com/nycrr/Document/Id4d803b2dfe911e7aa6b9b71698a280b?viewType=FullText.

Tompkins Recycling Facility

Tompkins Recycling Facility is a privately owned C&D Debris handling and recovery facility located at 60 Old Route 6 in Carmel, NY. According to the NYSDEC, this facility has not begun construction and is not currently operational.

Incineration Facilities Outside of the Planning Unit

WIN-Waste Dutchess (Wheelabrator)

The WIN-Waste Dutchess waste-to-energy facility (often referred to as Wheelabrator), located at 98 Sand Dock Road in Poughkeepsie, NY, next to the Dutchess County Resources Recovery Agency processes around 148,000 tons of post-recycled waste annually, using an efficient and compliant combustion process to generate renewable energy. This energy powers over 3,800 local homes and businesses, reducing landfill use and supporting the surrounding communities. As reported in the Putnam County Solid Waste Hauler application, approximately 2,576.36 tons of MSW are brought to this facility from Putnam County.

WIN-Waste Westchester

The WIN-Waste Westchester waste-to-energy facility located at 1 Charles Point in Peekskill, NY, processes approximately 631,000 tons of post-recycled waste annually, converting it into renewable energy through a clean and efficient combustion process. This energy is sufficient to power about 30,400 homes and businesses, helping divert waste from landfills and supporting local communities[11]. As reported in the 2025 Putnam County Solid Waste Hauler application, approximately 54,137.93 tons of MSW generated in 2024 was brought to this facility from Putnam County.

Landfills

Modern landfills are engineered to meet federal and state regulations, with designs that protect the environment from contaminants in solid waste. They incorporate liners and leachate collection systems to safeguard groundwater, gas collection systems to control emissions, and capping systems to minimize leachate after closure. MSW landfills primarily accept household, commercial, and institutional waste, and may also be permitted to receive non-hazardous sludge, industrial waste, and construction debris.

Within the Planning Unit

Putnam County has no active landfills; all waste generated in the planning unit is collected and disposed of at transfer stations that send the waste to landfills or incinerators. Table 3.3 details the characteristics of the nine inactive landfills located in the planning unit. This information was provided to the planning unit by the DEC because no formal data was found in records. Some inactive landfills in Putnam County, NY, are being investigated and monitored as part of New York State's Inactive Landfill Initiative (ILI) due to potential impacts on drinking water quality. These sites have been identified for groundwater contamination concerns, particularly the presence of per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane, which may pose risks to public health. Ongoing efforts include groundwater sampling, the installation of monitoring wells, and remediation actions where necessary to prevent contamination from reaching drinking water sources. The NYSDEC continues to assess these sites to determine necessary mitigation measures to protect the environment and public health. A complete table describing the characteristics of the inactive landfills can be found in Chapter 3, Table 3.3. A full report on the New York State Inactive

[11] Waste Innovations, WIN waste Westchester, About us, https://www.win-waste.com/about-us/locations/westchester-ny/

Landfill Initiative from the NYSDEC from 2024 can be reviewed for a better understanding of the Monitoring Classification in this table[12].

Table 3.3 – Inactive Landfills located in the Planning Unit

Inactive Landfills	Municipality	Monitoring Classification	Last Monitoring Sample Date	Owner Type	Waste Type	Cap Year	Acres
Fair Street **Alternate names:** Lot 5 Patterson Interstate Business Park C&D Landfill; Armento Landfill; Patterson Landfill; Patterson C&D Landfill; Armento/Heelan Dump	Carmel	Class P	1/7/2019	Private	C&D	N/A	2.9
Kent Landfill	Kent Lakes	No Class provided by NYSDEC	2/27/2018	Municipal	MSW	1986	11.0
Kessman **Alternate name:** Cross County Sanitary	Carmel	Class 4		Municipal	MSW	1996	7.2
Orlando Landfill	Putnam Valley	Class N	3/13/2023	Private	IND	N/A	8.0
Patterson	Patterson	No Class by NYSDEC	11/1/2017	Municipal	MSW	1995	14.0
Philipstown	Cold Spring	No Class by NYSDEC	No date provided by the DEC	Municipal	MSW	1997	11.3
Prisco C&D Landfill **Alternate Name:** Prisco Patterson C&D Dump Site	Patterson	Class N	12/14/2017	Private	C&D	N/A	3.0
Putnam County Landfill	Carmel	Class N	12/15/2017	Municipal	MSW	2012	4.5
Southeast Landfill	Southeast	No Class by NYSDEC	11/9/2017	Municipal	MSW, C&D	2010	15.0

Outside of the Planning Unit

Because there are no landfills located in the planning unit, the waste generated in Putnam County is brought by haulers to transfer facilities outside of the planning unit that then send the waste to landfill throughout NYS depending on the waste type. Unfortunately, the transfer stations located outside of the state that the planning unit is located that send waste to the landfills outside of the planning unit will not provide the volumes of waste by type that they send to the Chemung, New Lexington Ohio, and Seneca Meadows landfills. When the planning unit reached out to each transfer station located outside of the planning unit that accepts waste from Putnam County, they would only state that they send waste to these locations but cannot determine how much of the waste that they send to these landfills came from the planning unit. The total volumes received by each of these landfills cannot be estimated by the planning unit, nor can it accurately be quantified based on what is provided by the haulers to the planning unit as their permitting agency. The amount of waste generated by type in Putnam County brought to transfer facilities outside of the planning unit that is sent to the Chemung, New Lexington, and Seneca Meadows landfill, as reported by haulers permitted in Putnam County can be found in Table 3.12.

CHEMUNG LANDFILL

Chemung Landfill located at 1690 Lake St in Elmira, NY, approximately 218 miles west of Putnam County accepts C&D debris. Waste collected from Putnam County is brought to this landfill by transfer facilities

[12] New York State Inactive Landfill Initiative, July 2024, Status Report, https://dec.ny.gov/sites/default/files/2024-07/inactivelandfillrpt2024.pdf

outside of the planning unit that receives C&D waste from haulers licensed in the planning unit. According to the most recent report available on the NYSDEC Annual Report Index, the report submitted by Chemung Landfill indicates 206.79 tons of C&D Waste came from Putnam County, NY (pg. 46 of the Chemung MSW landfill annual report[13]).

NEW LEXINGTON LANDFILL

Previously called Tunnel Hill Landfill, the New Lexington Landfill is located on Tunnel Hill Road in New Lexington, Ohio. This location accepts MSW, C&D Debris, remediation soils, and certain non-hazardous specialty wastes[14]. Waste collected from Putnam County is brought to this landfill by transfer facilities outside of the planning unit that receives waste from haulers licensed in the planning unit. There is no available report for the volume of waste by type that is brought to this facility from transfer stations located outside of the planning unit that receive waste from the planning unit.

SENECA MEADOWS LANDFILL

Located in western New York at 1786 Salcman Road, in Waterloo, NY just south of Lake Ontario, Seneca Meadows accepts both MSW and C&D debris that is generated in Putnam County. Waste collected from Putnam County is brought to this landfill by transfer facilities outside of the planning unit that receives C&D waste from haulers licensed in the planning unit. According to the Senecca Meadows Annual Report submitted to the NYSDEC. The waste identified by the landfill manager as originating in Putnam County (pg. 20 of the Seneca Meadows Annual Report[15]) is 378 tons of Construction Debris, 183 tons of contaminated soil, 5,556 contaminated soils (BUD); accounting for 6,117 tons from the planning unit and a total of .33% of the waste received by the landfill outside of the planning unit.

Organics Management Facilities Outside of the Planning Unit

Sustainable Materials Management

Sustainable Materials Management, Inc. (SMM Compost) is a state-registered organics management facility located at 2 Bayview Road in Cortlandt Manor, NY, serving the greater Hudson Valley region, including Putnam County. The facility is dedicated to diverting food waste and other organic materials from landfills by transforming them into high-quality compost. SMM Compost processes a wide range of materials, including food scraps (meat, bones, dairy, shellfish), food-soiled paper, certified compostable packaging, yard trimmings, and woody debris. Materials are carefully inspected on arrival to ensure non-compostables such as plastics, glass, and hazardous waste are excluded. The facility uses an aerated static pile system designed by O_2 Compost, which promotes efficient aerobic decomposition through controlled airflow and temperature monitoring. This method ensures rapid breakdown of organic matter, effective pathogen reduction, and odor control. All batches are monitored to maintain temperatures above 130°F, and the finished compost is tested in laboratories to ensure it meets quality and safety standards. Certified haulers bring in food waste from municipalities, institutions, and businesses, while individuals can apply to drop off household compostable materials. The resulting compost is available for purchase either in bulk or in bags, with retail locations in both Cortlandt Manor and Garrison, NY. By managing food waste locally and turning it into a valuable soil amendment, SMM Compost supports regional sustainability efforts,

[13] Chemung MSW Landfill Annual Report, 2024, https://extapps.dec.ny.gov/fs/projects/SWMF/Annual%20Reports_Solid%20Waste%20Management%20Facility/Annual%20Reports_by%20Activity%20Type/Landfill/Landfill%20Annual%20Reports%20-%202023/R8/08S02_Chemung_County_Sanitary_LF_msw_R8_2023.2024-03-01.AR.pdf

[14] Win Waste New Lexington, https://www.win-waste.com/about-us/locations/new-lexington-oh/

[15] Seneca Meadows Annual Report 2024, https://extapps.dec.ny.gov/fs/projects/SWMF/Annual%20Reports_Solid%20Waste%20Management%20Facility/Annual%20Reports_by%20Activity%20Type/Landfill/Landfill%20Annual%20Reports%20-%202023/R8/50S08_Seneca_Meadows_msw_R8_2023.2024-3-1.AR.pdf

reduces greenhouse gas emissions, improves soil health, and fosters environmental education and community engagement throughout Putnam County and beyond.

Rock Terrace, LLC

Rock Terrace LLC is located at 210 & 230 Route 22, in Brewster, NY and is registered with the NYSDEC and receive leaves and manure (with bedding). This facility is a partner of Lawton Adam's which is a transfer facility located in Somers, NY and who is the recipient of waste that is composted at the Brewster location. In 2024, Rock Terrace reported to the DEC in their Annual Report received 9,625 cubic yards of leaves only, and 4,390 cubic yards of manure with bedding that came from their Lawton Adams Facility which is the Westchester planning unit.

Agricultural Operations Processing Organic Waste

According to the 2022 Census of Agriculture there are 68 farms located in the planning unit with the following land uses by percent; 34% Cropland, 18% pastureland, 36% Woodland and 12% for other uses. While these farms generate a significant amount of organic material, the County does not have specific data to report as the organic material is typically handled at the farms. Any waste that is picked up from the farms would be reported to the planning unit through the annual solid waste hauler permit application.

Recycling Centers Outside of the Planning Unit

Republic Services[16]

Republic Services operates a regional recycling facility that serves communities beyond the Putnam County planning unit. Located at 508 Fishkill Ave, Beacon, NY which is located in Dutchess County, this Materials Recovery Facility (MRF) accepts a wide range of single-stream recyclables including paper, cardboard, plastics (#1–#7), metals, and glass. The facility uses advanced sorting technologies to maximize material recovery and minimize contamination. Republic Services provides recycling services to municipalities, commercial entities, and haulers in the surrounding region, supporting Putnam County's broader waste diversion goals through contracted or private arrangements. The permit applications submitted by haulers was less specific, therefore, Table 3.4 shows the reported tonnage generated by the planning unit and in 2024 as reported by the receiving facility.

Table 3.34 – Material Received Within the Planning Unit by Republic Services

Location	Waste Type	Tonnage
Kent Recycling Center	Baled Cardboard	49.87
	Mixed Paper	26.94
	Mixed Plastic	17.96
Putnam Valley	Single Stream	161.24
Patterson	Single Stream	133.19
Philipstown	Single Stream	46.37

Scrap Metal Processing and Vehicle Dismantling Facility, Motor vehicle Repair Shop and Mobile Vehicle Crushing Facilities located in the planning unit

The NYSDEC requires facilities that process scrap metal, as well as those that dismantle, repair, and crush end-of-life (ELV) vehicles, to submit annual reports detailing the waste they generate and transport. This waste includes metals and hazardous materials such as refrigerants, used oil, diesel fuel, gasoline, engine

[16] Republic Services, 2025, Who we are, https://www.republicservices.com/about-us

coolant/antifreeze, and windshield washer fluid. These reports document the quantity of each waste type collected annually and the location where it is disposed of. However, due to the nature of waste generation and processing at these facilities, the originating planning unit cannot be determined. Table 3.5 lists each facility's name, NYSDEC registration type(s), address, and the types of waste transported from the facility.

Table 3.5 Scrap Metal and ELV Processing Facilities Located in the Planning Unit by NYSDEC Registration, Location, and Waste Type(S) Transported

Facility Registered	Address	NYSDEC Registration Type(s)	Waste Type Transported
Bryson's Inc.	820 Croton Falls Rd, Carmel NY10560	Vehicle Dismantling Facility, Motor vehicle Repair Shop and Mobile Vehicle Crushing Facility	• Used Oil • Gasoline • Engine Coolant/Antifreeze
Brewster Auto Inc.	444 Route 312, Brewster NY 10509	Vehicle Dismantling Facility, Motor vehicle Repair Shop and Mobile Vehicle Crushing Facility	• Used Oil • Gasoline • Engine Coolant/Antifreeze
Expressway Recycling, Inc.	3455 Route 9, Cold Spring NY 10516	Vehicle Dismantling Facility, Motor vehicle Repair Shop and Mobile Vehicle Crushing Facility	• Used Oil • Gasoline • Diesel Fuel • Engine Coolant/Antifreeze • Windo Washing Fluid
		Scrap Metal Processing Facility	• Aluminum Scrap Metal • Lead Weights • Ferrous Scrap Metal • Non-Ferrous Scrap Metal

Sewage/Sludge Transfer Stations

The planning unit does not have a wastewater treatment plan where waste generated within and outside of the planning unit is managed. All septic waste generated within the planning unit is picked up by haulers and either directly hauled to treatment plants located in Dutchess County or Danbury, Connecticut. There are three actively permitted privately owned transfer stations in Putnam County authorized to accept septage and sewage treatment plant sludge: Stuart W. Bates Inc. in Brewster, NY; J. Mantovi Excavating in Mahopac; and Tyndall Septic Systems, Brewster, NY.

J. Mantovi Excavating d.b.a. Mahopac Septic

Located at 485 Kennicut Hill Rd. in Mahopac NY, is a registered and privately owned transfer station that accepts sewage plant sludge, grease, and septage. Table 3.6 represents the amount of waste received from outside of the planning unit by this facility; the data for this facility was extracted from the NYSDEC Permitted Transfer Station Annual Report for this entity.

Table 3.6 Waste Received from Outside the Planning Unit by J. Mantovi Dba Mahopac Septic Transfer Station

Material Received	Non-Putnam Source	Tonnage
Septage	Westchester County	2733.6
Sewer Plant Sludge	Westchester County	1318.6

Stuart W. Bates Inc.

Located at 36 Starr Ridge Rd. in Brewster, NY, this privately owned facility accepts septage and treat sludge from sewage treatment plants. Table 3.7 represents the waste received by Stuart W. Bates from outside the planning unit; the data for this facility was extracted from the NYSDEC Permitted Transfer Station Annual Report for this entity.

Table 3.7 Waste Received from Outside the Planning Unit by Stuart W. Bates Transfer Station

Material Received	Non-Putnam Source	Tonnage
Septage	Westchester	232431.50

Tyndall Septic Systems

Tyndall Septic Systems is a privately owned and operated septic waste transfer station located at 15 Independent Way in Brewster, NY that services Dutchess, Putnam, and Westchester Counties. Table 3.8 represents the amount of waste received by Tyndall Septic from outside the planning unit; the data for this facility was extracted from the NYSDEC Permitted Transfer Station Annual Report for this entity.

Table 3.8 Waste Received from Outside the Planning Unit by Tyndall Septic Systems Transfer Station

Material Received	Non-Putnam Source	Tonnage
Septage	Westchester	195,850
Septage	Dutchess	42,000

Transfer Stations

Within the Planning Unit

TOWN OF KENT RECYCLING CENTER

Waste Generated at The Kent Recycling Center

The Town of Kent Recycling Center (KRC), located at 16 Ray Singer Court in Kent Lakes NY, operates as a registered transfer station on approximately one acre of land with multiple buildings. The facility is only open to residents of the Town of Kent on Wednesdays from 10am-1pm, Saturdays for MSW drop-off from 8am-12pm, and on select holidays. Materials accepted at the KRC include paper, cardboard, plastics, glass bottles and jars, metal cans, scrap metal, and textiles. In addition to recycling services, the KRC features an on-site repurpose facility where permit holders can drop off usable items and exchange them for others left by fellow residents. Table 3.9 provides a summary of the types and quantities of solid waste generated within the planning unit and processed at this facility.

Table 3.9 Material by Type and Amount Received at the Kent Recycling Center

Waste Type	2024 Tonnage	Unit
Single Stream	13.96	Ton
Commingled Paper	26.94	Ton
Cardboard	49.87	Ton
Bulk Metal/Scrap Metal	10.5	Ton

**White goods (appliances) are counted as scrap metal*

The Administrative and Financial Structure of the Kent Recycling Center

The Town of Kent Recycling Center is a volunteer-operated facility, staffed by approximately 10 to 12 volunteers during its hours of operation. The KRC is overseen by its own commission, which holds meetings on the third Thursday of every odd-numbered month. These meetings, open to the public, are typically attended by all volunteers and serve as staff meetings to review standard operating procedures and coordinate content for the KRC Newsletter. Use of the KRC requires the purchase of an annual permit, available for $50 per household, with proof of residency in the Town of Kent. Garbage disposal fees are $4 per 30-pound bag and $6 for contractor bags. The center is entirely volunteer-run and receives no funding from the town; the membership fees support the facility's operations and equipment needs. Additionally, volunteers take collected deposit-eligible recyclables (5¢ items) and return them to a local beer distributor, donating the proceeds to local nonprofit organizations.

TOWN OF PATTERSON RECYCLING CENTER

Waste Generated at the Town of Patterson Recycling Center[17]

The Town of Patterson Recycling Center, located at 271 Cornwall Hill Road Patterson, NY, provides comprehensive waste management services for Patterson residents only, operating under a single-stream recycling system that excludes municipal solid waste collection. This allows paper, cardboard, plastics, glass, and metal cans to be combined in one container for processing. In addition to standard recyclables, the center accepts bulk items such as appliances, furniture, mattresses, and rugs; scrap metal like lawn mowers, bicycles, and metal furniture; and electronics including computers, TVs, and cell phones. Automotive waste such as used motor oil and car batteries is also accepted, along with textiles that can be deposited in designated bins. The center takes yard waste like leaves and grass clippings (but not brush or wood), and it accepts tires and propane tanks for an additional fee. An annual permit is required to use the facility, with permit fees helping to support its operation. Table 3.10 reflects the type and amount of solid waste originating within the planning unit managed at this facility that was provided by the town through an inquiry specific to this plan.

Table 3.10 Material by Type and Amount Received at the Town of Patterson Recycling Center

Waste Disposed	2024 Tonnage	Unit
Mixed Material Recycling – Single Stream	362.63	Ton
Textiles	3.41	Ton
Bulk Metal	29.91	Ton
Used Motor Oil	200	Gal
E-Waste	3.74	Ton

The Administrative and Financial Structure of the Patterson Recycling Center

The Patterson Recycling Center is operated and maintained by the Town of Patterson and is administratively overseen by the Highway Superintendent and Sanitation Administrator; and is supported by the Highway and Sanitation Administrative Assistant. Additional staff for the recycling center includes a permit checker/attendant, and for sanitation includes one foreman, four Motor Equipment Operators (MEOs), and one occasional floater who helps where needed. The annual operational cost of the Recycling Center is $76,844. Insurance for the facility at 271 Cornwall Hill Rd is covered by the Town of Patterson. No

[17] Patterson Recycling Center – Recyclables Handling and Recovery Facility Annual Report, 2024 reflecting data from January 1,2023-December 31, 2023, https://extapps.dec.ny.gov/fs/projects/SWMF/Annual%20Reports_Solid%20Waste%20Management%20Facility/Annual%20Reports_by%20Activity%20Type/Recyclables%20Handling%20and%20Recovery%20Facilities_RHRF/RHRF%20Annual%20Reports%20-%202023/R3/40R10001_Patterson_Recycling_Center_rhrf_R3_2023.2024-2-17.AR.pdf

post-closure plan or associated costs have been identified for the Recycling Center. The center generates an estimated $34,000 in revenue from permit fees: $17,000 from general facility use permits (which require a $30 sticker) and $17,000 from permits for chargeable items such as tires, couches, and mattresses. Table 3.11 reflects the revenues collected by the Town of Patterson from recyclables (e.g., textiles and scrap metal) collected at the Patterson Recycling Center. There are no fines collected. The Recycling Center also receives financial support from the Town's General Fund. Facility operations and maintenance are funded through a combination of permit fees and General Fund contributions.

Table 3.11 – Revenue Collected by Material Type at Town of Patterson for Recyclables

Type of Waste	Revenue Collected	Disposal Site
Bulk Metal	$3,628.70	Southeast Auto
Textiles	$256.56	Rags Limitless

TOWN OF PHILIPSTOWN RECYCLING CENTER

Waste Generated at the Town of Philipstown Recycling Center[18]

The Town of Philipstown Recycling Center is only open on Saturdays from 9am-3pm and is located at 59 Lane Gate Road in Cold Spring, NY and is approximately 4 acres in size. From town of Philipstown residents only, the center accepts various recyclable materials, including metal, plastic, and glass containers (excluding mirrors, windows, or drinking glasses), electronic waste, scrap metal and white goods, and freon-free air conditioners. The facility has a capacity of 30 yards (yd) for single stream recycling. These recyclable items are then picked up by Royal Carting and brought to Republic Services (previously named Beacon Recycling) and the tipping fees are incurred by the Town of Philipstown when the 30yd dumpster is full; there is not a regular scheduled pick-up. To utilize this facility, residency in the Town of Philipstown is verified and permits are issued by the Town Clerk. Waste from commercial business is not accepted at this facility. Approximately 50-60 residents utilize the facility per week. Table 3.12 reflects the type and amount of solid waste originating within the planning unit managed at this facility and each food scrap drop-off site.

Food Scrap Drop-off

The Center at Lane Gate also has a food scrap drop-off location for approximately 300 registered households living in both incorporated villages (Cold Spring and Nelsonville) and unincorporated towns of Philipstown (Town of Garrison and Continental Village) with ten 64-gallon toters.

Kemble Ave Food Scrap Drop-off Site

Located on Kemble Avenue in the Village of Cold Spring, there is a smaller food scrap recycling location with two 64-gallon toters kept in a small pad-locked shed.

Table 3.12 Material by Type and Amount Received at the Town of Philipstown Recycling Center

Material Received	2024 Tonnage	Unit
Comingled Recyclables (metal, plastic, glass)	46.37	Ton
Scrap Metal (from residents)*	27.2	Ton
Food Scraps	13	Ton

[18] Philipstown Recycling Center – Recyclables Handling and Recovery Facility Annual Report, 2024 reflecting data from January 1,2023-December 31, 2023, https://extapps.dec.ny.gov/fs/projects/SWMF/Annual%20Reports_Solid%20Waste%20Management%20Facility/Annual%20Reports_by%20Activity%20Type/Recyclables%20Handling%20and%20Recovery%20Facilities_RHRF/RHRF%20Annual%20Reports%20-%202023/R3/40R20001_Philipstown_Recycling_Center_rhrf_R3_2023.2024-2-15.AR.pdf

**Whitegoods (appliances) are counted as scrap metal*

The Administrative and Financial Structure of the Philipstown Recycling Center

The Town of Philipstown owns and operates the Philipstown Recycling Center. Since there are no fines or enforcements through or related to this facility, the town taxes cover the costs associated with the recycling facility including the cost of the weekly attendant's hours, tipping fees for commingled recyclables, and any other needed costs and maintenance. Tipping fees are approximately $700/annually. There are no closure or post-closure plans in place, or current capital investment projects planned, however discussions on the addition of solar panels have begun with no formal plans in place.

Outside of the Planning Unit

There following transfer facilities located outside of the planning unit are known to the planning unit to receive waste generated by the planning unit as a result of reports to the solid waste and recycling program through the hauler permit report, and by reviewing available annual reports submitted by transfer facilities to the NYSDEC (these are linked in this plan if they are available online). Table 3.12 reflects the waste by type that was aggregated in table 2.1 to reflect the volume of waste by type generated by the planning unit and brought to transfer facilities outside of Putnam County that was later transferred to the previously identified landfills and other unknown locations (this data is collected from hauler permit applications and is all that is available to the planning unit to descriptively identify volume of waste by type). It is also important to know that the data reflected in Table 3.13 as being transported to the transfer stations in the permit application by haulers is not comprehensive as some of the reports from haulers were not as detailed as anticipated (i.e. some haulers omitted the location that waste generate by the planning unit was transported to, the type of waste was aggregated by the hauler instead of being broken out by type as requested, etc.). The planning unit has identified this as a data and information gap and has included activities to improve the reporting from haulers so that future reports are more accurate and comprehensive.

ALL AMERICAN WASTE TRANSFER

All American Waste is a transfer facility located at 182 Danbury Rd, New Milford, CT 06776. This facility is reported by a permitted hauler to receive waste that originates in the planning unit. Because this facility is located in the State of Connecticut, the planning unit cannot obtain or require this facility by law to submit an annual report to quantify the waste received by this facility from the planning unit and/or transferred to landfills. The data included in table 3.12 reflects the volume of waste by type that haulers reported to the planning unit in their permit application for 2025.

BROOKFIELD RESOURCE MANAGEMENT

Located at 2105 Albany Post Road, Montrose, NY 10548, is reported by a permitted hauler as receiving waste that originates within the planning unit.

LA MELA SANITATION SERVICES

La Mela Sanitation Services, located at 1118 US-9W, Marlboro, NY 12542, is reported to receive waste generated within the planning unit. Waste that is brought to this transfer facility may be transferred to Chemung Landfill, New Lexington Ohio Landfill, or Seneca Meadows as reported to the SWPM on the phone, however, the volume of waste by type that is received by this planning unit that is brought to the landfills is not known by this transfer facility. The Planning unit cannot require this facility to report these totals by law because they are not within their jurisdiction. The data in table 3.12 is an aggregate by waste type as reported by haulers who bring waste generating in the planning unit to this facility.

OAK RIDGE TRANSFER STATION

Oak Ridge Transfer Station, owned by Interstate Waste Services is located at 307 White St, Danbury, CT 06810. This facility receives waste from permitted haulers that originates in the planning unit. Because this facility is located in the State of Connecticut, the planning unit cannot obtain or require this facility by law to submit an annual report to quantify the waste received by this facility from the planning unit and/or transferred to landfills. The data included in table 3.13 reflects the volume of waste by type that haulers reported to the planning unit in their permit application for 2025.

CASELLA WASTE MANAGEMENT SERVICES D.B.A. ROYAL CARTING

Located at 409 NY-82, Hopewell Junction, NY 12533, which is in the neighboring planning unit, Dutchess County, receives waste generated by Putnam County. The data reflected in Table 3.13 reflects the volume of waste by type generated by the planning unit as reported by the permitted haulers.

SOMERS SANITATION D.B.A. CITY CARTING

Located in Westchester County at 241 NY-100, Somers, NY 10589, Somers Sanitation d.b.a. City Carting is owned by WIN Waste Innovations. Waste that originates in the planning unit is brought to this facility and may be brought to either the incineration facility in Peekskill or to landfills; both located outside of the planning unit.

Table 3.13 Volume of Waste by Type Generated by the Planning Unit, Brought to Transfer Facilities Located Outside of the Planning Unit

Transfer Facility	Waste Type	2024 Tonnage
Brookfield Resource Management	White Goods	1.34
	Scrap Metal	4.23
Somers Sanitation (d.b.a. City Carting)	C & D Debris - Concrete	182.99
	C & D Debris – Mixed	32.1
	MSW	47.36
	Tires	.33
	Leaves/Grass/Stumps/Brush (incl. Christmas Trees)	16.59
	Commingled Recyclables (metal, plastic, glass)	654.66
	Commingled Paper/Corrugated Cardboard	321.69
Oak Ridge Transfer Station	MSW	7979.08
	Commingled Recyclables (metal, plastic, glass)	425.41
	C & D Debris – Other	.42
	Scrap Metal	3.82
	Corrugated Cardboard	17.64
All American Waste	MSW	79.17
	C & D Debris – Clean Wood	28
LaMela Sanitation	MSW	24.1
	C& D Debris	594.62
Casella Waste Management Services d.b.a Royal Carting	MSW	10864.05
	C & D Debris – Mixed	282.32
	Bulk Items (Furniture/Large Items)	7984
	Single Stream Recycling	83.95

Data Gaps and Informational Needs

For data pertaining to waste generated outside of the planning unit that is transferred through Putnam County facilities, work is needed to identify a mechanism to require reporting to the planning unit by these facilities that are registered or permitted so that the waste stream is accurately represented and considered. Additionally, to quantify the volume of waste by type that is brought to transfer facilities outside of Putnam County must be collected from haulers in more detail and separated out by type and receiving facility. Further, the planning unit will work with other neighboring planning units and jurisdictions such as the State of Connecticut and Westchester County to identify waste that is generated by Putnam County and transferred to landfills from the transfer facilities located in their jurisdictions so that the amount of waste being landfilled is more accurate.

Solid Waste Programs

Recyclables Collection and Processing

TOWN-MANAGED SANITATION PROGRAMS

Each town within Putnam County oversees its own curbside sanitation and drop-off programs. The information in this section was provided to the planning unit by each town supervisor or village mayor. Residents should contact their local town offices for specific information regarding pickup schedules and accepted materials. In this section, an overview of each town-managed sanitation program reflects the administrative and financial structure and organization of the program.

Town of Carmel

The Town of Carmel, New York, has implemented a municipal solid waste program to streamline refuse and recycling services for its residents. The Town of Carmel allows private haulers to competitively bid (via Request for Bid: RFB) to provide refuse and recycling services to the residents of the Town of Carmel. There are two private haulers contracted for the Town of Carmel, one to handle residential waste collection and one to handle condominiums and multi-dwelling units. Under this program, residents receive twice-weekly garbage pickup, once-weekly recycling, two annual bulk pickups, and holiday tree removal. The cost for single-family homes is $453 per year, billed through property taxes, with the town allocating a total budget of $4.5 million for these services. This centralized approach replaces the previous system of multiple private haulers, aiming to reduce traffic, pollution, and costs. Additional services, such as driveway pickup or extra containers, are available for an extra fee.

Town of Kent and Lake Carmel Sanitation

Town of Kent

Residents of the Town of Kent can utilize the Kent Recycling Center by purchasing a permit, or they can hire private haulers at their own cost for curbside garbage and recycling pickup. Residents who do not utilize the KRC have the option to purchase a waste subscription with a private hauling company of their choice. The Town of Kent also has an e-waste shed located behind townhall that is open from 9a-12p where residents can drop off covered electrical equipment (CEE) at no cost as long as there are no batteries or unacceptable items. Residents should inquire with town hall for a list of items that are accepted.

Lake Carmel Sanitation

The Lake Carmel Sanitation District, located within the Town of Kent, New York, provides municipal solid waste and recycling services to residents of the Lake Carmel community totaling 2,363 residents and 29 commercial locations. The district operates a structured collection schedule one day for each of the following: regular garbage and recyclables, bulk non-metal items, white goods, and brush and leaves. The Lake Carmel Sanitation Department purchases and distributes lawn and leaf bags to all residents that visit and request them at the Lake Carmel Sanitation office. Residents are required to place garbage in cans no larger than 35 gallons; larger containers must have bagged waste that can be lifted manually. For residents in this special district, fees for sanitation services are paid through the town tax bill at the rate of 3.851/thousands of the assessed value.

Town of Patterson

Sanitation services in the Town of Patterson is managed through two separate special improvement districts. Both districts are funded through special assessments paid for by those benefitted residential units

in each of the respective districts. Sanitation District 1 is served by a private hauling company that is currently operating under a five-year contract. The annual cost for each residential unit in District 1 for 2025 was $379.40 per unit. The 2025 operating budget for District 1 is $507,126.00. Sanitation District 2 is serviced directly by the Town of Patterson using municipal employees in a Sanitation Department with an annual cost of $1,250,890. For District 2 The Town of Patterson has included $10,000 in their annual budget for capital improvements and a new packer truck costing approximately $300,000. The annual cost for each residential unit in District 2 for 2025 was $419.52 per unit. The 2025 operating budget for District 2 was $1,290,850.00.

Town of Philipstown

The Town of Philipstown does not provide municipal refuse collection services, leaving residents to arrange for private solid waste pickup through haulers such as Royal Carting, AAA, and Louis Lombardo & Sons. However, the town supports a limited bulk-waste disposal option through a voucher system, allowing residents to drop off up to 500 pounds of waste per year to Royal Carting/Welsh Sanitation, with the town covering $37.50 per voucher and an additional $0.06 per pound over the limit. An annual Shredder Day event, hosted by the Lion's Club, further supplements local disposal options. Recycling services are offered at the Philipstown Recycling Center on Lane Gate Road, where food scraps, e-waste, white goods, and plastics are accepted (excluding C&D waste and organic brush). While a nominal vehicle fee has been discussed, as of March 2025, no charges are applied for car drop-offs. The center is located on a site that has served as an inactive landfill since the 1990s, and future planning includes considerations such as a biofiltration project. Additionally, the Philipstown Food Scrap Drop-off program does allow residents who are registered to receive one garden size container of finished compost, free of charge, as a token of appreciation for participating in the food scrap drop-off program.

Village of Cold Spring

Although located within the Town of Philipstown, the Village of Cold Spring manages its own solid waste contract at an annual cost of about $240,000. To address seasonal population increases, the Village expanded trash collection to four days per week from April through November to manage overflow, especially in public areas. In 2010, the Village received grant funding to purchase secure composting bins for residents interested in at-home composting. In 2024, the Village used a New York State Energy and Research Development Authority (NYSERDA) Clean Energy Communities grant to expand the Town of Philipstown Food Scrap Recycling Program with a new Village drop-off set on Kemble Avenue. The Village's Climate Smart Coordinator/Trustee volunteers to support the Food Scrap Drop-off Program on behalf of Cold Spring and partners with the Town of Philipstown's Food Scrap Recycling Volunteer Coordinator, who oversees program implementation. While the NYSERDA grant funded the Cold Spring site initially as a pilot, the ongoing haulage fees now are paid through the Village's General Fund. The Village of Cold Spring does not receive any revenue from fines, permit fees, general fund contributions, or special district charges.

Village of Nelsonville

Also located in the Town of Philipstown, the Village of Nelsonville provides solid waste collection for approximately 250 households at a cost of around $76,000 per year, averaging about $27 per household per month through a municipal contract with a private hauler bid tri-annually. The mayor of Nelsonville oversees this program and its components along with the Village board of trustees. The program includes two bulk waste pickup days annually, one in the spring and one in the fall. Residents may also obtain a voucher to dispose of their bulk items directly at the waste collector's

facility through the Town of Philipstown. Businesses in Nelsonville contract privately for refuse removal. There are no capital investments planned for this program.

Town of Putnam Valley

The Town of Putnam Valley (PV) provides a combination of public and private solid waste services depending on the district. Among the town's 14 improvement districts, Lake Peekskill manages its own waste and recycling services, while the remaining districts rely on the town to bid contracts. Non-district residents may contract with any private hauler licensed by both the Town of Putnam Valley and Putnam County. The town mandates that all haulers be permitted, with application fees of $2,500 for new vendors, $200 for renewals, and $150 per truck. A private hauling company handles municipal garbage and recycling collection for most residents, with weekly pickup. Households receive one toter for trash and one for recyclables from the hauling company. The Town Hall Garage is the location for bulk waste drop-offs for all residents, which is offered four times annually, excluding C&D materials; bi-annual community shredding events take place in the spring and fall; and e-waste and scrap metal drop-off open Monday through Friday from 8am-2pm.

Lake Peekskill Improvement District (LPID)

Unlike other areas of Putnam Valley that rely on private haulers or town-bid services, Lake Peekskill offers a fully municipally managed system tailored to the needs of its community. The district provides residents with regular garbage and recycling pickup, as well as bulk waste collection, all managed independently of the town-wide service contracts. There are five staff members, one acting as the foreman (who reports to the Town of Putnam Valley Supervisor) who are also responsible for the operations and maintenance of parks and recreation, beaches and lakes, and snow for the district. Monday and Tuesday are for garbage pickup, and Thursdays are for recycling pickup for all residents in the Lake Peekskill Sanitation District. Garbage and refuse are handled manually by improvement district staff utilizing their own compactor trucks. Residents provide their own garbage and recycling vessels and are restricted to 36-gallon containers to promote the safety of improvement district staff, prevent injuries, and control the waste generated by residents. The cost for sanitation is included in the Lake Peekskill improvement district taxes. LPID has two bulk pick-up curbside days annually, one in the spring and one in the fall. White goods and scrap metal are picked up on bulk pickup days but are kept separate from the bulk items and are brought to the Putnam Valley highway department for proper disposal. Residents of LPID utilize PV e-waste drop-off program and bi-annual community shred days. The budget for the LPID. LPID does provide education to remedy when resident's refuse and recycling practices do not adhere to the PV code.

Town of Southeast

The Town of Southeast's refuse program is overseen by a Special District Manager, who reports to the Town Supervisor. Waste and recycling services are competitively bid and contracted with a private hauling company. The current hauler is privately insured and is operating under a three-year agreement costing the Town $2.6 million annually for residential service (including service to condominiums). Residents pay taxes to receive twice-weekly refuse collection, which includes one day for bulk item pickup. In addition to refuse collection, the Town Clerk's Office administrates the leaf collection program and sells compostable leaf bags to residents generating approximately $1800 in revenue annually. The Town also provides residents with free e-waste and white good drop-off services on the first Saturday of every other month at 10 Palmer Road, staffed by two employees and annual Shred Day is typically held in summer at no cost to residents, with the Town funding the $1,680 expense for the shred truck. There is no revenue for this program and

any fees charged to residents cover the costs paid by the Town for program related costs (leaf bags). The Town does not have any plans for capital investments; however, they are discussing revising the town charter to revise Chapter 117 Solid Waste Collection to promote environmental stewardship and sustainability in waste generation behaviors for the town's residents.

Village of Brewster

The Village of Brewster contracts with a private hauler following a bid process to provide curbside solid waste and recycling services for its residents, who currently pay approximately $500 annually (or about $47 per month, including administrative fees). The current contract is for three years with the option to extend it for two additional but separate years and costs approximately $413,000. The total operating budget for refuse collection is $465,000 which includes administrative costs for residents who choose to be billed monthly for refuse pickup. Trash is collected twice weekly on Tuesdays and Fridays, while recycling is picked up on Fridays. Bulk item collection is offered twice per year, Christmas tree disposal is available each January, and e-waste can be dropped off by residents at the Town of Southeast's facility located at 10 Palmer Road. Brewster also has the capacity to enforce waste regulations, though current outreach via email and mailers may not reach all residents. The Village has discussed the possibility of consolidating services under a single contract with the Town of Southeast to streamline operations and reduce costs. Ongoing challenges include the pickup of white goods and appliances containing Freon, as well as concerns about communication and service expectations with the current hauler. The Village is reviewing its existing hauler contract as part of long-term planning efforts.

SINGLE-STREAM RECYCLING

Some towns utilize single stream recycling systems, allowing residents to combine all recyclables such as paper, cardboard, plastics, and glass into one bin. These materials are later sorted at specialized facilities identified in the previous section of this plan.

PRIVATE HAULERS

Licensed private companies provide residential and commercial waste and recycling services throughout the county. The list of permitted solid waste haulers can be found on the Putnam Recycles Website[19].

Recycling Data Collection Efforts

For the planning period, the solid waste program manager will be improving data collection efforts for all components of solid waste in the planning unit to allow for a comprehensive review of all components of the solid waste program. The data will be analyzed to identify additional needs that align with the New York State Solid Waste Management Plan, and other NYSDEC recommended programs for waste reduction, reuse, and recycling practices. This data will also be used to inform budget conversations and to identify areas of improvement for this program from hauler application/permit renewal, accessibility of information, enforcement, and regulations.

Organics Recovery

The planning unit does not currently have any county-run organics management or recovery programs. For the planning period, the SWPM will work with stakeholders, community partners and residents to assess interest in an organics management program for municipal food scrap recycling, composting, and agricultural organics management. Additional information about the data gap for organics recovery in the

[19] PutnamRecycles – Permitted Solid Waste Haulers, https://www.putnamcountyny.gov/images/Departments/Department_of_Health/recycle/2025_PC-Permitted-Solid-Waste-Haulers_3.pdf

data gaps and informational needs section of this chapter has been identified and will be added to the implementation schedule for the planning period to create.

Public Outreach and Education

Putnam County Department of Health

Within a rural community, it can be challenging to reach a large portion of the public, however, PCDOH prioritizes multiple educational outlets to reach as many residents as possible about current recycling, waste reduction and reuse practices. The Solid Waste Program Manager is responsible for engaging with the community regularly by tabling at community events, managing the department's Recycling Website (Putnam Recycles[20]), social media campaigns, creating and maintaining any tools or info sheets (print and electronic), promoting the county's compost bin sales, and creating presentations upon request for classroom and community group presentations. Visual representation of some of these materials can be found in Appendix 1 – Educational Materials).

SOCIAL MEDIA

The PCDOH's media team showcases the Solid Waste Program monthly on X (formerly Twitter), Instagram and Facebook. Posts cover composting, curbside recycling, waste reduction (generally, food around the holidays, gift wrapping near winter holidays), paint recycling (PaintCare), upcycling, reuse (water bottles, bags, etc.), litter cleanups, plastic-free July, and Earth Day. PutnamHealthNY reposts relevant information on solid waste, recycling, and composting from RecycleRightNY, the EPA, NYSAR3, and other industry agencies.

PUTNAM HEALTH WEBSITE – PUTNAM RECYCLES

The PCDOH's "Putnam Recycles" program offers a comprehensive suite of public outreach and educational resources to promote responsible waste management and environmental stewardship. The program provides detailed guidance on curbside recycling, encouraging residents to contact their local towns or permitted haulers for specific pickup schedules and accepted materials.

COMPOSTING EDUCATION

To support backyard composting efforts, the county offers discounted Earth Machine compost bins and shares educational materials in partnership with the CCE of Putnam County. In 2024, PCDOH sold 7 Earth Machine compost bins. To date, in 2025, 14 Earth Machine compost bins have been sold.

ELECTRONIC WASTE (E-WASTE) RECYCLING

Additionally, the program supports electronics recycling by advising residents to utilize town-specific programs or retail drop-off locations like Best Buy and Staples.

HOUSEHOLD HAZARDOUS WASTE DAY (HHWD)

For hazardous waste disposal, the county hosts biannual Household Hazardous Waste Drop-Off days at Fahnestock State Park, allowing residents to safely dispose of items such as paints, solvents, and pesticides. The program also addresses medication safety by organizing take-back events in collaboration with local law enforcement and health organizations, and by educating and directing residents to the permanent drop boxes for medication throughout the county.

[20] Putnam County Health Departments Putnam Recycles Website, 2025, https://www.putnamcountyny.gov/health/recycle/

KEEP PUTNAM BEAUTIFUL

Litter Patrol

To combat litter, the county operates a Litter Patrol via an annual contract where patrollers pick up litter on all county-owned roads. The Litter Patrol Hotline Request Form[21] is designed to collect detailed reports of litter issues within Putnam County. It begins by asking the user to specify the type of litter problem (typically roadside). The form then requests the date the report is being submitted and the full address of the litter location, including street address, city, state, and zip code. To further assist in identifying the area, it asks for the nearest landmarks or cross streets. Users are also asked to indicate the date they first observed the litter and to provide a detailed description of its nature. Finally, the form collects contact information from the person submitting the report, including their full name, a call-back phone number, and an email address, allowing for follow-up if necessary. This form helps the county effectively monitor and respond to community concerns about environmental cleanliness.

Litter Equipment Rental

Residents are also encouraged to volunteer to pick up litter in their towns. The PCDOH has cleanup supplies, including grabbers and safety vests, that residents interested in volunteering to pick up litter can borrow for safe cleanup up Putnam County Roads. This offering encourages community participation in maintaining clean public spaces and "Keeping Putnam Beautiful". Requests can be submitted via a designated form[22].

Event Recycling Container Rental

The PCDOH can provide recycling containers for outdoor events, fairs, and community gatherings to encourage event-goers proper waste sorting. Clearly labeled bins make it easy for attendees to recycle, helping reduce waste and promote sustainability. Suitable for events of all sizes, these containers support cleaner, environmentally responsible gatherings. Requests can be submitted via a designated form[23].

Sustainable Putnam

Sustainable Putnam is a nonprofit dedicated to building ecologically sound, socially equitable, and economically responsible communities across Putnam County, NY. Through public outreach and education, they empower residents with tools like the Clean Energy Toolkit to reduce carbon footprints and make informed energy choices, while also hosting community events, workshops, and partnerships with local initiatives such as the Putnam County Climate Smart Task Force. Driven by an all-volunteer team, the organization promotes clean energy adoption, climate resilience, and hands-on learning opportunities that engage people of all ages.

Recycling Market Agreements

Currently, Putnam County participates in the PaintCare agreement to have all latex paints collected at the HHW collection events disposed of through PaintCare. The Solid Waste Program Manager will be assessing areas where these types of agreements would decrease costs to residents and municipalities to decrease the burden of refuse and recycling costs and responsibilities. Additional work to identify public-private partnerships to work on Extended Producer Responsibility (EPR) and manufacturer costs to promote the use of recycled materials and decrease costs and burdens for residents in the planning unit. Lastly, in accordance with the Putnam County Code, Section 205-13, the Solid Waste Program Manager

[21] Putnam County, NY – Litter Patrol Hotline Request Form, https://form.jotform.com/231133651487152

[22] Putnam County, NY – Litter Equipment Rental Request Form, https://forms.office.com/g/VavL7Uucsa

[23] Putnam County, NY – Event Recycling Container Request Form, https://forms.office.com/g/cPUiFcZuUe

will work to engage and maintain ongoing marketing of recyclable conversations with regional partners, municipalities and counties to address waste challenges more efficiently and cost-effectively to expand access to resources and infrastructure to manage solid waste in a more sustainable manner.

Efforts to Enforce Local Disposal and Recycling Laws

PCDOH has an Enforcement Protocol that is followed when a complaint is received and distributed to the appropriate program staff, in this case, as of January 2025, the SWPM would receive any complaints that have the potential to violate the Putnam County Charter, Chapter 205, Articles I-III. In 2024, there were no formal complaints recorded for the enforcement of violations to the code. The program staff evaluates the complaint, speaks with the complainant, investigates and observes the actions alleged in the complaint, and notifies the origin of the complaint if there is a violation of the Putnam County Charter, Chapter 205, Articles I-III and employs educational resources, information, and may enforce civil penalties up to $500 per violation.

Local Hauler Licensing

In Putnam County, New York, any business that transports regulated waste generated or disposed of within the county is required to obtain an annual permit from the PCDOH, as mandated by Chapter 205 of the Putnam County Code and Title 1, Article 27 of the NYSDEC. To receive a valid Certificate of Registration and vehicle permit stickers, applicants must complete the designated application including detailed annual reporting forms and submit it along with a $300 fee (covering up to five vehicles), payable by certified check or money order. Additional vehicle stickers cost $50 each. These stickers must be prominently displayed on all permitted vehicles. The permits expire annually on the last day of February, and late renewals submitted after February 21st incur a $50 penalty. As a condition of the permit, haulers must submit comprehensive annual reports detailing the volume and type of waste and recyclables, methods of collection and disposal, and locations specific to Putnam County. Failure to complete these reports or to comply with local, state, and federal laws may result in permit denial, revocation, enforcement actions, or legal penalties.

Pricing and Financial Incentives

The planning unit does not currently have a financially incentivized program to promote proper source separation, recycling, or other solid waste practices.

Data Gaps and Information Needs

For the current programs in the Putnam County Solid Waste Program, data collection across all aspects of the hauler permitting process will be reviewed and improved. Data collected from hauler permit applications/renewals on waste stream generation will be used to assess the waste stream in the planning unit and will be utilized to educate residents on the current waste stream on an annual basis. This data will focus on material types to inform targeted strategies. Through this data modernization, haulers will be asked to be clearer and more specific in reporting the waste produced in and transported outside of the planning unit for each municipality and material type accepted. The solid waste manager will also plan a county-wide survey to collection demographic and geographic data that will help to understand population density, growth trends, and regional characteristics that include waste production. A formal survey on existing waste collection, transportation, processing and disposal infrastructure will be conducted to assess the current system capacity and costs, efficiency and gaps. Additionally, the planning unit will be working to identify a mechanism for transfer facilities located in Putnam County who receive waste from inside and receive and process waste from outside of the planning unit to report waste totals for each of these characteristics. A mechanism will also be identified for the planning unit to be able to track progress of inactive landfills located within the planning unit. During the planning period, the Litter Patrol Contractor will

participate in the implementation of an electronic vouchering system for litter pick up conducted on Putnam County roads. The data collected through the electronic vouchering system will be used to improve the program and evaluate spending on this program for potential downsizing or expansion based on the county's needs. Lastly, the planning unit has been working to and will continue to identify additional data sources to quantify and characterize the waste stream. Conversations with Stonybrook University and the planning unit have been underway to utilize this grant funded program through the Waste Data and Analysis Center which would assist in the identification of solid waste and recycling habits of the residents in the planning unit; however, there are challenges as a result of no flow control in the County. The planning unit does not currently have a mechanism in place for the collection and reporting of organic waste types diverted/donated for food recovery efforts. The planning unit will work with designated food scrap generators located in Putnam County such as grocery stores and restaurants to quantify the impact of food recovery programs.

Chapter 4: Regulations within the Planning Unit

Local Disposal and Recycling Law

Putnam County Regulations

Chapter 205 – Solid Waste

Putnam County Code Chapter 205 regulates the collection, transportation, and disposal of solid waste and recyclables. There are three articles, Tire Disposal adopted on 9/6/1988, Recycling adopted on 8/5/1997 and amended in 11/2007, and Solid Waste Management adopted on 7/2/1991 and amended in 6/2011.

ARTICLE I – TIRE DISPOSAL[24]

Article I of Chapter 205 prohibits the discarding of waste tires except at permitted processing or collection sites. Individuals storing 1,000 or more waste tires must obtain a permit in accordance with state regulations. Tires must be collected separately from other solid waste and delivered to authorized facilities.

ARTICLE II – RECYCLING[25]

Recycling regulations stipulate that solid waste must not be mixed with recyclables or green waste; each category must be collected separately or in vehicles designed to keep them distinct. Haulers are required to offer recycling collection services to their customers. Additionally, appliances containing chlorofluorocarbons (CFCs) must be handled carefully to prevent the release of these substances into the atmosphere.

ARTICLE III – SOLID WASTE MANAGEMENT[26]

Putnam County has established comprehensive regulations for solid waste management, tire disposal, and recycling to protect public health and the environment. Under Article III of Chapter 205, the county mandates that all transporters of regulated solid waste obtain an annual permit from the PCDOH. These transporters must submit annual reports detailing the volume and type of waste handled, including recyclables, and display county-issued decals on their vehicles. Violations of these provisions can result in civil penalties up to $500 per offense, with each day of noncompliance constituting a separate violation.

Regulations by Municipality

Within the planning unit, each municipality has its own code specific to garbage/refuse, recycling/source separation, littering, dumping, junkyards, transfer stations and corresponding enforcement penalties/fines at the discretion of each municipalities governing body.

Carmel

The Town of Carmel's Chapter 95 Code on Garbage, Rubbish, and Refuse encompasses three key articles addressing littering, recycling, and waste management[27]. Adopted in 1975, Article I prohibits the abandonment or deposit of litter such as garbage, containers, and appliances left on public or private property without permission, requires businesses to maintain litter-free areas, and forbids dumping in water bodies. Article II, added in 1976, mandates the curbside separation and bundling of recyclable paper products such as newspapers, magazines, and cardboard, with ownership of these materials transferring to

[24] Putnam County, NY Code, 2023, Chapter 205 – Solid Waste, Article 1 – Tire Disposal, https://ecode360.com/6608447
[25] Putnam County, NY Code, 2023, Chapter 205 – Solid Waste, Article II – Recycling, https://ecode360.com/6608513
[26] Putnam County, NY Code, 2023, Chapter 205 – Solid Waste, Article III – Solid Waste Management, https://ecode360.com/6608648
[27] Town of Carmel, NY Code, Chapter 95 – Garbage, Rubbish, and Refuse, https://ecode360.com/5067917#5067952

the town upon collection. Article III establishes comprehensive rules for the storage, collection, and disposal of waste, requiring residents and businesses to use sealed containers, follow strict placement and collection timeframes, and comply with licensing rules for waste haulers. Minimum services such as weekly pickups and bulk disposal are mandated, with oversight by the Town Board. Penalties range from $100 to $1,000 in fines and mandated community service hours for littering offenses, up to $250 or 15 days in jail for recycling violations, and up to $500 per day for storage or licensing violations, with enforcement supported by court injunctions and police oversight.

Kent

Chapter 40 of the Town of Kent Code governs garbage disposal, landfill use, refuse collection, and recycling, with multiple articles aimed at protecting public health and promoting sustainability[28]. Article I, adopted in 1985, designated a specific sanitary landfill on Ressiquie Street as the only legal dumping site, prohibits unauthorized dumping elsewhere, and requires permits for commercial haulers and residents. This site is now considered inactive and is being remediated by the Town at the guidance of the NYSDEC. Covered vehicles and locally generated waste only are allowed, with violations punishable by fines up to $500 or 30 days in jail. Article II sets landfill operating hours by Town Board resolution and authorizes permit fees for commercial users. Currently, there are no open landfills located in the Town of Kent. Article III outlines refuse collection rules for Sanitary District 1 (Lake Carmel), which mandates recycling of paper, plastic, glass, and metal, and establishes strict container and collection guidelines, enforced by police and sanitation departments, with escalating fines up to $250. Article IV allows for a transfer station to replace the landfill as the disposal site if activated. Article V establishes comprehensive garbage and recycling rules, promotes source separation, allows use of a recycling center with user fees, and assigns enforcement to zoning officials and the Recycling Commission, with fines ranging from $10 to $250. Article VIII creates the Kent Recycling Commission to operate and maintain the Recycling Center, set fees, track recycling performance, promote education, and report annually to the Town Board, operating under strict financial oversight. The code integrates enforcement mechanisms, financial structure, and public participation to ensure responsible waste management town wide.

Patterson

The Town of Patterson has three chapters within the charter to address recycling, landfill operations and garbage/refuse storage, collection and transportation.

Recycling – Chapter 128[29]

Chapter 128, known as the “Mandatory Recycling Law of the Town of Patterson, mandates the separation and collection of recyclables in alignment with New York State Environmental Conservation Laws. It requires the use of single-stream recycling in Garbage District 2, where residents must place all recyclables loosely in containers (no larger than 35 gallons) and not in bags. The Town Board may adjust collection methods and recyclable materials through public hearings. Scavenging recyclables left for collection is strictly prohibited unless expressly authorized by the Town. Violations by residents or commercial operators are subject to escalating fines, starting at $25 and increasing up to $300 for repeat offenses. Enforcement is overseen by the Director of Codes Enforcement or their designee, who can issue appearance tickets or summonses.

[28] Town of Kent, NY Code – Chapter 40 – Garbage, Refuse and Landfill, https://ecode360.com/8321968
[29] Town of Patterson, NY Code – Chapter 128 Recycling, https://www.pattersonny.org/PDFs/Codes/Chapter128-Recycling.pdf

Landfill Operations – Chapter 79[30]

Chapter 79 regulates the use of the town's sanitary landfill and prohibits unauthorized dumping. Article I outlines rules for the public landfill, restricting use to town residents or those with contracts and requiring identification stickers. Only waste originating from Patterson is accepted, and all vehicles must be covered to prevent littering. The landfill's operating hours are set by resolution and posted. Violations—including improper dumping or disruptive conduct—can result in exclusion from the landfill and penalties up to $1,000 or 15 days in jail. Article II bans private dumps and the placement of fill material without a permit from the Planning Board. It also forbids importing waste from outside the town. Violators face the same penalties as in Article I, including potential criminal charges.

Refuse Sanitation – Chapter 97[31]

Chapter 97 establishes rules for the proper storage, collection, and transportation of solid waste within the Town of Patterson. It defines terms such as garbage, refuse, rubbish, and hazardous waste, and regulates how waste must be stored requiring watertight, covered containers or strong bags of limited size and weight. Collection is restricted to specific hours (6am-6:30pm, Monday through Saturday), and refuse may not be placed out before 7pm. the night prior. Vehicles used for hauling waste must meet sanitary standards, prevent leakage or odor, and clearly display identifying information. The Town Board may adopt additional regulations as needed. Violations of this chapter are considered offenses under the Penal Law and are punishable by fines up to $1,000 or imprisonment for up to 15 days, or both.

Philipstown

The Town of Philipstown's sanitation laws, found in Chapter 99[32] and Chapter 107[33], regulate garbage disposal, recycling, and junkyard operations to protect health, safety, and the local environment. Article I of Chapter 99 establishes rules for the town dump, restricting its use to residents and limiting the types of waste allowed, while prohibiting dumping near water bodies or on unauthorized land, with penalties of up to $1,000 or 30 days in jail. Article II requires landfill access permits, waste origin verification, and usage fees based on vehicle type, with the possibility of user bans for violations. There are currently no active landfills in the Town of Patterson. Article III mandates that only licensed collectors handle garbage disposal, with strict operational and licensing requirements; violators can face fines of up to $500 per offense, with ongoing violations considered misdemeanors. Article IV, adopted in 2007, introduces mandatory recycling for residents and businesses, requiring separation of recyclables and banning mixed disposal; fines escalate from $100 for a first offense to $500 and/or six months' jail for repeated violations. Chapter 107 governs junkyards and secondhand parts businesses, requiring detailed license applications, public hearings, zoning compliance, and strict operational standards—such as fencing, fire safety, and orderly material storage. Licenses are non-transferable and revocable upon violations. Enforcement includes inspections and potential license forfeiture, with daily fines and legal action authorized for noncompliance. These regulations reflect Philipstown's commitment to preserving the Hudson Highlands' scenic character while promoting public health and environmental responsibility.

[30] Town of Patterson, NY Code – Chapter 79 Dumbs and Dumping, https://www.pattersonny.org/PDFs/Codes/Chapter79-Dumps_and_Dumping.pdf

[31] [31] Town of Patterson, NY Code – Chapter 97 Garbage, https://www.pattersonny.org/PDFs/Codes/Chapter97-Garbage.pdf

[32] Town of Philipstown, NY Code - Chapter 99 Garbage, Rubbish, and Refuse https://ecode360.com/print/PH1134?guid=6317588,6317610,6317618,6317658

[33] Town of Philipstown, NY Code – Chapter 107 Junkyards, https://ecode360.com/6317693#6317693

Village of Cold Spring

The Village of Cold Spring established its Mandatory Recycling Law in 1992 (Chapter 93[34]) to promote public health, environmental protection, and resource conservation by requiring residents and businesses to separate recyclable materials from other solid waste. The law applies to all areas serviced by the Village Highway Department and defines "recyclables" to include newspapers, cardboard, glass, aluminum and tin cans, plastic bottles labeled #1 or #2, tires, and large metal items such as appliances (white goods) and machinery parts. All recyclables must be separated at the source and disposed of only at times, places, and in containers designated by the Village Board. Disposal of mixed recyclables with regular waste is prohibited. The Village Board has full authority to adopt, modify, and enforce additional recycling regulations by resolution. A 2000 amendment stipulates that recycling containers may be placed curbside no earlier than 4pm. the day before collection and must be removed by midnight on collection day. Penalties for noncompliance range from up to $25 for a first offense, up to $50 for a second, and up to $250 for third and subsequent offenses, with violations classified as legal infractions. The law ensures local accountability and supports broader sustainability efforts.

Village of Nelsonville

The Village of Nelsonville enacted its Mandatory Recycling Law in 1992 (Chapter 162, Article I[35]) to promote environmental sustainability and protect public health by establishing a village-wide recycling program. The law applies to all individuals, households, businesses, and organizations within village limits and mandates that recyclables be separated from other solid waste before collection or disposal. Designated recyclable materials include newspapers, cardboard, glass, tin and aluminum cans, plastic bottles labeled #1 PETE or #2 HDPE, tires, appliances 9white goods) and large metal items. The Village Board is empowered to designate when, where, and how recyclables must be disposed of and may update regulations by resolution. Disposal of recyclables mixed with regular waste is prohibited. Violators are subject to escalating penalties: up to $25 for a first offense, $50 for a second, and $250 for third or subsequent violations. The law reinforces Nelsonville's commitment to resource conservation and responsible waste management.

Putnam Valley

The Town of Putnam Valley regulates waste management through several local laws aimed at preserving public health, property values, and the environment. Chapter 97[36], Article I mandates that all garbage and refuse be stored in covered, pest-resistant containers, only placed at the curb on designated collection days, and removed promptly afterward. Dumping waste in or near water bodies is prohibited. Article II requires all private waste haulers to be licensed by the Town Board, provide insurance and route details, use town-approved disposal sites, and maintain sanitary vehicles. Unlicensed collection or violations may result in revocation, fines, or imprisonment. Article III enforces mandatory recycling for residents and businesses, with specific materials designated by the Town Board and collected by authorized carters only. Mixing recyclables with trash or unauthorized collection is strictly prohibited. Chapter 79[37] addresses illegal dumping, littering, and abandonment of vehicles, broadly defining litter and banning disposal on public or private property, streets, parks, or water bodies. Only approved and licensed dump sites are permitted, and waste haulers must secure their loads. Penalties for violations range from $10 to $1,500, including potential

[34] Village of Cold Spring, NY Code – Chapter 93 Recycling, https://www.coldspringny.gov/sites/g/files/vyhlif416/f/uploads/0093-current_version.pdf

[35] Village of Nelsonville, NY Code – Chapter 162 Solid Waste, https://www.nelsonvilleny.gov/_files/ugd/b667a0_23b667adee6e450abcd9e8f7f85e6d67.pdf?index=true

[36] Town of Putnam Valley, NY Code – Chapter 97 Solid Waste, https://ecode360.com/9473693

[37] Town of Putnam Valley, NY Code – Chapter 79 Littering and Dumping, https://ecode360.com/9473526

jail time up to 15 days, with escalating fines for repeat offenses and daily violations considered separate offenses. The town may also recover cleanup costs and pursue court injunctions. Enforcement is carried out by Code Enforcement Officers, the Town Board, and law enforcement agencies.

Southeast

The Town of Southeast enforces waste management and property cleanliness through Chapters 91[38], 117[39], and 87[40] of its municipal code. Chapter 91, adopted in 1987, targets littering and illegal dumping by broadly defining litter to include refuse, abandoned household goods, and construction debris. It prohibits dumping on any public or private land without permission and requires businesses to maintain clean premises and remove posted event signage within ten days. Items left unattended for over 48 hours may be considered abandoned unless they fall under specific exemptions. Violators face fines up to $1,000 and/or 15 days in jail per offense. Chapter 117 governs solid waste collection and mandates licensing for all haulers. Licensees must submit detailed route and vehicle information, maintain $300,000 in liability insurance, and affix permits to each vehicle. Licenses expire annually and can be revoked following a public hearing for violations such as improper disposal or expired insurance. Vehicles must be kept clean and nuisance-free. Noncompliance may result in civil and criminal penalties up to $250 per day, with each day and each officer considered separately liable. Chapter 87 regulates junkyards and similar businesses, requiring detailed license applications, site maps, fencing, fire safety protocols, and compliance with visual and environmental standards. Licenses are non-transferable and renewable annually, subject to inspection. Open storage must be screened to preserve the town's aesthetics. Existing operations had to register within 30 days of the law's passage. Violators may be fined up to $250 or jailed for up to 15 days. Collectively, these codes aim to protect public health, safety, and the town's environmental and visual integrity.

Brewster

The Village of Brewster manages residential waste through Chapter 205[41], which includes two key articles regulating solid waste collection and financing. Article I, adopted in 1991 and amended in 2002, establishes the framework for garbage collection and disposal in a village without municipal facilities. It defines key terms, appoints a Commissioner of Sanitation, and designates the Village or approved contractors to collect waste from residences. The law details how waste must be stored, what materials are prohibited (e.g., hazardous waste, construction debris), and outlines the frequency of collection. It also authorizes the Board of Trustees to impose sanitation charges, create additional rules, and assign enforcement responsibilities to local officials. Article II creates a Residential Refuse and Garbage District to fund waste services via a unit charge levied on each residential dwelling. The article outlines billing, late penalties, proration for new units, and legal provisions allowing charges to be adjusted by Board resolution and collected as liens if unpaid. Penalties for violations under either article are tiered: up to $250 for a first offense, $350 and up to 15 days in jail for a second offense within three years, and up to $500 and 15 days in jail for third or subsequent violations. Each day a violation continues is treated as a separate offense. Additionally, unpaid fees that are more than 30 days overdue may accrue interest and penalties and become a lien on the property. The code grants the Village legal authority to pursue further remedies as needed.

[38] Town of Southeast, NY Code – Chapter 91 Littering, https://ecode360.com/9064738
[39] Town of Southeast, NY Code – Chapter 117 Solid Waste Collection, https://ecode360.com/9065690
[40] Town of Southeast, NY Code – Chapter 87 Junkyards, https://ecode360.com/9064737
[41] Village of Brewster, NY Code – Chapter 205 Solid Waste, https://ecode360.com/9064737

Zoning Laws

While the County itself has no zoning restrictions, Philipstown is the only town that specifically identifies zoning laws respective to solid waste facilities.

Philipstown

Sections § 175-50[42] and § 175-51[43] of the Philipstown Zoning Law regulate solid waste facilities, industrial activities, soil processing, junkyards, and outdoor storage. Under § 175-50, solid waste management facilities are strictly prohibited in the Town of Philipstown, with the sole exception of those owned and operated by the Town itself. The processing of soil, including activities such as rock crushing, is also broadly restricted. It is not allowed in the OC District, on lots smaller than five acres within the Industrial/Manufacturing (M) and Soil Mining Overlay (SMO) Districts, or in any zoning district located south of the intersection of East Mountain Road South and Route 9. Additionally, soil processing is prohibited in all other land use and overlay districts. All industrial uses and any municipal solid waste facilities must comply with a set of stringent operational standards. These include the requirement that all operations, including loading and unloading, take place within fully enclosed buildings with impervious floors. Any leachate must be collected and properly removed off-site. Hazardous materials or materials regulated under 6 NYCRR Part 360 cannot be stored outdoors in a way that risks contamination of air, soil, or water. Disposal into any environmental medium must comply with permits issued by relevant agencies. Facilities must also inspect all incoming materials to ensure compliance with their permitted operations and to prevent acceptance of unsuitable or dangerous materials. Moreover, these operations must adhere to the zoning law's environmental performance standards and aquifer protection provisions. To ensure compliance, applicants may be required to provide a performance guarantee, such as a bond or letter of credit, sufficient to cover the potential cost of remediation in the event of a violation. They may also be required to contribute annually to an environmental inspection fund to support oversight by qualified experts.

New Local Laws or Upcoming Amendments

PCDOH will work closely with the Putnam County Law Department and Legislature to revise the Putnam County Solid Waste Code based on the needs assessments conducted during the implementation of activities and tasks outlined in the implementation schedule. Some efforts that may be included for discussion of adding, removing, or amending the county code are to identify local environmental justice requirements, identify local stewardship requirements and opportunities, EPR for hard to recycle items, green procurement requirements, and other sustainability initiatives.

[42] Town of Philipstown, NY Code – Chapter 175, Zoning Laws, Section 50, Solid Waste facilities, industrial uses and soil processing, https://ecode360.com/6319050#6319176

[43] Town of Philipstown, NY Code – Chapter 175, Zoning Laws, Section 51, Junkyards and outdoor storage, https://ecode360.com/6319604#6319589

Chapter 5: Alternatives Evaluation and Selection

Overview

As part of the 2025–2034 Solid Waste Management Planning process, Putnam County evaluated a comprehensive set of program categories designed to strengthen waste reduction, diversion, and recovery efforts while maintaining environmental and fiscal responsibility. The County reviewed 11 of 15 program categories in alignment with NYSDEC guidance:

1. Waste reduction programs;
2. Reuse programs;
3. Recyclables recovery programs for paper, metal, glass, plastic, and textiles;
4. Organics recovery programs for food scraps and yard trimmings;
5. Programs to develop or improve local and regional markets for recyclables;
6. Enforcement programs;
7. ~~Incentive-based pricing;~~
8. Education and outreach;
9. Data collection and evaluation efforts;
10. Local hauler licensing programs, including an assessment of laws preventing commingling of recyclables with waste;
11. ~~Flow control and districting potential;~~
12. C&D debris reduction, including deconstruction, reuse and recovery programs;
13. ~~Private sector management and coordination opportunities;~~
14. ~~Management of waste through thermal treatment technologies; and~~
15. Waste disposal options

Each program was analyzed based on its potential impact on the municipal solid waste stream, administrative feasibility, infrastructure requirements, cost implications, and compatibility with existing county programs. While not all categories were selected for implementation during this planning period, each was considered for potential inclusion based on administrative and technical viability, cost-effectiveness, and regional alignment. Selected alternatives represent those with the greatest potential to reduce waste generation, increase diversion, and promote sustainability, given the county's available resources and infrastructure capacity. Programs not selected remain under review for future integration should funding, partnerships, or capacity allow. The county's evaluation builds upon the successes and lessons learned from the 2010–2020 LSWMP and incorporates both previously implemented measures and innovative strategies identified through stakeholder feedback, regional collaboration, and evolving state policy priorities. The categories where an evaluation did not take place because they do not exist, there is no infrastructure, or resources available for the following categories: management of waste through thermal treatment technologies, flow control and districting potential; incentive-based pricing; and private sector management and coordination opportunities.

Alternatives Assessment, Evaluation, and Selection

Jurisdictional Impacts

Putnam County recognizes that waste management systems operate within a regional context and that collaboration with neighboring jurisdictions is essential for efficiency, cost savings, and consistency in public messaging. Neighboring counties including Westchester, Dutchess, Rockland, and Orange have

expressed general support for enhanced waste reduction, reuse, recycling, and organics diversion initiatives in meetings hosted by the Hudson Valley Regional Council. Many of these jurisdictions have already implemented complementary programs such as regional recycling campaigns, food scrap drop-off initiatives, repair and reuse events, and market development projects. This regional alignment creates opportunities for shared educational templates, joint procurement of outreach materials, coordinated messaging, and consistent recycling signage across the Hudson Valley. During the planning period, Putnam County will strengthen communication with these neighboring jurisdictions and will actively seek formal feedback and comments on proposed programs. The Solid Waste Program Manager will maintain regular communication with counterparts in adjacent counties to ensure coordination in data reporting, public outreach, and policy development. Future efforts will include coordinated stakeholder meetings to discuss and evaluate programs that address regional data collection standards, joint market development opportunities, shared processing and composting infrastructure, and potential collaborative grant applications to support program implementation. Through these collaborative efforts, Putnam County will contribute to a more cohesive, efficient, and equitable regional solid waste management system that promotes shared responsibility, environmental stewardship, and long-term sustainability throughout the Hudson Valley for all of the alternatives evaluated in this chapter.

Identification of New or Modified Local Laws, Ordinances, and Regulations Required to Implement Selected Alternatives

To fully implement the selected alternatives identified in Chapter 5 of the Putnam County Local Solid Waste Management Plan (LSWMP), the County may require the adoption of new local laws, amendments to existing ordinances, revisions to the Putnam County Sanitary Code and Solid Waste Code, intermunicipal agreements, or administrative regulations. The following section identifies the legal and regulatory mechanisms associated with each selected alternative and provides a framework for future implementation. Final language, enforcement authority, and implementation schedules will be developed in coordination with the Putnam County Department of Health (PCDOH), County Attorney, municipal governments, and relevant stakeholders as necessary.

These proposed legal and regulatory actions are intended to:

- Ensure consistency with New York State Department of Environmental Conservation (NYSDEC) requirements.
- Support enforceable waste reduction and diversion goals.
- Establish clear operational standards for generators, haulers, and facilities.
- Promote regional consistency and environmental justice principles; and.
- Provide the County with sufficient authority to administer, monitor, and enforce program requirements.

5.1 Waste Reduction Programs

Zero Waste Challenge Program

The County will expand its Zero Waste Challenge Program, first piloted under the previous LSWMP, into a countywide initiative designed to reduce overall waste generation and promote sustainable consumption habits. The Zero Waste Challenge will encourage residents, businesses, and institutions to measure their

waste output, identify opportunities for reduction, and implement tangible changes such as improved purchasing practices, reuse of durable materials, and food waste prevention. Participants will receive digital and printed toolkits including waste tracking templates, reduction tips, and access to community workshops. The County will partner with local schools, community groups, and small businesses to integrate the challenge into educational curricula and workplace sustainability efforts. Participants achieving significant reductions will be recognized through annual awards, helping to generate momentum and visibility for the program.

ADMINSTRATIVE AND TECHNICAL IMPACTS OF A ZERO-WASTE CHALLENGE PROGRAM

Qualitative and Quantitative Impacts

Implementation of the expanded Zero Waste Challenge Program is projected to reduce the overall municipal solid waste stream by an estimated 5–8% within the first five years, primarily through reductions in food waste, single-use packaging, and non-recyclable materials. Qualitatively, the program is expected to increase public awareness of waste prevention practices, strengthen community engagement around sustainability, and foster behavioral changes that support long-term waste reduction goals. Businesses and institutions participating in the program are anticipated to see improved material efficiency and lower disposal costs over time.

Facility and Program Requirements

The Zero Waste Challenge does not require new physical waste management facilities; rather, it relies on administrative coordination, outreach infrastructure, and educational resources which will be done by the PCDOH and in collaboration with interested stakeholders. The County will maintain a centralized online platform for participant registration, data tracking, and resource distribution.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The program supports natural resource conservation by reducing the demand for virgin materials through reuse and reduction efforts. Currently, energy savings in terms of employment, the program could create local job opportunities in education, outreach, waste auditing, and data management. The recognition and partnership components of the program also strengthen the local green economy by supporting small businesses engaged in repair, reuse, and sustainable product development.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following measures may provide administrative authority for County-led waste prevention initiatives while establishing consistent standards for participant engagement, data collection, and public recognition:

- Establish County authority to administer voluntary waste reduction initiatives.
- Authorize PCDOH to develop waste reduction targets, recognition programs, and reporting systems.
- Amend County procurement policies to prioritize reusable, recyclable, and low-waste products and require County departments and participating institutions to reduce single-use products where feasible.
- Establish administrative rules for voluntary participant reporting, waste tracking methodologies, and confidentiality protections for participating businesses and institutions.

- Develop Memoranda of Understanding (MOUs) with schools, municipalities, and businesses participating in County-led zero waste initiatives.

5.2 Reuse Programs

Countywide Reuse Directory

A countywide reuse directory will also be developed to connect residents with donation centers, thrift stores, repair professionals, disposal facilities, and material exchange networks. Complementing the Zero Waste Challenge, the County will continue to promote Reuse Programs in collaboration with Sustainable Putnam, which operates repair cafés throughout the region. The County will assist in expanding awareness and geographic coverage of these events and will explore opportunities to recruit additional volunteers to sustain the effort.

ADMINISTRATIVE AND TECHNICAL IMPACTS OF A COUNTYWIDE REUSE DIRECTORY

Quantitative and Qualitative Impacts

The countywide Reuse Directory is projected to divert an estimated 3–5% of the municipal solid waste stream from disposal over the planning period by extending product lifespans and reducing demand for new goods. Key material categories affected include textiles, furniture, small appliances, electronics, and building materials. Qualitatively, the program strengthens community participation in the circular economy, fosters a culture of repair and reuse, and enhances environmental awareness. Increased access to reuse resources is also expected to reduce illegal dumping and improve waste diversion metrics reported under the County's LSWMP.

Facility and Program Requirements

The Reuse Directory will function primarily as a digital platform hosted on the Putnam Recycles website, supplemented by printed materials for distribution through libraries, municipal offices, and community centers. No new waste management facilities are required. The program will require a modest expansion of administrative capacity to maintain listings, verify participant information, and coordinate outreach with partner organizations such as Sustainable Putnam. Collaboration with existing repair cafés and donation centers will be leveraged to ensure consistent coverage across all major population areas in the County.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

From a life-cycle perspective, reuse extends product utility and significantly reduces environmental impacts associated with manufacturing, transport, and end-of-life disposal. Compared to recycling, reuse achieves higher energy savings (up to 80%) and lower emissions due to avoided production of new goods. The program will contribute directly to natural resource conservation by reducing consumption of raw materials and diverting reusable goods from the waste stream. Energy savings are realized through reduced manufacturing demand and minimized transportation associated with new product distribution.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following measures may provide clarity in operational authority, and ensure public safety and accessibility should they be deemed necessary:

- Establish a voluntary registration program for reuse organizations, repair businesses, thrift stores, and donation centers listed in the County directory.
- Establish minimum operational and reporting standards for participating entities
- Strengthen provisions addressing illegal dumping and littering..

- Require County public-facing reuse resources to comply with accessibility and multilingual communication standards.

Expanded Repair Café Network

The County, in partnership with Sustainable Putnam and other community organizations, will expand the existing network of repair cafés to increase public access to free or low-cost repair opportunities for common household items. Repair cafés provide spaces where residents can bring broken or damaged goods—such as small appliances, bicycles, clothing, furniture, and electronics to be repaired by skilled volunteers. These events foster skill-sharing, community engagement, and waste reduction by extending the usable life of materials that might otherwise be discarded. To implement the expansion, the PCDOH will conduct a needs assessment to identify underserved areas, potential host sites (e.g., libraries, schools, community centers, or faith-based facilities), and volunteer groups capable of supporting these activities. The County will also work to establish partnerships with vocational schools, civic organizations, and local businesses to enhance visibility and ensure sustainability of the program.

ADMINITRATIVE AND TECHNICAL IMPACTS

Quantitative and Qualitative Impacts

The expanded repair café network is anticipated to divert a measurable portion of reusable materials from the solid waste stream by preventing the disposal of repairable items. Quantitatively, it will reduce waste associated with small electronics, textiles, and furniture—categories that make up a significant portion of the municipal solid waste composition. Qualitatively, the program promotes a “repair culture” by reintroducing traditional skills, empowering residents to fix rather than discard, and fostering intergenerational learning and collaboration. It will also strengthen social connections within communities and raise awareness of the environmental and economic benefits of waste prevention.

Facility and Program Requirements

The repair cafés will primarily utilize existing community facilities such as libraries, schools, senior centers, and town halls offered free of charge or at minimal cost. The PCDOH will assist in identifying and securing appropriate venues that are accessible, safe, and equipped with adequate space, lighting, and electrical capacity. Volunteers will serve as the primary staff for these events, supported by partner organizations to coordinate scheduling, outreach, and materials. The County will develop standardized event toolkits, including safety guidelines, repair checklists, and promotional materials to maintain program consistency.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

Program implementation will focus on leveraging partnerships and volunteer labor to minimize financial impacts. Material needs such as tools, signage, and basic supplies will be met through donations, sponsorships, or in-kind contributions. While direct costs are limited, the environmental and life-cycle benefits are substantial. Repairing items rather than replacing them reduces the demand for new manufacturing, minimizes transportation-related emissions, and decreases landfill dependency. The cumulative life-cycle impact demonstrates a significant reduction in resource extraction and energy consumption compared to production of new goods.

By extending product life and reducing waste generation, the expanded repair café network directly supports natural resource conservation and energy efficiency. Each repaired item represents a tangible reduction in material and energy inputs required for new production. The program also provides indirect employment and skill-building opportunities by engaging volunteers, tradespeople, and students interested in repair-related fields. Over time, the initiative may stimulate growth in local repair-based businesses and

encourage entrepreneurship in circular economy sectors. Furthermore, by increasing public access to repair opportunities, the County enhances community resilience and promotes a sustainable, low-waste lifestyle among residents.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

These provisions will clarify operational authority, reduce administrative barriers to repair events, and ensure public safety and accessibility.

- Formally recognize repair and reuse activities as waste prevention measures within County sustainability programs.
- Establish standardized liability waivers, safety procedures, and volunteer protections for repair café participants and host organizations and ensure simplicity in permitting requirements for reoccurring nonprofit repair and reuse events held at schools, libraries, and community centers.

5.3 Recyclable Recovery Programs for Paper, Metal, Glass, Plastic, and Textiles

Recycling Enhancement Programs

To strengthen recycling system performance, the County will implement a series of enhancements designed to improve participation, reduce contamination, and increase recovery rates. Key components include:

- STANDARDIZED RECYCLING BIN SIGNAGE: Consistent color-coded bin labeling and graphics to help residents correctly separate recyclables, reducing confusion and contamination.
- EXPANDED TEXTILE COLLECTION: Establishment of additional collection points for clothing and household textiles, supported through partnerships with nonprofit and commercial collectors.
- CONTAMINATION REDUCTION EDUCATION: Targeted outreach campaigns at transfer stations, schools, and events to reinforce proper sorting behavior.

Together, these efforts will strengthen the County's existing recycling infrastructure, improve efficiency in material recovery, and increase public confidence in local recycling programs.

ADMINISTRATIVE AND TECHNICAL IMPACTS

Quantitative and Qualitative Impacts

Quantitatively, the Recycling Enhancement Programs are expected to result in higher recovery rates for key recyclable materials such as paper, plastics, metals, and textiles, while reducing contamination rates that currently limit processing efficiency. The expansion of textile collection alone is projected to divert a meaningful portion of the waste stream otherwise destined for disposal.

Qualitatively, the standardization of signage and expanded education efforts will promote behavioral consistency across the County's jurisdictions, reducing resident confusion and fostering long-term recycling participation. The program will also enhance data reliability for material recovery facilities (MRFs) and support more accurate measurement of diversion performance under the County's solid waste management plan.

Facility and Program Requirements

The Recycling Enhancement Programs will utilize the existing network of transfer stations, MRFs, and collection routes, with modest adjustments for signage installation, public education, and textile collection infrastructure. New textile bins and signage will be installed at designated municipal and community locations, selected based on accessibility and participation potential. The County will collaborate with municipal partners, schools, and nonprofit organizations to deploy standardized signage and host outreach events. County staff will oversee program coordination, contractor management, and data collection to ensure consistent implementation and reporting. The initiative does not require the construction of new recycling facilities but enhances operational efficiency within the current system.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The Recycling Enhancement Programs are designed to achieve high environmental returns with modest financial investment through strategic system improvements and community partnerships. By standardizing recycling signage and expanding textile recovery, the County will improve material quality and reduce contamination—resulting in lower disposal costs and higher revenues from recyclable commodities. From a life-cycle perspective, these enhancements significantly reduce environmental impacts by conserving raw

materials, minimizing energy use, and extending the useful life of products. Textile recovery in particular offers substantial benefits, as it offsets the production of new fibers that require intensive energy, water, and chemical inputs. Reducing contamination also decreases the volume of recyclables that are rejected and landfilled, further conserving landfill space and associated greenhouse gas emissions. The programs directly support natural resource conservation and energy efficiency, reducing dependence on virgin material extraction and manufacturing. Moreover, they create local employment and volunteer opportunities in areas such as outreach, materials collection, data management, and education. Strengthened partnerships with recycling contractors, nonprofits, and community organizations will foster workforce engagement within the circular economy, promoting sustainable development while advancing the County's waste reduction goals.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following measures can improve recycling consistency, reduce contamination, regulate textile collection activities, and strengthen material recovery performance for the planning unit if deemed necessary:

- Require standardized recycling signage, labeling, and educational graphics at transfer stations, recycling centers, public buildings, schools, parks, and municipal facilities
- Establish consistent accepted-material lists across participating municipalities
- Authorize placement and regulation of textile collection bins
- Establish maintenance, reporting, and anti-dumping standards for textile collection operators
- Amend the Putnam County Solid Waste Code to strengthen requirements for separation of designated recyclable materials
- Establish administrative procedures for contamination warnings, corrective actions, and repeat violation penalties

5.4 Organic Recovery Programs for Food Scraps and Yard Trimmings

Feasibility Assessment of an Organics Management Facility

Organics represent one of the largest and most impactful diversion opportunities within the County's waste stream, comprising an estimated 25–30% of total municipal solid waste. To address this, the County will continue supporting the town-run food scrap drop-off programs and expand promotion of backyard composting through public workshops, starter bin distribution, and educational outreach.

In addition, the County will conduct a feasibility assessment to evaluate the potential development of a local Organics Management Facility (OMF) to process food scraps, yard trimmings, and other compostable materials. This assessment will examine various technology options such as aerated static pile composting, windrow composting, and anaerobic digestion to determine the most suitable approach based on available feedstock quantities, site characteristics, and regional market conditions for finished compost or biogas. The study will also identify potential public- and private-sector partners, evaluate siting constraints, and develop a phased implementation strategy that complements existing drop-off and education programs. The planning unit will consider the State's planned expansion Food Scraps Recycling Law in 2027 and 2029 to account for any potential increases in food scraps that could be recycled at the county-run compost facility.

ADMINISTRATIVE AND TEHCNICAL IMPACTS

Quantitative and Qualitative Impacts

Quantitatively, implementation of an organics management facility could divert up to 25–30% of the County's solid waste stream from disposal, representing a significant increase in the County's overall diversion rate. The facility would process both residential and commercial food scraps, yard trimmings, and other compostable organics, reducing the volume of waste sent to regional transfer stations and out-of-county landfills.

Qualitatively, the initiative would enhance local sustainability by establishing a closed-loop system for managing organic waste. It would provide a visible community benefit through the production of finished compost for agricultural and landscaping uses, improve public awareness of sustainable waste practices, and reduce odor and litter issues often associated with unmanaged food waste.

Facility and Program Requirements

The feasibility assessment will determine the appropriate facility type, capacity, and location for an organic processing operation within the County. Key considerations include:

- Availability of suitable land with compatible zoning and access to transportation routes.
- Proximity to major waste generation sources such as schools, restaurants, and food distributors.
- Evaluation of site-scale technologies, including composting and anaerobic digestion.
- Potential integration with existing waste transfer or recycling infrastructure.

The County will also continue to enhance **supporting programs** including food scrap drop-off sites and backyard composting—to complement future centralized processing efforts. Community education will remain a vital component to ensure proper separation of organics at the source and maintain material quality.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The feasibility assessment will include a high-level economic evaluation of alternative technologies and facility configurations to determine their relative costs and benefits. While capital investment requirements for organics management facilities can vary significantly depending on scale and technology, the long-term life-cycle advantages are well established. The planning unit will be applying for the NYSDEC Municipal Food Scraps Recycling Initiatives grant which can be used to increase residential food scrap recycling through the creation of a food scrap recycling program and facilities. Diverting organics from landfills reduces greenhouse gas emissions, particularly methane and minimizes hauling distances and disposal costs. From a life cycle and environmental perspective, organics processing supports substantial natural resource conservation and energy recovery. Composting produces a nutrient-rich soil amendment that enhances soil health, reduces dependence on chemical fertilizers, and improves water retention. Anaerobic digestion, if selected, could generate renewable energy in the form of biogas, contributing to local energy resilience and offsetting fossil fuel use. The development and operation of an organics management facility would also create local employment opportunities in facility operations, collection logistics, compost distribution, and educational outreach. These activities strengthen the regional green economy by building workforce capacity in sustainable materials management. Overall, the initiative represents a strategic step toward achieving the County's long-term waste diversion and sustainability goals while positioning it as a regional collaborator in organics recovery and circular resource management.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following measures could provide a legal authority for organics collection, processing, facility siting, and contamination control while ensuring consistency with state regulations if deemed necessary:

- Establish zoning compatibility criteria, buffering standards, odor management requirements, traffic controls, and environmental performance standards for composting or anaerobic digestion facilities
- Modify municipal or county contracts to authorize separate collections of organics.
- Require generators participating in county organics programs to separate designated organic materials from municipal solid waste.
- Require large food waste generators, where feasible and legally authorized, to divert food scraps to approved recovery programs consistent with NYSDEC and county and/or municipal organics policies.
- Establish public health and nuisance prevention standards for residential composting systems including backyard composting, food scrap drop-off locations, composting facilities, etc.
- Authorize shared use agreements for regional composting infrastructure and transfer operations.

Pilot Curbside Organics Collection

Future phases may include pilot curbside organics collection in select municipalities to evaluate operational feasibility and community interest. These efforts are expected to significantly reduce methane emissions, improve soil health, and advance the County's Climate Smart Communities goals. Data from pilot programs will be used to refine future expansion strategies and estimate cost-benefit outcomes.

ADMINSTRATIVE AND TECHNICAL IMPACTS

Qualitative and quantitative impacts

Quantitatively, curbside collection of organics has the potential to divert a substantial portion of the waste stream potentially up to 20–25% of residential solid waste depending on participation rates and seasonal generation patterns. The pilot will generate detailed data on material quantities, participation levels, and contamination rates, which will inform long-term expansion planning.

Qualitatively, the program will significantly advance climate action goals by reducing methane emissions associated with the landfilling of organic materials. It will also improve community understanding of proper waste separation practices and strengthen public support for organics diversion. The initiative contributes to the County's Climate Smart Communities designation by promoting emissions reduction, soil health enhancement, and local sustainability leadership.

Facility and Program Requirements

The pilot will be implemented within select municipalities that demonstrate strong community engagement and logistical readiness. Existing waste haulers will be evaluated for participation, and potential integration with the County's current recycling or transfer operations will be explored to optimize collection routes and minimize costs. Collected organics will be transported to an approved regional composting or anaerobic digestion facility for processing. The County will coordinate with facility operators to ensure capacity and compliance with state and local permitting requirements. Administrative activities will include pilot planning, resident recruitment, public outreach, data tracking, and evaluation of operational performance. Containers, signage, and educational materials will be provided to ensure consistent messaging and reduce contamination. Results from the pilot will inform best practices for future scaling and guide decisions regarding regional facility siting or partnerships.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The pilot curbside organics collection program represents a strategic, data-driven investment in the County's sustainable materials management system. While program costs will depend on participation rates and operational logistics, the pilot is expected to identify opportunities for cost efficiency and long-term savings through waste reduction and landfill diversion. From a life-cycle perspective, curbside collection of organics significantly reduces greenhouse gas emissions, particularly methane, by diverting decomposable materials from landfills. Processed organics generate valuable compost that enhances soil health, increases carbon sequestration, and improves water retention in local landscapes—thereby reducing reliance on synthetic fertilizers and irrigation. The program advances natural resource conservation by returning nutrients to the soil and closing the loop on organic material use. It also supports energy recovery opportunities through potential anaerobic digestion applications that produce renewable biogas. In addition to environmental benefits, the pilot will create local employment and volunteer engagement opportunities in collection, outreach, and program administration. It will stimulate growth in the regional organics recycling sector and provide hands-on experience that supports the future expansion of a full-scale, countywide curbside program. Overall, the pilot will serve as a critical step toward achieving the County's long-term zero waste and climate resiliency goals, while providing measurable data to guide future organics management policy and infrastructure investments.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following could provide a legal authority for any municipality seeking to participate in an organics pilot program:

- Establish collection standards, container specifications, contamination thresholds, and participation requirements for organics pilot programs.
- Establish penalties or corrective procedures for contamination of organics collection streams.

5.5 Programs to Develop or Improve Local and Regional Markets for Recyclables

A strong regional market for recyclables and recovered materials is essential for maintaining program stability and economic viability.

Map Regional Material Flows

Putnam County will work with local businesses, manufacturers, and neighboring counties to map regional material flows and identify opportunities to expand markets for recycled-content products. Collaboration with private entities such as Call2Recycle (for batteries), Trex (for plastic film), and major retailers offering collection programs will enhance recovery of hard-to-recycle materials and provide convenient outlets for residents.

ADMINSTRATIVE AND TECHNICAL IMPACTS

Qualitative and quantitative impacts

Quantitatively, the mapping project will produce a comprehensive inventory of material flows within and across county boundaries, including data on tonnages collected, processed, and marketed by material type. This information will allow the County to estimate diversion potential for targeted materials such as plastics, metals, paper, glass, and specialty recyclables like batteries and film plastics.

Qualitatively, the initiative will improve data transparency and decision-making in solid waste management planning. It will help identify material categories with untapped recovery potential, assess regional recycling infrastructure gaps, and guide policies that strengthen local markets for recycled-content goods. Collaboration with private partners will also raise public awareness of available recycling programs and promote regional consistency in collection and marketing practices.

Facility and Program Requirements

The County will coordinate with regional stakeholders including municipal recycling coordinators, transfer station operators, private haulers, and manufacturers to collect and analyze material flow data. Geographic Information Systems (GIS) and supply chain mapping software may be used to visualize flows between generators, collection facilities, processors, and end users. No new physical infrastructure will be required to complete this assessment. However, the project will rely on strong inter-agency collaboration, data-sharing agreements, and outreach to private sector partners to ensure accuracy and completeness. The County will also integrate findings into its waste characterization updates and future solid waste infrastructure planning.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The mapping of regional material flows represents a low-cost, high-value planning initiative with substantial environmental and economic benefits. By identifying inefficiencies and potential synergies across the regional recycling and manufacturing network, the County can improve resource use and reduce transportation-related emissions associated with long-distance material hauling. From a life-cycle perspective, strengthening local and regional markets for recycled-content materials reduces reliance on virgin material extraction and manufacturing, leading to lower energy consumption and greenhouse gas emissions. Enhanced recovery of difficult-to-recycle materials such as batteries, plastic film, and composite materials prevents hazardous or persistent waste from entering disposal streams and supports responsible end-of-life management. The initiative contributes to natural resource conservation by promoting reuse of materials within regional production cycles. It also has the potential to stimulate local economic development by attracting recycling processors, remanufacturers, and product designers interested in sustainable material sourcing. As regional market capacity expands, new green jobs may be created in

areas such as materials recovery, logistics, data analysis, and recycled product manufacturing. Ultimately, this program will provide the County with a data-driven foundation for future waste reduction, recycling, and circular economy strategies—ensuring that policy decisions are aligned with both environmental objectives and regional economic opportunities.

Recycled-Content Procurement Policies

The County will also encourage public agencies and local governments to adopt recycled-content procurement policies, ensuring steady demand for recycled materials and supporting regional circular economy goals.

ADMINSTRATIVE AND TECHNICAL IMPACTS

Qualitative and quantitative impacts

Quantitatively, implementation of recycled-content procurement policies will increase the volume of recycled materials reintroduced into the local economy, helping to stabilize recycling markets and improve the overall cost-effectiveness of recycling programs. By driving demand for recycled commodities such as paper, plastics, and glass, these policies will indirectly support higher recovery rates and reduce the need for virgin materials.

Qualitatively, the initiative will elevate the leadership role of local government in demonstrating sustainable purchasing practices, setting an example for private sector adoption, and building public trust in the recycling system. It also reinforces regional collaboration and consistency in sustainability goals, helping municipalities align with state mandates and Climate Smart Communities certification criteria.

Facility and Program Requirements

Implementation of recycled-content procurement policies requires administrative coordination rather than new physical facilities. The County will work with procurement officers, sustainability coordinators, and department heads to identify suitable products and establish performance standards for recycled content. Training workshops and informational materials will be developed to assist agencies in evaluating vendor compliance and integrating environmental criteria into procurement decisions. The County will also maintain a centralized resource library of approved vendors, case studies, and model policies to facilitate adoption by smaller municipalities and public entities. Coordination with state programs such as the New York State Executive Order 4 (Establishing a State Green Procurement and Agency Sustainability Program) will ensure consistency with broader policy frameworks and leverage existing contract mechanisms to expand access to sustainable products.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The adoption of recycled-content procurement policies provides a cost-effective mechanism to strengthen recycling markets while delivering measurable environmental and economic benefits. Although some recycled-content products may have higher unit costs, life-cycle analyses consistently demonstrate that they offer long-term savings through reduced resource extraction, energy use, and waste generation. From a life-cycle perspective, prioritizing recycled materials conserves natural resources, reduces greenhouse gas emissions associated with raw material production, and supports the development of cleaner, more resilient supply chains. Increased demand for recycled goods helps stabilize material markets and encourages innovation in product design and material recovery technologies. The program supports natural resource conservation by reducing the consumption of virgin raw materials and decreasing the environmental footprint of public sector operations. It also promotes energy efficiency, as manufacturing with recycled materials typically requires significantly less energy than processing raw inputs.

Economically, expanded procurement of recycled-content products can stimulate regional job growth in recycling, remanufacturing, and sustainable product distribution. By linking material recovery with public purchasing power, the County helps ensure that recycling efforts contribute to local economic development and environmental stewardship, creating a self-sustaining loop within the regional circular economy.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

Any of the following measures may strengthen the local demand for recyclable materials, and improve regional market stability:

- Require county agencies to preferentially purchase products that contain post-consumer recycled content when possible.
- Evaluate the green-procurement administrative policy in accordance with New York State Executive Order No. 4 and develop model language for municipalities seeking to adopt recycled-content purchasing requirements.

5.6 Enforcement Programs

Enforcement Protocols

To maintain the integrity of the County's recycling and waste management programs, Putnam County will implement enforcement protocols designed to ensure that both haulers and generators comply with applicable recycling and disposal regulations. The program will establish an integrated system of monitoring, reporting, and accountability that standardizes operations across all waste service providers and promotes adherence to established performance requirements.
Key components include:

- Compliance Monitoring: Regular inspections and reporting requirements for licensed haulers to verify proper collection, recycling, and disposal practices.
- Generator Education and Oversight: Guidance and follow-up for residential, commercial, and institutional generators to ensure proper waste separation and adherence to diversion mandates.
- Standardized Enforcement Actions: Uniform procedures for addressing noncompliance, including warnings, fines, or other administrative remedies, applied consistently across the County.

The enforcement protocols will complement other waste diversion initiatives—such as recycling enhancements, reuse programs, and organics management—by ensuring that collected materials are properly managed and contamination is minimized.

ADMINSTRATIVE AND TECHNICAL IMPACTS

QUALITATIVE AND QUANTITATIVE IMPACTS

Quantitatively, effective enforcement is expected to reduce contamination rates in the recycling stream, improving material recovery efficiency and ensuring that a higher proportion of collected recyclables can be successfully marketed. The program will also improve overall compliance rates among generators and haulers, resulting in more consistent participation across residential, commercial, and institutional sectors.

Qualitatively, enforcement protocols enhance transparency, accountability, and customer confidence in the County's waste management system. Standardized procedures help build trust among residents,

businesses, and municipalities by ensuring that all haulers operate under uniform regulations and that improper disposal is addressed fairly and consistently.

Facility and Program Requirements

The enforcement program will primarily require administrative capacity rather than new facilities. County staff will coordinate monitoring activities, inspections, reporting, and follow-up actions. Coordination with municipal offices, haulers, and state regulatory agencies will ensure compliance with licensing requirements and proper documentation of enforcement actions. Data management systems may be used to track violations, corrective actions, and compliance trends. Outreach and training for haulers and generators will support voluntary compliance and minimize the need for formal enforcement actions.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

While the primary function of the enforcement program is administrative oversight, it delivers substantial environmental and operational benefits. By reducing contamination in recycling streams, the County ensures that collected materials are fully recoverable, maximizing the environmental benefits of diversion efforts and preventing additional processing or disposal costs. From a life-cycle perspective, improved compliance conserves natural resources and reduces energy consumption by ensuring that materials are reused or recycled rather than lost to landfills. Decreasing contamination also minimizes greenhouse gas emissions associated with disposal and remanufacturing processes. Additionally, consistent enforcement supports efficient waste collection operations and may enhance customer service satisfaction, indirectly supporting local hauler operations and employment stability in the waste management sector. By fostering a cleaner, more reliable recycling stream, the program strengthens the overall efficiency of the County's waste management system while contributing to environmental sustainability and workforce engagement in recycling and compliance-related activities.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

Measures that would play a role based on these alternatives can be found in section 5.10 of this chapter.

5.7 Incentive-based Pricing

Incentive-based pricing in solid waste management refers to a rate structure that encourages waste reduction by charging residents and businesses based on the amount of waste they generate. Commonly known as "pay-as-you-throw" (PAYT), this approach treats waste disposal like a utility service, where users pay proportionally to their usage. Households that produce lass waste pay less, while those generating more pay higher fees. This pricing model provides a direct financial incentive to reduce, reuse, and recycle, leading to decreased landfill use and increased participation in diversion programs. Incentive-based pricing also promotes fairness by aligning costs with waste generation and can help communities achieve sustainability goals while managing solid waste program costs more effectively. Putnam County is not selecting this category as an area for the enhancement of an existing program or the addition of a new one during this planning period unless planned assessments as stated in the implementation schedule should identify this need. Any local laws, ordinances, or regulations would provide enforceable authority to support compliance, reduce contamination, and maintain the integrity of the county's chosen incentive-based diversion program will be identified if the county were to determine their interest in participating or implementing an incentive-based recycling or waste management initiative in the future.

5.8 Education and Outreach

Education and outreach are foundational to achieving sustained waste reduction and recycling success. The County will develop and implement a comprehensive communications strategy that reaches residents, businesses, and institutions through multiple channels.
Key initiatives will include:

- A unified "What Goes Where" recycling guide distributed by mail, online, and at community facilities.
- A school-based sustainability curriculum, "Every day is Earth Day," integrated into environmental education programs to teach students lifelong waste reduction habits.
- Social media campaigns, public service announcements, and community workshops focused on key topics such as contamination prevention, reuse opportunities, and food waste reduction.
- Multilingual materials to ensure accessibility for all residents and alignment with environmental justice principles.

Through consistent and inclusive communication, these efforts will foster a more informed public, increase program participation, and create a strong foundation for the success of other initiatives.

ADMINSTRATIVE AND TECHNICAL IMPACTS

Qualitative and quantitative impacts

Quantitatively, the education and outreach program is expected to increase participation rates in recycling, organics diversion, and reuse programs, contributing to measurable reductions in contamination and higher overall diversion rates. Tracking engagement metrics—such as attendance at workshops, guide distribution, and digital reach—will provide data to evaluate program effectiveness.

Qualitatively, the initiative improves public understanding and behavioral consistency across households, schools, and businesses. Educational programs and multilingual resources foster community equity, environmental literacy, and long-term cultural shifts toward sustainable consumption and waste reduction practices.

Facility and Program Requirements

The program relies on administrative infrastructure and communication channels rather than physical facilities. County staff will coordinate content development, distribution, event planning, and outreach tracking. Partnerships with schools, community organizations, and local media will support broader reach and engagement. Materials such as guides, curriculum resources, and workshop kits will be produced centrally and distributed through both digital and in-person channels. Integration with social media, local news outlets, and community networks ensures widespread coverage, while feedback mechanisms will help refine messaging and delivery for maximum impact.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

While primarily an educational initiative, the program delivers significant indirect environmental and economic benefits. Increased awareness and understanding of proper recycling, organics diversion, and reuse practices directly reduce contamination rates, improve material recovery, and enhance the efficiency of collection and processing systems. From a life-cycle perspective, these behavioral changes conserve

natural resources by increasing the reuse of materials and reducing the need for virgin material production, which is energy- and resource-intensive. Proper diversion of organics reduces methane emissions from landfills and improves soil health through composting programs. Additionally, education and outreach contribute to employment and community engagement by creating opportunities for local educators, workshop facilitators, volunteers, and program coordinators. By fostering public participation and stewardship, the initiative strengthens the County's workforce capacity in waste management, sustainability education, and community-based environmental programs.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following measures can ensure consistent public communication, improve accessibility, and support long-term participation in waste diversion programs:

- Require recycling signage standards for consistent messaging at public and municipal facilities.

5.9 Data Collection and Evaluation Efforts

Data Collection Hauler Licensing

Reliable data and consistent enforcement are essential to effective solid waste and recycling program implementation. Putnam County will develop a centralized hauler reporting system to collect standardized data on waste and recycling operations, including tonnage, material types, contamination rates, and collection coverage. In addition to data collection, the County will implement hauler licensing protocols to ensure that all private waste service providers operate in compliance with County regulations. Licensing will require haulers to submit regular reports, adhere to established performance standards, and maintain proper operational practices. The integrated system will support regulatory compliance, program evaluation, and state reporting requirements, while also enabling data-driven decision-making for future program improvements and infrastructure planning.

ADMINSTRATIVE AND TECHNICAL IMPACTS

QUALITATIVE AND QUANTITATIVE IMPACTS

Quantitatively, the centralized reporting system will provide accurate measurements of material flow, diversion rates, and contamination levels, enabling more precise evaluation of program effectiveness. Data collected will support trend analysis, identify areas for improvement, and allow the County to benchmark performance against regional and state standards.

Qualitatively, the initiative improves transparency and accountability among haulers, generators, and the public. Consistent data collection fosters confidence that materials are being managed properly and that program objectives such as waste reduction, recycling efficiency, and organics diversion are being met.

FACILITY AND PROGRAM REQUIREMENTS

Implementation of this initiative primarily involves administrative and technological infrastructure. The County will develop a centralized digital platform to facilitate data submission, tracking, and analysis. Training and technical support will be provided to haulers to ensure accurate and timely reporting. Licensing procedures will include submission of documentation, compliance verification, and integration with enforcement protocols to maintain uniform operational standards across all haulers. Coordination with municipal staff and regulatory agencies will ensure that the system meets both local and state reporting requirements.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

While largely administrative, the centralized hauler data collection and licensing system delivers significant indirect environmental and operational benefits. Reliable reporting ensures that recyclables, organics, and other diverted materials are properly handled, reducing contamination, improving recovery rates, and maximizing the efficiency of collection and processing systems. From a life-cycle perspective, improved data supports better resource management, contributing to natural resource conservation and energy savings by ensuring materials are recovered and reintroduced into productive cycles rather than sent to landfills. Accurate data also allows for targeted interventions such as outreach or enforcement that further reduce waste, emissions, and processing inefficiencies. The program supports employment and capacity building by creating roles for program administrators, data analysts, and compliance officers. Enhanced hauler oversight improves operational reliability, strengthens workforce skills, and fosters collaboration between the County, haulers, and community stakeholders to achieve broader sustainability and zero-waste goals.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following measures can improve system accountability, support state reporting compliance, and enable a data-driven approach to planning and enforcement:

- Require all waste and recycling haulers to digitally submit tonnage and material recovery reports as part of the annual reporting requirement of the waste transporter permitting process.
- Establish a procedure that governs public access to aggregated data while protecting confidential business information.

5.10 Local Hauler Licensing, and Assessment of Laws Preventing Commingling of Waste

Revise the Putnam County Solid Waste Code & Hauler Licensing requirements

Putnam County will update its Solid Waste Code and hauler licensing requirements to strengthen the regulatory framework governing waste collection, recycling, and disposal. Key updates will include:

- STRONGER ANTI-COMMINGLING PROVISIONS: Ensuring recyclables, organics, and refuse are properly separated to reduce contamination and improve material recovery.
- STANDARDIZED PERFORMANCE EXPECTATIONS: Establishing uniform operational standards for haulers regarding collection schedules, material handling, customer service, and reporting compliance.
- ELECTRONIC REPORTING REQUIREMENTS: Requiring haulers to submit digital reports on tonnage, material types, contamination rates, and service coverage to support centralized data collection and regulatory oversight.

These revisions are intended to enhance program accountability, consistency, and compliance, while supporting the County's broader waste diversion and sustainability initiatives.

ADMINSTRATIVE AND TECHNICAL IMPACTS

Qualitative and quantitative impacts

Quantitatively, the strengthened Code and licensing updates are expected to reduce contamination rates, improve the quality and quantity of recovered recyclables, and ensure more consistent service coverage across the County. Improved compliance monitoring will allow for more precise tracking of waste diversion metrics and program performance.

Qualitatively, these updates will increase transparency and trust between haulers, residents, and regulatory authorities. Standardized expectations and anti-commingling provisions will clarify responsibilities, improve customer service, and foster a more reliable and efficient waste management system.

Facility and Program Requirements

Implementation primarily involves administrative and technological infrastructure, rather than new physical facilities. County staff will update licensing forms, integrate electronic reporting systems, and provide guidance and training for haulers to ensure understanding and compliance with the new provisions. Coordination with haulers, municipal offices, and state regulatory agencies will ensure consistency across jurisdictions and alignment with state reporting requirements. Enforcement protocols will be applied uniformly to support adherence to the revised Code and maintain program integrity.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The revisions are expected to deliver indirect environmental, operational, and economic benefits. By improving separation of recyclables and organics at the source, the updates enhance material recovery efficiency, reduce contamination, and prevent unnecessary disposal, maximizing the environmental benefits of recycling and organics programs. From a life-cycle perspective, better separation and reporting supports natural resource conservation, energy savings, and greenhouse gas reduction by ensuring materials are returned to productive use rather than landfilled. Electronic reporting and standardized performance expectations improve operational efficiency and support targeted interventions for compliance, further minimizing resource loss and emissions. The updated Code and licensing framework also strengthen workforce capacity and accountability, providing clear operational guidelines for haulers and supporting program administrators in monitoring and enforcement roles. These changes promote reliability, efficiency, and transparency across the County's solid waste system, contributing to long-term sustainability and economic benefits for the region.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

A comprehensive solid waste code amendment would be required to incorporate updated recycling, organics diversion, reporting, and enforcements requirements for haulers. Specifically, the county is going to focus on:

- Prohibiting permitted haulers from intentionally combining source separated recyclables or organics solid waste and requiring haulers to enforce any instances where customers are not purchasing subscriptions in accordance with the source separation law .
- Require digital reporting of collection activities, disposal destinations, contamination incidents, and tonnage data.
- Establish operational standards included buy not limited to collection practices, customer service, and reporting timelines.
- Establish due process procedures for suspension, revocation, or denial of hauler permits for repeated violations.

5.11 Flow Control and Districting Potential

An evaluation and assessment of flow control is not being conducted at this time. Putnam County does not have flow control and will not be prioritizing this during this planning period. Since Putnam County is a home-rule county, each municipality has the authority to district as they see fit. If this route were explored and facilities were to be built in Putnam County, possible laws might include a flow control law to direct designated waste streams to approved facilities, municipal districting agreements to establish collection

standards and/or service territories, and intermunicipal waste agreements for the coordination of regional collection and disposal responsibilities.

5.12 C & D Debris Reduction, Including Deconstruction, Reuse, and Recovery Programs

C&D Waste Reduction and Reuse Initiative

C&D debris represents a significant portion of Putnam County's waste stream and provides a high-impact opportunity for diversion. In collaboration with the Putnam County Climate Smart Communities Taskforce, the County will develop a C&D Waste Reduction Policy to encourage deconstruction over demolition, promoting the recovery and reuse of valuable materials such as wood, metal, concrete, and fixtures. The program will involve partnerships with local contractors, building departments, haulers, and community organizations to facilitate proper separation, collection, and reuse of C&D materials. The County will also explore the development of regional reuse hubs or material recovery depots, where salvaged building materials can be stored, sold, or donated for reuse in new construction projects or community programs. These efforts are designed to conserve natural resources, reduce landfill disposal costs, and create local economic opportunities in green construction, deconstruction services, and materials recovery industries.

ADMINSTRATIVE AND TECHNICAL IMPACTS

Qualitative and quantitative impacts

Quantitatively, implementation of a C&D Waste Reduction Policy could divert a substantial portion of the County's construction and demolition waste from disposal, with potential recovery rates varying by material type. Wood, metal, concrete, and other structural components represent the largest tonnage, while fixtures, cabinets, and doors offer high-value recovery potential.

Qualitatively, the initiative promotes sustainable building practices and encourages community and industry engagement in waste reduction. It fosters a culture of material stewardship, enhances awareness of circular economy principles in the construction sector, and builds capacity for reuse and recycling of C&D materials throughout the County.

Facility and Program Requirements

The initiative will leverage existing infrastructure, including local recycling facilities, transfer stations, and potential off-site material recovery depots. New or repurposed regional hubs may be established to store, sort, and redistribute salvaged materials for resale or donation. Administrative requirements include collaboration with building departments, permitting agencies, and haulers to establish operational guidelines, tracking systems, and compliance monitoring. Partnerships with contractors and community organizations will facilitate material collection and reuse while ensuring alignment with County and state regulations.

Cost, Life-Cycle, and Resource, Energy, and Employment Impacts

The C&D Waste Reduction and Reuse Initiative offers significant environmental, economic, and operational benefits. By recovering and repurposing building materials, the program reduces the need for virgin material extraction, conserves natural resources, and lowers greenhouse gas emissions associated with production and transportation. From a life-cycle perspective, deconstruction and material recovery prevent unnecessary landfill disposal, reduce energy consumption, and promote the reuse of durable materials such as wood, metal, and concrete. Establishing reuse hubs creates opportunities for local businesses and social enterprises to engage in resale, refurbishment, or donation of materials, generating jobs and stimulating economic activity in the green construction sector. Additionally, the program strengthens regional circular economy infrastructure, provides workforce development opportunities in deconstruction

and materials recovery, and supports the County's Climate Smart Communities goals by reducing emissions and promoting sustainable land use practices.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

The following potential local laws, ordinances, or regulations can support material recovery, reduce landfill disposal of recoverable C&D materials and encourage sustainable construction practices:

- Compose a construction and demolition diversion ordinance which would require diversion or recovery of designated C&D materials from disposal.
- Implement a deconstruction requirement for select projects which would require the evaluation of deconstruction opportunities for certain public or large-scale demolition projects.
- Implement a Building Permit Waste Management Plan requirement which would require the submission of a waste management and material recovery plan as part of a building or demolition permit application(s).
- Establish operational standards at Salvage Yards or Transfer Stations that accept C&D materials for reuse located in the planning unit.
- Require the documentation of material diversion quantities and disposal destinations for contractors as part of building permit application requirements.

5.13 Private Sector Management and Coordination Opportunities

Putnam County will only be working on this area as a priority if the assessments planned in the implementation schedule should identify the need. Any identification of implementation of a program that would fit this category will be identified and explained in the biennial reports.

5.14 Management of Waste Through Thermal Treatment Technologies

Since Putnam County does not have any waste processing facilities and since there is no plan to build one, Putnam County will participate in conversations with neighboring planning units which have these types of facilities and will only identify programs and projects associated with the category as needed as a result of these collaborative conversations. Any additional program identification or enhancement of a neighboring planning units' program will be explained in the biennial update.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

Because Putnam County does not currently plan to construct thermal treatment facilities no local regulatory changes are proposed at this time. Future participation in regional waste-to-energy discussions may require intermunicipal waste export agreements, regional disposal contract amendments, and environmental review and public participation procedures. These measures would support regional coordination if future waste management infrastructure or disposal conditions change.

5.15 Waste Disposal Options

Vape Device and E-Waste Stewardship Pilot Program

Putnam County will launch a Vape Device and E-Waste Stewardship Pilot Program in partnership with the Product Stewardship Institute (PSI) and the Center for Sustainable Materials Management (CSMM). Guided by a newly established Vape Product Advisory Committee, comprising County agencies, public health officials, educators, and local retailers, the program will develop a safe and convenient collection system for disposable and rechargeable vape devices. The initiative addresses both environmental and public health risks associated with improper disposal of lithium batteries, plastics, and nicotine residues. The pilot will test multiple collection methods and education, and outreach will target youth, parents, and

vape users, emphasizing the hazards of improper disposal and the importance of recycling components responsibly. Data collected during the pilot will inform statewide policy development and evaluate the potential for expansion into a permanent, producer-supported program under extended producer responsibility (EPR) principles.

ADMINSTRATIVE AND TECHNICAL IMPACTS

QUALITATIVE AND QUANTITATIVE IMPACTS

Quantitatively, the pilot program will establish baseline data on the volume, types, and composition of vape device waste generated in the County. By capturing both disposable and rechargeable devices, the program is expected to divert potentially hazardous materials from the waste stream, including lithium batteries and plastics, which are otherwise difficult to manage safely.

Qualitatively, the program promotes environmental stewardship and public health awareness, particularly among youth and parents. The initiative will enhance community understanding of safe disposal practices and foster responsible recycling behavior, providing a model for other jurisdictions to follow.

FACILITY AND PROGRAM REQUIREMENTS

The pilot will leverage existing County infrastructure, such as transfer stations and community collection sites, while exploring partnerships with retail outlets and manufacturers to expand access points. Secure drop boxes and mail-back systems will be tested for operational feasibility, safety, and convenience. Administrative requirements include coordination with the Vape Product Advisory Committee, program oversight, tracking collection volumes, and conducting outreach and education. Staff and partners will manage logistics, ensure compliance with health and safety regulations, and compile data for program evaluation and reporting.

COST, LIFE-CYCLE, AND RESOURCE, ENERGY, AND EMPLOYMENT IMPACTS

Although primarily a pilot program, the initiative provides significant environmental and public health benefits. Safe collection of vape devices prevents lithium battery fires, chemical contamination, and plastic pollution, and maximizes the recovery of materials that can be reused or responsibly recycled.
From a life-cycle perspective, diverting vape devices from the waste stream conserves natural resources, reduces greenhouse gas emissions associated with disposal and production of new materials, and minimizes the energy footprint of material management. Safe handling and recycling of lithium batteries also reduce risks to energy-intensive waste processing facilities. The program creates employment and volunteer opportunities in collection, outreach, education, and program administration. It also builds workforce capacity in hazardous waste handling and e-waste stewardship, and fosters collaboration with public health, educational, and retail sectors. By piloting a replicable and scalable model, the County contributes to broader environmental goals, supports public health protections, and provides a data-driven foundation for potential statewide policy and EPR program development.

RECOMMENDED LOCAL LAWS, ORDINANCES, AND REGULATORY UPDATES

- Based on the recommendations from the NYSDEC as a result of the Vape Pilot Program, Putnam County will modify its local laws once the appropriate definition is applied to vape devices and what waste category would be appropriate (i.e. hazardous waste, e-waste, or universal waste). As a result of any determinations made by the State, the following could be potential laws that the county may entertain to support the safe management of emerging waste streams, reduce environmental and fire hazards, and provide a regulatory framework for future stewardship and producer responsibility programs: Create a battery and electronic waste collection ordinance to

establish standards for the safe collection storage and transport of vape devices with lithium batteries and classified as electronic waste

- Create retail participation and collection standards to authorize voluntary or mandatory retailer participation in vape and e-waste collection initiatives where legally permissible.

- Establish these materials handling requirements to prevent fires and decrease emergency response for collected lithium batteries and nicotine containing devices.

- Collaborate with partners on an Extended Producer Responsibility (EPR) advocacy resolution to support state-level legislation requiring producers to finance and manage end-of-life recovery programs for vape devices and related materials.

Putnam County Local Solid Waste Management Plan

2025-2034 Implementation Schedule

Key		1-3 yrs	3-5yrs	5+yrs	ongoing	prior to plan adoption	Climate Smart Communities Integration	as needed

Project	Activity	PROGRESS	START	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
LSWMP													
Finalize the Putnam County Local Solid Waste Management Plan	Compose Chapters 1-7	100%	2025 Q1	completed in 2025; informed this schedule									
	Receive feedback from DEC and incorporate into plan	50%	2025 Q3										
	Resubmit for DEC approval	100%	2026 Q1										
	Present to County Executive and Legislature for adoption LSWMP	0%	2026 Q2										
Achieve the goals of the LSWMP	Operate under the LSWMP from 2026-2035	0%	2026 Q2										
	Submit Biennial Update to DEC	0%	2028 Q1 2031 Q1 2034 Q1										
	Begin working on 2036-2046	0%	2034 Q1										
Solid Waste Program Activities													
Revise Hauler permitting process	Digitize the permit application	10%	2027 Q2										
	Digitize and improve the permit renewal process	10%	2027 Q2										
	Improve annual reporting mechanism for haulers	75%	2026 Q2										
	Evaluate and improve hauler permitting process	25%	Annual Q1										
Enforcement	Review of Code to determine revisions needed to improve compliance	25%	2025 Q3										
	Re-establish hauler enforcement program	5%	2026 Q4										
	Conduct hauler compliance checks	0%	quarterly										
	Continue education regarding source separation requirements to commercial establishments and multi-family residences	50%	ongoing										
	Analysis of data from waste haulers to identify problem areas and permitting fees	0%	Annually Q2										
	Distribution of any revision of Codes to municipalities and waste haulers and post on county website and send media release	0%	when needed										
Data Collection & Reporting	Conduct periodic assessments of MSW, C&D, and recyclables	5%	Annually Q2										
	Identify and develop assessment schedule and tool	0%	as needed										
	Facilitate data sharing between stakeholders (municipalities and haulers)	0%	Quarterly/Annually										
	Collaborate with neighboring planning units and jurisdictions for data sharing and program planning best practices	25%	Quarterly as needed										
	Review annual report requirements in Solid Waste and Septic Waste permit application and update to include all waste types (including industrial waste as an add-in)	0%	2026 Q1										
	Identify collection mechanism for tracking, reporting, and management of data for inactive landfills located in the planning unit	0%	2026 Q4										

Putnam County Local Solid Waste Management Plan

2025-2034 Implementation Schedule

Key		1-3 yrs	3-5yrs	5+yrs	ongoing	prior to plan adoption	Climate Smart Communities Integration	as needed

Project	Activity	PROGRESS	START	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	Identify a mechanism to collect data/information from transfer stations and processing facilities located within the planning unit that receive waste from within the planning unit and from outside the planning unit	0%	2026 Q3										
	Evaluate data collection schedule and tool	0%	2028 Q2, and annually following										
Evaluate program components and identify improvement strategies or additional activities	Regulatory assessment (Local and Municipal)	50%	ongoing										
	Regulatory Assessment (State)	50%	ongoing										
	Rebrand and Expand Keep Putnam Beautiful	25%	2027 Q4										
	Increase number of litter equipment rentals county-wide	0%	2029 Q2										
	Evaluate Medication Take Back and Syringe Disposal Programs and improve as needed	0%	2027 Q2										
	Report to municipalities on program(s) and progress	0%	2026 Q3										
	Help Putnam County Climate Smart Task Force achieve Silver Certification Status	0%	2026 Q1										
	Evaluate budget and reassess based on program offerings	50%	Annually Q3										
Extended Producer Responsibility	Paper Product Packaging	0%	2026 Q3										
	Rechargeable batteries (vape devices)	50%	2027 Q1										
Sewage/Septage/Sludge	Investigate final disposition treatment of sewage, septage, and sludge and identify any necessary projects for improvement	0%	ongoing										
	Review septage/sewage/sludge hauling regulations	0%	2025 Q4										
	Conduct regular compliance checks for septic haulers	0%	quarterly										
	Work with state environmental agencies, health departments, and wastewater authorities for consistent standards	0%	2026 Q3 and as needed										
Education and Outreach													
Continuing Education	Participation in regional conferences and trainings to obtain information on evolving solid waste management technology and practices (SWANA, NYSAR3 Organics Summit and Annual Conference, E-waste Conference, etc.)	50%	when scheduled										
Putnam Recycles Website & Social Media	Develop county-wide materials; multi-lingual and multi-pronged	0%	ongoing										
	Compose coordinated messaging	15%	ongoing										
	Promote recycling in public events / forums	25%	ongoing										
	Add school resources and events to County webpage, update as needed	0%	ongoing										
	Expand content on website	25%	2026 Q3										
	Workshops & Seminars on plastic pollution	0%	2026 Q2										
	Plastic Free Challenge	0%	2026 Q3										
	Plastic Free July Campaign	0%	2026 Q4										

Putnam County Local Solid Waste Management Plan

2025-2034 Implementation Schedule

Key		1-3 yrs	3-5yrs	5+yrs	ongoing	prior to plan adoption	Climate Smart Communities Integration	as needed

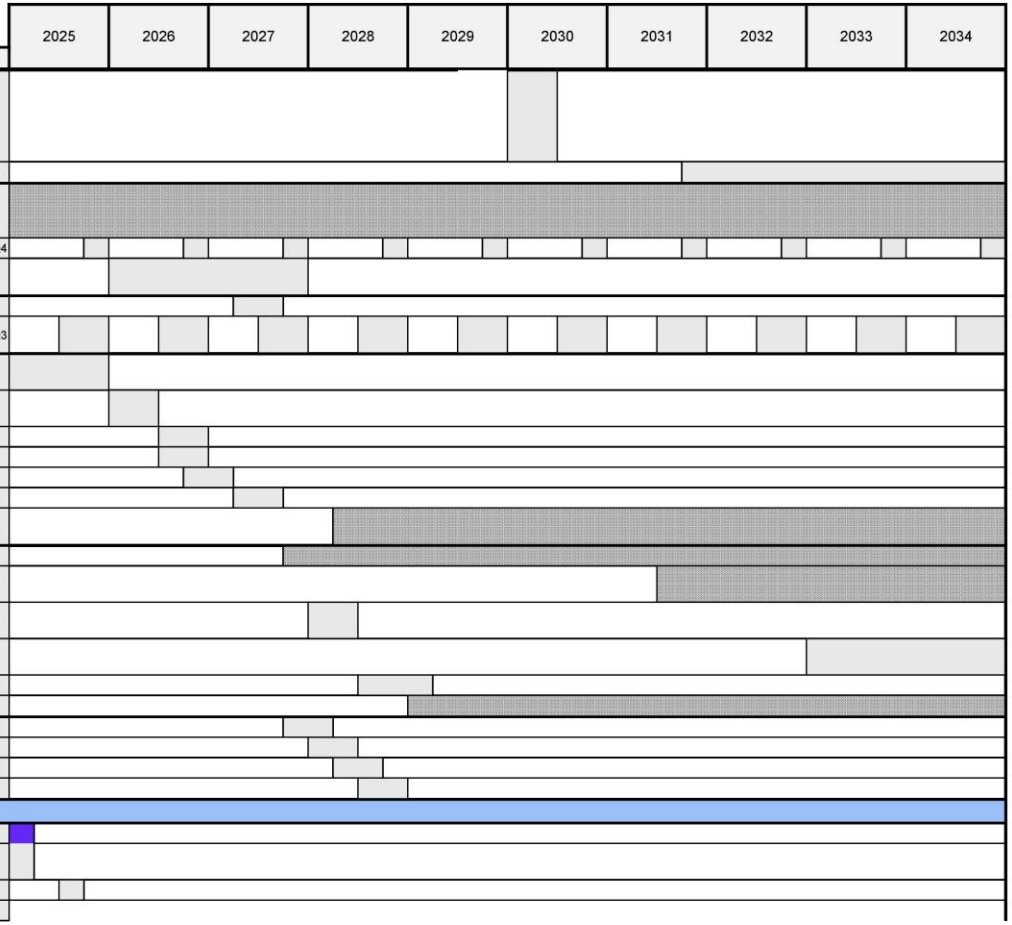
Project	Activity	PROGRESS	START	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Plastic Reduction Campaign	Plastic Alternatives Initiatives (schools)	0%	2027 Q1										
	Refill Station Campaign	0%	2027 Q2										
	Reusables kit distribution	0%	2027 Q3										
	Infographics & Reels	0%	2027 Q4										
	Plastic-free Office Initiatives and Market days	0%	2028 Q1										
	Employee Challenges	0%	2028 Q2										
	Evaluate all programs in Plastic Reduction	0%	Annual Q4										
Brochures, Pamphlets, Mailers	Informational Brochure/Mailer - Solid Waste & Recycling	0%	2026										
	Informational Brochure/Mailer - Food Scrap Recycling	0%	2026										
	Informational Brochure/Guide - Composting	0%	2026										
	Informational Mailer- Organics & Food Scraps	0%	2026										
	Informational Mailer/Guide - General Recycling Guidelines	0%	2026										
	Recycling Guide/Directory - Solid Waste & Recycling	0%	2026										
	Recycling Guide/Directory - Composting	0%	2026										
	Recycling Guide/Directory - Food Scrap Recycling	0%	2026										
	Recycling Guide/Directory - Composting	0%	2026										
	Map/Locator - All Topics	0%	2026										
Vape & Rechargeable Battery Disposal	Compose public awareness campaigns	0%	2025-2027										
	Create signage	0%											
Special Waste Campaigns	Educate on Mattress Disposal	85%	2026 Q4										
	Develop a Mattress Recycling Pilot Program	100%	2026 Q1										
	Prepare educational material on deconstruction and outlets such as ReStore	0%	2035 Q2										
Waste Reduction Campaigns	Conduct annual seminar series for the public on specific topics (including multi-family source separation)	0%	ongoing										
	Continue focused educational theme initiatives as progress is made towards increasing amounts and types of materials recycled	0%	ongoing										
	Campaigns supporting reuse habits	0%	2029 Q1										
	Educate/advertise for Event Recycling Container Rental Program	50%	ongoing										
	For Climate Smart Communities: share educational materials and events attended to achieve Silver CSC certification	0%	ongoing										
	Educate on Low-waste/Zero-waste Certification	0%	2030 Q3										
Recycling Program													
Construction & Demolition	Research & Assess C&D best practices and other county policies	0%	2029 Q2										
	Conduct analysis of C&D waste stream	0%	2030 Q2										
	Assess current C&D recycling practices	0%	2028 Q1										
	Compose C&D policy and present to legislature for adoption	0%	2030 Q4										

Putnam County Local Solid Waste Management Plan

2025-2034 Implementation Schedule

Key		1-3 yrs	3-5yrs	5+yrs	ongoing	prior to plan adoption	Climate Smart Communities Integration	as needed

Project	Activity	PROGRESS	START
Disposal	Work with town building departments to educate contractors on proper disposal options including reduction, reuse, and recycling options. Building permit restrictions/requirements relating to reuse and recycling will be evaluated	0%	2031 Q1
	Evaluate C&D policy implementation	0%	2032 Q2
Household Hazardous Waste	Continue to contract vendors for PCDOH hosted HHW Drop-off events and provide at least one Household Hazardous Waste collection opportunity per year for residents	75%	ongoing
	Evaluate program features and improve as needed	0%	biannual Q4
	Evaluate capacity to add additional events to exceed 2/year	0%	2027 Q1
Special Waste Campaigns	Create a Mattress Disposal Program	0%	2028 Q1
	Assist Municipalities with evaluating and improving e-waste programs	0%	biannual Q3
Vape & Rechargeable Battery Disposal	Identify stakeholders - Schools, retailers, vape shops, waste haulers and hazardous waste vendors	100%	2026 Q1
	Identify best practices for vape & rechargeable battery disposal	50%	2026 Q2
	Determine applicable regulations (Federal & State; EPA)	50%	2026 Q3
	Identify collection options and handling protocol	50%	2027 Q3
	Create tracking and reporting mechanism and schedule	25%	2027 Q4
	Implement program	25%	2028 Q2
	Evaluate program components & adjust strategies as needed	0%	2029 Q2
Reuse Programs	Advocate/Educate for Reuse Programs	0%	2028 Q4
	Review/evaluate building permit restrictions/requirements relating to reuse and recycling will be evaluated	0%	2032 Q3
	Organize community swap events & partner w/ local charities/thrift stores	0%	2029 Q2
	Identify locations and promote the program of reuse Centers (municipal/community/school)	0%	2034 Q1
	Host upcycling workshops	0%	2029 Q3
	Evaluate all activities and reuse programs	0%	2028 Q1
Waste Reduction Campaigns	Create upcycling workshops	0%	2028 Q4
	Campaigns supporting reuse habits	0%	2029 Q1
	Create waste sorting guides/magnets/mobile app	0%	2029 Q2
	Household Waste Tracking Challenge	0%	2029 Q3
Organics Management			
	Collect research on food scrap recycling and composting	15%	2025 Q3
	Identify program structure and its components to present to CE for support	0%	2026 Q1
	Apply for funding through Municipal Waste Reduction Grant	0%	2026 Q3
	Phase into Implementation Plan	0%	



Putnam County Local Solid Waste Management Plan

2025-2034 Implementation Schedule

Key		1-3 yrs	3-5yrs	5+yrs	ongoing	prior to plan adoption	Climate Smart Communities Integration	as needed

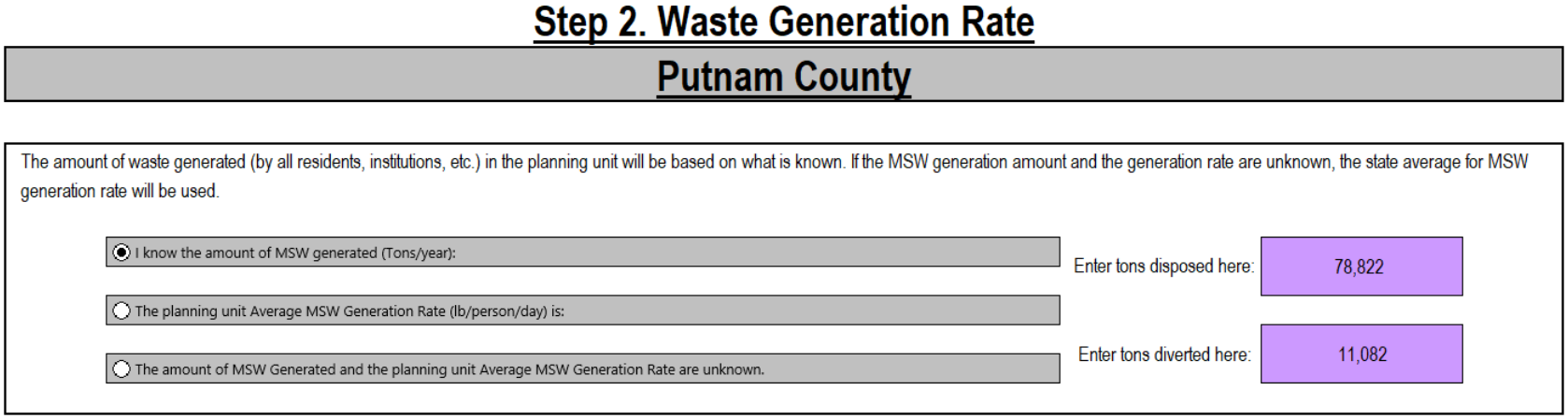
Project	Activity	PROGRESS	START	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
County-Facility Compost Pilot Program	**Phase 1**: Weigh & sort at facilities, Site selection, permitting requirements & applications, collection plan and identify haulers	0%	2025 Q2										
	Phase 2: Part 1: Pilot Preparation: Purchase/Install Bins, Posters/signage, conduct outreach and training for staff at each facility	0%	2026 Q3										
	Phase 2: Part 2: Pilot Initiation: Initiate collection and begin collecting data weekly by conducting facility check-ins, begin community engagement and awareness campaign to share success of county-facility pilot program	0%	2027 Q3										
	Phase 3: Part 1: Evaluate Program Success	0%	ongoing										
	Phase 3: Part 2: Expand program for additional facilities(town buildings) or to the public	0%	2030 Q3										
Municipal Food Scrap Recycling Programs	Food Scrap collection at Farmer's markets	0%	2026 Q2										
	County-wide Food Scrap Recycling Pilot Program	5%	2027 Q3										
	Curbside food scrap pick-up	0%	2029 Q3										
	County-facility pilot composting facility	0%	2030 Q4										
	Review County code and update/revise/add as needed for food scrap regulation	0%	2028 Q1										
Collaboration/Partnerships													
Climate Smart Communities	Collaborate with Putnam County Climate Smart Taskforce to advance certification	0%	ongoing										
	Build relationship with Cold Spring, Nelsonville, Philipstown Climate Smart Taskforces	0%	ongoing										
	Build relationship with Kent Climate Smart Taskforce	0%	ongoing										
	Build relationship with Putnam Valley Climate Smart Taskforce	0%	ongoing										
Sustainable Putnam	Continue collaborating on special waste, reuse, and reduction programs	0%	ongoing										
Schools	Re-establish Green Schools Task Force with representation from all school districts to work on environmental issues, policies, and curricula	0%	2026 Q3										
	Work with schools and curriculum committees to incorporate more recycling and waste reduction behaviors	0%	2027 Q1										
Municipalities	Identify members of Solid Waste Task Force	0%	2026 Q1										
	Meet with town board quarterly to discuss and promote recycling	0%	Quarterly										

Chapter 7: Waste Stream Projections

The NYSDEC Population and MSW Composition Calculator was utilized to support the development of long-term municipal solid waste projections required in Chapter 7 of the LSWMP. The calculator estimated annual MSW generation quantities and composition over the planning period based on projected population changes and waste reduction goals outlined in the implementation plan from Chapter 6. The waste generation rate is based on what is known, was taken from the Putnam County the Solid Waste Hauler Application and was used to inform the percentages and assumptions for progressively decreasing amounts of waste managed through disposal and thermal treatment. These projections form the basis for evaluating future waste management strategies in alignment with NYSDEC requirements.

The first step of this calculator is to identify the planning unit and the planning period. Putnam County was selected as the planning unit, and the planning period was identified as 2025-2034. Since the plans composition began in 2025, data collected in the 2025 permitting application which represented the waste hauled for the year of 2024 was used in this calculator.

Figure 7.1 Waste Generation Rate for Putnam County based on 2024 data collected in the 2025 Putnam County Solid Waste Hauler Application



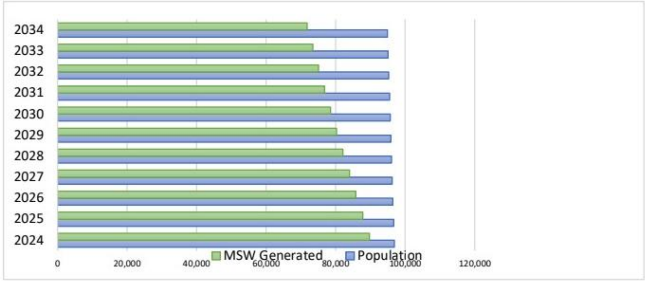
The third step to using this calculator is to use the information from step 2 to inform the population increases over the 10-year planning period and the amount of MSW that may be generated. Figure 7.2 shows all of the pieces of this projection process. The annual rate of population growth used for this equation is -0.20% which is based off of the data input by the NYSDEC from the American Census Survey and Cornell University which

represents Putnam County having a population decrease[44]. Figure 7.2 depicts the comparison between the population size and the amount of MSW to be generated for this planning period.

Figure 7.2 Planning Unit Population and Municipal Solid Waste Projections

Putnam County **2025-2034**

Current Data	
2020 Population Census	98,060
2024 Population	96,870
2024 MSW Generated (Tons/yr)	89,905
2024 MSW generation rate (Lb/person/day)	4.46
2024 MSW Disposed (Tons/yr)	78,822
2024 MSW Diverted (Tons/yr)	11,083



Annual rate of population growth (%)	-0.20%

Population Projection

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
96,870	96,672	96,474	96,276	96,079	95,883	95,686	95,490	95,295	95,099	94,905	94,710	94,516

Forecasting future conditions... What do you expect to happen to the MSW generation rate over the next 10 year period plan?

- ○ MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit, if the population increases, waste generation will rise as well, and vice versa.
- ○ MSW generation amount remains the same, regardless of whether or not the planning unit's population fluctuates.
- ◉ As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of ...

Reduction Factor (per year)	2.0%

MSW generation rate (Lb/person/day)	5.08

MSW Generation Projection

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
5.08	4.98	4.88	4.78	4.68	4.59	4.50	4.41	4.32	4.23	4.15	4.07	3.98	(Lb/person/day)
89,750	87,775	85,843	83,954	82,106	80,299	78,532	76,804	75,114	73,461	71,844	70,263	68,717	Tons/yr

[44] American Census Survey, 2019, https://data.census.gov/cedsci/table?q=United%20States&g=0400000US36,36%240500000&tid=PEPPOP2019.PEPANNRES

Step four in the population and municipal solid waste calculator consists of representing a detailed analysis of the MSW composition. This analysis is based off of the population density which the NYSDEC includes as suburban, rural, and urban. The breakdown of residential and commercial/institutional was also modified to more accurately represent the population distribution for these density indicators.

Figure 7.3 Population Size and MSW Generation Projections

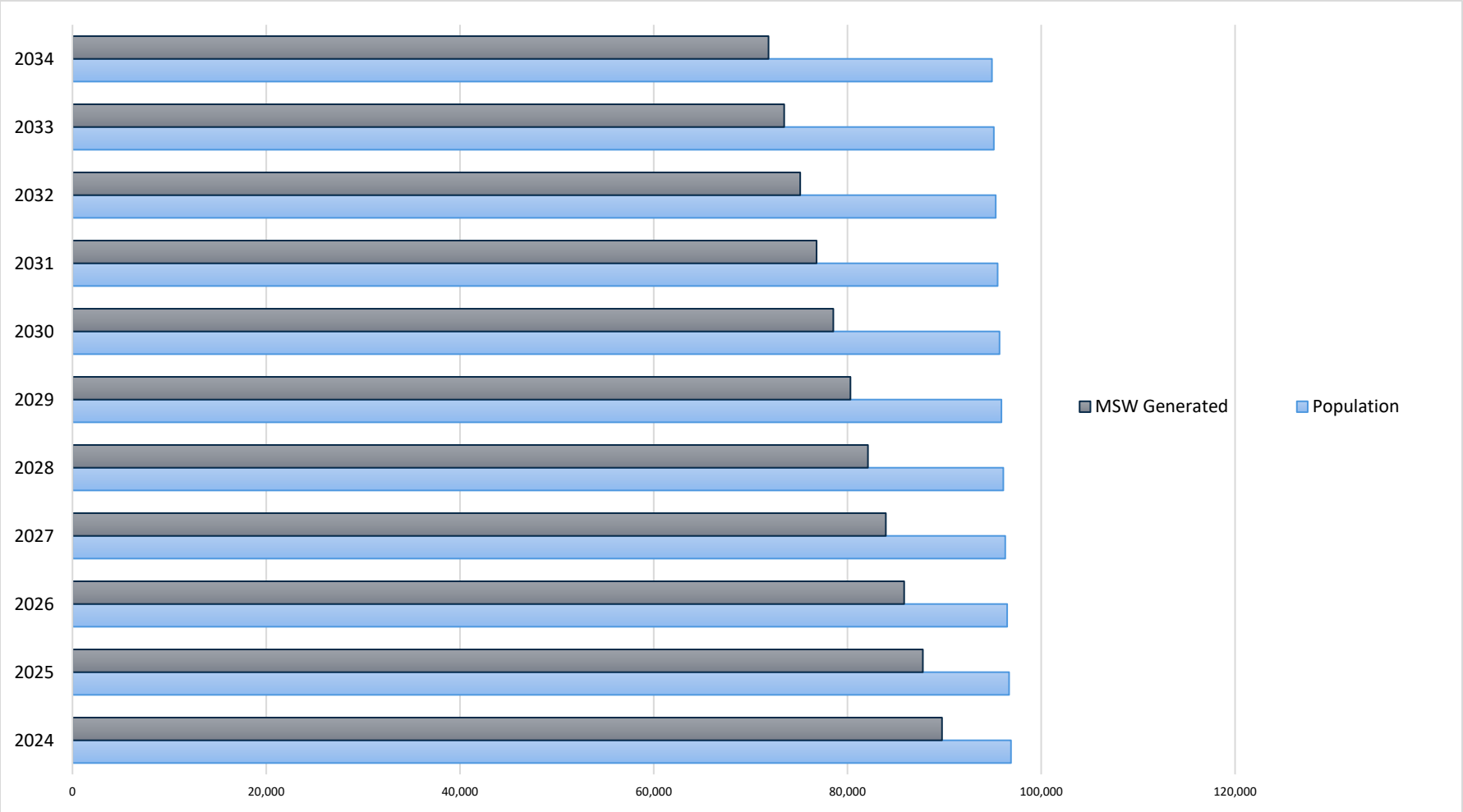


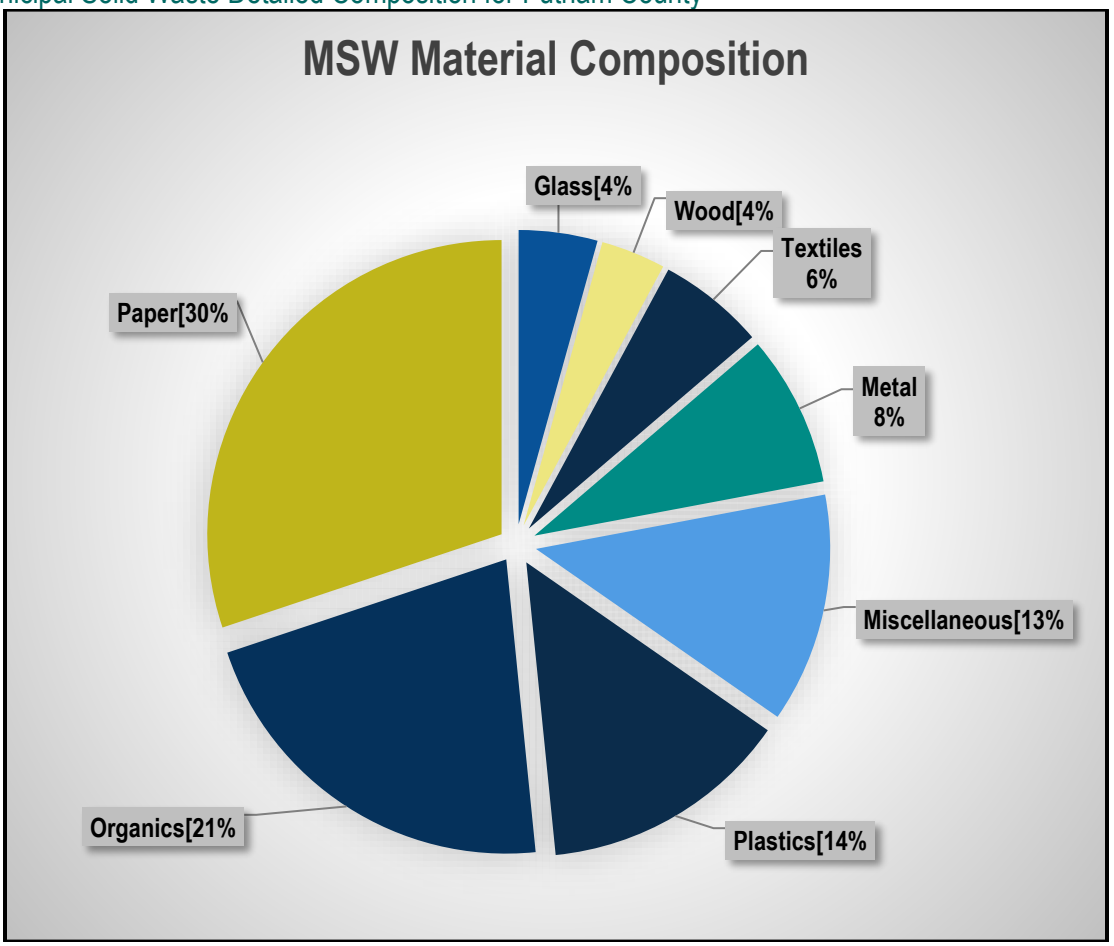
Figure 7.4 shows this detailed MSW composition analysis by material type and percentages.

Figure 7.4 Detailed MSW Composition Analysis for Putnam County

Putnam County											2025-2034
	Density Population Distribution		Rural			Suburban			Urban			MSW Materials Composition (%)
			32.32%			65.28%			2.40%			
			Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	
			90.00%	10.00%	100.00%	86.00%	14.00%	100.00%	60.00%	40.00%	100.00%	100.00%
Material	Newspaper		5.20%	1.90%	4.87%	5.00%	1.90%	4.57%	6.60%	2.00%	4.76%	4.67%
	Corrugated Cardboard		6.60%	13.90%	7.33%	6.60%	13.90%	7.62%	6.90%	13.70%	9.62%	7.58%
	Other Recyclable Paper	Paperboard	3.20%	1.10%	2.99%	3.30%	1.00%	2.98%	3.60%	0.90%	2.52%	2.97%
		Office Paper	0.80%	3.80%	1.10%	0.90%	4.20%	1.36%	1.10%	5.80%	2.98%	1.32%
		Junk Mail	3.00%	0.70%	2.77%	3.20%	0.70%	2.85%	3.50%	0.70%	2.38%	2.81%
		Other Commercial Printing	1.70%	2.30%	1.76%	1.70%	2.40%	1.80%	2.30%	2.60%	2.42%	1.80%
		Magazines	1.10%	0.90%	1.08%	1.00%	0.80%	0.97%	1.10%	1.00%	1.06%	1.01%
		Books	0.50%	0.30%	0.48%	0.50%	0.30%	0.47%	0.60%	0.40%	0.52%	0.48%
		Paper Bags	0.50%	0.20%	0.47%	0.50%	0.20%	0.46%	0.60%	0.20%	0.44%	0.46%
		Phone Books	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.20%	0.26%	0.30%
		Poly-Coated	0.20%	0.30%	0.21%	0.20%	0.20%	0.20%	0.30%	0.20%	0.26%	0.20%
	Other Recyclable Paper (Total)		11.30%	9.90%	11.16%	11.60%	10.10%	11.39%	13.40%	12.00%	12.84%	11.35%
	Other Compostable Paper		6.80%	6.80%	6.80%	6.40%	6.40%	6.40%	6.80%	6.80%	6.80%	6.54%
	Total Paper		***29.90%***	***32.50%***	***30.16%***	***29.60%***	***32.30%***	***29.98%***	***33.70%***	***34.50%***	***34.02%***	***30.13%***
	Ferrous/Aluminum Containers	Ferrous Containers	1.90%	1.00%	1.81%	1.20%	0.70%	1.13%	1.40%	0.70%	1.12%	1.35%
		Aluminum Containers	0.70%	0.40%	0.67%	0.60%	0.30%	0.56%	0.50%	0.40%	0.46%	0.59%
	Ferrous/Aluminum Containers (Total)		2.60%	1.40%	2.48%	1.80%	1.00%	1.69%	1.90%	1.10%	1.58%	1.94%
	Other Ferrous Metals		5.20%	5.40%	5.22%	5.00%	5.80%	5.11%	3.30%	3.70%	3.46%	5.11%
	Other Non-Ferrous Metals	Other aluminum	0.20%	0.30%	0.21%	0.20%	0.30%	0.21%	0.20%	0.30%	0.24%	0.21%
		Automotive batteries	0.80%	0.50%	0.77%	0.70%	0.40%	0.66%	0.20%	0.20%	0.20%	0.68%
		Other non-aluminum	0.50%	0.30%	0.48%	0.30%	0.40%	0.31%	0.40%	0.20%	0.32%	0.37%
	Other Non-Ferrous Metals (Total)		1.50%	1.10%	1.46%	1.20%	1.10%	1.19%	0.80%	0.70%	0.76%	1.26%
	Total Metals		***9.30%***	***7.90%***	***9.16%***	***8.00%***	***7.90%***	***7.99%***	***6.00%***	***5.50%***	***5.80%***	***8.31%***
	PET Containers		1.10%	0.80%	1.07%	0.90%	0.80%	0.89%	1.20%	1.00%	1.12%	0.95%
	HDPE Containers		1.10%	0.60%	1.05%	0.90%	0.70%	0.87%	1.00%	0.70%	0.88%	0.93%
	Other Plastic (3-7) Containers		0.20%	0.10%	0.19%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
	Film Plastic		5.70%	5.90%	5.72%	5.50%	5.80%	5.54%	5.80%	5.80%	5.80%	5.61%
	Other Plastic	Durables	3.10%	3.20%	3.11%	3.00%	3.20%	3.03%	3.20%	3.30%	3.24%	3.06%
		Non-Durables	1.60%	1.80%	1.62%	1.60%	1.80%	1.63%	1.80%	1.90%	1.84%	1.63%
		Packaging	1.40%	1.10%	1.37%	1.40%	1.10%	1.36%	1.50%	1.10%	1.34%	1.36%
	Other Plastic (Total)		6.10%	6.10%	6.10%	6.00%	6.10%	6.01%	6.50%	6.30%	6.42%	6.05%
	Total Plastics		***14.20%***	***13.50%***	***14.13%***	***13.50%***	***13.60%***	***13.51%***	***14.70%***	***14.00%***	***14.42%***	***13.73%***
	Glass Bottles, Jars and Containers		4.10%	3.80%	4.07%	3.90%	3.80%	3.89%	4.30%	3.80%	4.10%	3.95%
	Other Glass (Flat glass, dishware, light bulbs, etc.)		0.50%	0.40%	0.49%	0.30%	0.40%	0.31%	0.40%	0.40%	0.40%	0.37%
	Total Glass		***4.60%***	***4.20%***	***4.56%***	***4.20%***	***4.20%***	***4.20%***	***4.70%***	***4.20%***	***4.50%***	***4.32%***
	Food Scraps		12.70%	13.30%	12.76%	12.90%	15.50%	13.26%	17.20%	25.20%	20.40%	13.27%
	Leaves and Grass / Pruning and Trimmings		3.10%	1.10%	2.90%	11.30%	9.10%	10.99%	4.20%	1.50%	3.12%	8.19%
	Total Organics		***15.80%***	***14.40%***	***15.66%***	***24.20%***	***24.60%***	***24.26%***	***21.40%***	***26.70%***	***23.52%***	***21.46%***
	Clothing Footwear, Towels, Sheets		4.60%	3.00%	4.44%	4.40%	3.20%	4.23%	4.80%	2.50%	3.88%	4.29%
	Carpet		1.40%	1.30%	1.39%	1.70%	1.40%	1.66%	1.70%	0.90%	1.38%	1.56%
	Total Textiles		***6.00%***	***4.30%***	***5.83%***	***6.10%***	***4.60%***	***5.89%***	***6.50%***	***3.40%***	***5.26%***	***5.86%***
	Total Wood (Pallets, crates, adulterated and non-adulterated wood)		***4.10%***	***9.00%***	***4.59%***	***2.90%***	***4.10%***	***3.07%***	***2.00%***	***3.50%***	***2.60%***	***3.55%***
	DIY - Construction & Renovation Materials		8.00%	7.60%	7.96%	3.80%	2.70%	3.65%	4.40%	3.80%	4.16%	5.05%
	Diapers		1.90%	1.10%	1.82%	2.10%	1.20%	1.97%	2.30%	1.10%	1.82%	1.92%
	Electronics		1.30%	1.40%	1.31%	1.60%	1.70%	1.61%	1.30%	1.30%	1.30%	1.51%
	Tires		1.80%	1.80%	1.80%	1.70%	1.40%	1.66%	0.50%	0.40%	0.46%	1.68%
	HHW		0.60%	0.00%	0.54%	0.60%	0.00%	0.52%	0.50%	0.00%	0.30%	0.52%
	Soils and Fines		0.60%	0.60%	0.60%	0.10%	0.20%	0.11%	0.10%	0.10%	0.10%	0.27%
	Other Composite Materials - Durable and/or Inert		1.90%	1.70%	1.88%	1.60%	1.50%	1.59%	1.90%	1.50%	1.74%	1.68%
	Total Miscellaneous		***16.10%***	***14.20%***	***15.91%***	***11.50%***	***8.70%***	***11.11%***	***11.00%***	***8.20%***	***9.88%***	***12.63%***
	Total		***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***

Step five of this calculator is for the estimation of the waste streams composition based on the amount of material generated in the planning unit as compared to the state average. Figure 7.5 shows the key categories contributing to the composition of the waste stream in Putnam County.

Figure 7.5 Municipal Solid Waste Detailed Composition for Putnam County



Step six identifies the projections for diversion over the ten-year planning period. Each percentage of MSW diverted for each year is based on the percent of MSW composition expected and is represented in Figure 7.6.

Figure 7.6 Municipal Solid Waste Diversion Projections for Putnam County, 2024-2036

Putnam County **2025-2034**

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Projected MSW Generation (Tons/yr)	87,775	85,843	83,954	82,106	80,299	78,532	76,804	75,114	73,461	71,844	70,263	68,717
MSW Diverted (Tons/yr)	7,221	7,080	7,079	7,079	7,078	7,078	7,077	7,077	7,076	7,076	7,051	7,051

			2024			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
		MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted
	Material	100.0%	89,905	11,082	12.3%	8.0%	8.1%	8.2%	8.4%	8.6%	8.8%	9.0%	9.2%	9.4%	9.6%	9.8%	10.0%
Paper	Newspaper	4.7%	4,198	0	0.0%	4.7%	4.7%	4.7%	4.8%	4.8%	4.8%	4.8%	4.8%	4.9%	4.9%	4.9%	4.9%
Paper	Corrugated Cardboard	7.6%	6,811	882	12.9%	7.9%	7.9%	7.9%	8.0%	8.0%	8.0%	8.0%	8.0%	8.1%	8.1%	8.1%	8.1%
Paper	Other Recyclable Paper (Total)	11.4%	10,205	1,149	11.3%	11.6%	11.6%	11.6%	11.7%	11.7%	11.7%	11.7%	11.7%	11.8%	11.8%	11.8%	11.8%
Paper	Other Compostable Paper	6.5%	5,879	0	0.0%	6.6%	6.6%	6.6%	6.7%	6.7%	6.7%	6.7%	6.7%	6.8%	6.8%	6.8%	6.8%
Paper	*Total Paper*	30.1%	27,092	2,031	7.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
Metal	Ferrous/Aluminum Containers (Total)	1.9%	1,745	0	0.0%	1.8%	1.8%	1.8%	1.9%	1.9%	1.9%	1.9%	1.9%	2.0%	2.0%	2.0%	2.0%
Metal	Other Ferrous Metals	5.1%	4,592	81	1.8%	4.8%	4.8%	4.8%	4.9%	4.9%	4.9%	4.9%	4.9%	5.0%	5.0%	5.0%	5.0%
Metal	Other Non-Ferrous Metals (Total)	1.3%	1,137	0	0.0%	1.2%	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1.4%
Metal	*Total Metals*	8.3%	7,474	81	1.1%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
Plastic	PET Containers	1.0%	855	0	0.0%	1.0%	1.0%	1.0%	1.1%	1.1%	1.1%	1.1%	1.1%	1.2%	1.2%	1.2%	1.2%
Plastic	HDPE Containers	0.9%	836	0	0.0%	80.0%	80.0%	80.0%	80.1%	80.1%	80.1%	80.1%	80.1%	80.2%	80.2%	80.2%	80.2%
Plastic	Other Plastic (3-7) Containers	0.2%	177	0	0.0%	20.0%	20.0%	20.0%	20.1%	20.1%	20.1%	20.1%	20.1%	20.2%	20.2%	20.2%	20.2%
Plastic	Film Plastic	5.6%	5,040	0	0.0%	5.6%	5.6%	5.6%	5.7%	5.7%	5.7%	5.7%	5.7%	5.8%	5.8%	5.8%	5.8%
Plastic	Other Plastic (Total)	6.1%	5,441	3,031	55.7%	6.1%	6.1%	6.1%	6.2%	6.2%	6.2%	6.2%	6.2%	6.3%	6.3%	6.3%	6.3%
Plastic	*Total Plastics*	13.7%	12,348	3,031	24.5%	10.7%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%
Glass	Glass Bottles, Jars and Containers	4.0%	3,552	1,393	39.2%	4.0%	4.0%	4.0%	4.1%	4.1%	4.1%	4.1%	4.1%	4.2%	4.2%	4.2%	4.2%
Glass	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	335	0	0.0%	40.0%	40.0%	40.0%	40.1%	40.1%	40.1%	40.1%	40.1%	40.2%	40.2%	40.2%	40.2%
Glass	*Total Glass*	4.3%	3,887	1,393	35.8%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
Organics	Food Scraps	13.3%	11,932	13	0.1%	14.5%	14.5%	14.5%	14.6%	14.6%	14.6%	14.6%	14.6%	14.7%	14.7%	14.7%	14.7%
Organics	Leaves and Grass / Pruning and Trimmings	8.2%	7,361	444	6.0%	7.8%	7.8%	7.8%	7.9%	7.9%	7.9%	7.9%	7.9%	8.0%	8.0%	8.0%	8.0%
Organics	*Total Organics*	21.5%	19,294	457	2.4%	11.9%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Textiles	Clothing Footwear, Towels, Sheets	4.3%	3,858	3	0.1%	4.2%	4.2%	4.2%	4.3%	4.3%	4.3%	4.3%	4.3%	4.4%	4.4%	4.4%	4.4%
Textiles	Carpet	1.6%	1,407	0	0.0%	1.5%	1.5%	1.5%	1.6%	1.6%	1.6%	1.6%	1.6%	1.7%	1.7%	1.7%	1.7%
Textiles	*Total Textiles*	5.9%	5,264	3	0.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Wood	*Total Wood* (Pallets, crates, adulterated and non-adulterated wood)	3.5%	3,190	4,087	128.1%	1.6%	1.6%	1.6%	1.6%	1.6%	1.7%	1.7%	1.7%	1.7%	1.7%	1.8%	1.8%
Miscellaneous	DIY Construction & Renovation Materials	5.1%	4,543	0	0.0%	5.0%	5.0%	5.0%	5.1%	5.1%	5.1%	5.1%	5.1%	5.2%	5.2%	5.2%	5.2%
Miscellaneous	Diapers	1.9%	1,727	0	0.0%	2.0%	2.0%	2.0%	2.1%	2.1%	2.1%	2.1%	2.1%	2.2%	2.2%	2.2%	2.2%
Miscellaneous	Electronics	1.5%	1,356	0	0.0%	1.2%	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1.4%
Miscellaneous	Tires	1.7%	1,506	0	0.0%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%
Miscellaneous	HHW	0.5%	466	0	0.0%	18.9%	18.9%	18.9%	19.0%	19.0%	19.0%	19.0%	19.0%	19.1%	19.1%	19.1%	19.1%
Miscellaneous	Soils and Fines	0.3%	243	0	0.0%	50.0%	50.0%	50.0%	50.1%	50.1%	50.1%	50.1%	50.1%	50.2%	50.2%	50.2%	50.2%
Miscellaneous	Other Composite Materials - Durable and/or inert	1.7%	1,515	0	0.0%	1.7%	1.7%	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%	1.9%	1.9%	1.9%	1.9%
Miscellaneous	*Total Miscellaneous*	12.6%	11,355	0	0.0%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%

The final step of this calculator represents the detailed projections for waste generation and diversion for Putnam County for the period spanning 2025-2034 and is broken down by waste type. This is represented in figure 7.7.

Figure 7.7 Putnam County Municipal Solid Waste Generation and Diversion Projections for 2025-2036

Step 7. Municipal Solid Waste (MSW) Generation and Diversion - Detailed Projections

Putnam County	2025-2034

2024			2025			2026			2027			2028			2029			2030			2031			2032			2033			2034			2035			2036		
MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted
89,904	**11,082**	**12.3%**	**89,749**	**7,221**	**8.0%**	**87,774**	**7,080**	**8%**	**85,843**	**6,941**	**8.1%**	**83,953**	**6,805**	**8.1%**	**82,106**	**5,998**	**7.3%**	**80,299**	**6,541**	**8.1%**	**78,532**	**6,413**	**8.2%**	**76,804**	**6,287**	**8.2%**	**75,113**	**6,164**	**8.2%**	**73,460**	**6,043**	**8.2%**	**71,844**	**6,186**	**8.6%**	**70,263**	**5,988**	**8.5%**
4,198	0	0.0%	4,190	197	4.7%	4,098	193	5%	4,008	190	4.7%	3,920	187	4.8%	3,833	183	4.8%	3,749	180	4.8%	3,667	177	4.8%	3,586	174	4.8%	3,507	170	4.9%	3,430	167	4.9%	3,354	164	4.9%	3,281	161	4.9%
6,811	882	12.9%	6,799	537	7.9%	6,649	527	8%	6,503	516	7.9%	6,360	506	8.0%	6,220	496	8.0%	6,083	487	8.0%	5,949	477	8.0%	5,818	468	8.0%	5,690	459	8.1%	5,565	450	8.1%	5,690	461	8.1%	5,323	432	8.1%
10,205	1,149	11.3%	10,187	1,182	11.6%	9,963	1,158	12%	9,744	1,134	11.6%	9,529	1,111	11.7%	9,319	1,089	11.7%	9,114	1,066	11.7%	8,914	1,045	11.7%	8,718	1,023	11.7%	8,526	1,003	11.8%	8,338	982	11.8%	8,526	1,006	11.8%	7,975	943	11.8%
5,879	0	0.0%	5,869	387	6.6%	5,739	380	7%	5,613	373	6.6%	5,490	366	6.7%	5,369	359	6.7%	5,251	352	6.7%	5,135	345	6.7%	5,022	338	6.7%	4,912	332	6.8%	4,803	326	6.8%	4,912	334	6.8%	4,594	313	6.8%
27,092	2,031	7.5%	27,045	2,303	8.5%	26,450	2,258	9%	25,868	2,213	8.6%	25,298	2,170	8.6%	24,742	2,127	8.6%	24,197	2,085	8.6%	23,665	2,044	8.6%	23,144	2,003	8.7%	22,635	1,964	8.7%	22,136	1,925	8.7%	22,482	1,965	8.7%	21,173	1,850	8.7%
1,745	0	0.0%	1,742	31	1.8%	1,704	31	2%	1,667	31	1.8%	1,630	30	1.9%	1,594	30	1.9%	1,559	30	1.9%	1,525	29	1.9%	1,491	29	1.9%	1,458	29	2.0%	1,426	28	2.0%	1,458	29	2.0%	1,426	29	2.0%
4,592	81	1.8%	4,584	220	4.8%	4,483	216	5%	4,384	212	4.8%	4,288	208	4.9%	4,193	205	4.9%	4,101	201	4.9%	4,011	197	4.9%	3,923	194	4.9%	3,836	190	5.0%	3,752	187	5.0%	3,836	192	5.0%	3,752	188	5.0%
1,137	0	0.0%	1,135	14	1.2%	1,110	14	1%	1,085	13	1.2%	1,061	13	1.3%	1,038	13	1.3%	1,015	13	1.3%	993	13	1.3%	971	13	1.3%	950	13	1.4%	929	13	1.4%	950	13	1.4%	929	13	1.4%
7,474	81	1.1%	7,461	265	3.6%	7,297	261	4%	7,136	256	3.6%	6,979	252	3.6%	6,825	248	3.6%	6,675	244	3.7%	6,528	240	3.7%	6,385	236	3.7%	6,244	232	3.7%	6,107	228	3.7%	6,244	234	3.8%	6,107	230	3.8%
855	0	0.0%	854	9	1.0%	835	9	1%	816	8	1.0%	798	8	1.1%	781	8	1.1%	764	8	1.1%	747	8	1.1%	730	8	1.1%	714	8	1.2%	699	8	1.2%	714	9	1.2%	699	9	1.2%
836	0	0.0%	834	668	80.0%	816	653	80%	798	639	80.0%	781	625	80.1%	763	4	0.6%	747	598	80.1%	730	585	80.1%	714	572	80.1%	698	560	80.2%	683	548	80.2%	698	560	80.2%	683	548	80.2%
177	0	0.0%	177	35	20.0%	173	35	20%	169	34	20.0%	165	33	20.1%	162	3	1.9%	158	32	20.1%	155	31	20.1%	151	30	20.1%	148	30	20.2%	145	29	20.2%	148	30	20.2%	145	29	20.2%
5,040	0	0.0%	5,031	282	5.6%	4,920	277	6%	4,812	271	5.6%	4,706	266	5.7%	4,603	225	4.9%	4,501	257	5.7%	4,402	252	5.7%	4,305	247	5.7%	4,211	243	5.8%	4,118	238	5.8%	4,211	244	5.8%	4,118	240	5.8%
5,441	3,031	55.7%	5,431	331	6.1%	5,312	325	6%	5,195	319	6.1%	5,080	313	6.2%	4,969	307	6.2%	4,859	301	6.2%	4,752	296	6.2%	4,648	290	6.2%	4,546	285	6.3%	4,445	279	6.3%	4,546	286	6.3%	4,445	281	6.3%
12,348	3,031	24.5%	12,327	1,324	10.7%	12,056	1,298	11%	11,790	1,272	10.8%	11,531	1,246	10.8%	11,277	548	4.9%	11,029	1,196	10.8%	10,786	1,172	10.9%	10,549	1,148	10.9%	10,317	1,125	10.9%	10,090	1,102	10.9%	10,317	1,129	10.9%	10,090	1,106	11.0%
3,552	1,393	39.2%	3,546	142	4.0%	3,468	139	4%	3,391	137	4.0%	3,317	135	4.1%	3,244	132	4.1%	3,172	130	4.1%	3,102	128	4.1%	3,034	126	4.1%	2,967	123	4.2%	2,902	121	4.2%	2,967	125	4.2%	2,902	122	4.2%
335	0	0.0%	335	134	40.0%	327	131	40%	320	128	40.0%	313	125	40.1%	306	123	40.1%	299	120	40.1%	293	118	40.1%	286	115	40.1%	280	113	40.2%	274	110	40.2%	280	113	40.2%	274	110	40.2%
3,887	1,393	35.8%	3,880	276	7.1%	3,795	270	7%	3,711	265	7.1%	3,630	260	7.2%	3,550	255	7.2%	3,472	250	7.2%	3,395	245	7.2%	3,321	241	7.2%	3,248	236	7.3%	3,176	231	7.3%	3,248	237	7.3%	3,176	233	7.3%
11,932	13	0.1%	11,912	1,727	14.5%	11,650	1,692	15%	11,393	1,657	14.5%	11,143	1,622	14.6%	10,897	1,589	14.6%	10,658	1,556	14.6%	10,423	1,524	14.6%	10,194	1,492	14.6%	9,969	1,462	14.7%	9,750	1,431	14.7%	9,969	1,465	14.7%	9,750	1,435	14.7%
7,361	444	6.0%	7,348	573	7.8%	7,187	562	8%	7,029	551	7.8%	6,874	540	7.9%	6,723	530	7.9%	6,575	519	7.9%	6,430	509	7.9%	6,288	499	7.9%	6,150	490	8.0%	6,015	480	8.0%	6,150	492	8.0%	6,015	482	8.0%
19,294	457	2.4%	19,260	2,300	11.9%	18,836	2,254	12%	18,422	2,208	12.0%	18,017	2,163	12.0%	17,620	2,119	12.0%	17,232	2,075	12.0%	16,853	2,033	12.1%	16,482	1,992	12.1%	16,119	1,951	12.1%	15,765	1,911	12.1%	16,119	1,957	12.1%	15,765	1,918	12.2%
3,858	3	0.1%	3,851	162	4.2%	3,766	159	4%	3,683	156	4.2%	3,602	153	4.3%	3,523	151	4.3%	3,445	148	4.3%	3,370	146	4.3%	3,295	143	4.3%	3,223	141	4.4%	3,152	138	4.4%	3,223	142	4.4%	3,152	139	4.4%
1,407	0	0.0%	1,404	21	1.5%	1,373	21	2%	1,343	21	1.5%	1,314	20	1.6%	1,285	20	1.6%	1,256	20	1.6%	1,229	20	1.6%	1,202	20	1.6%	1,175	20	1.7%	1,149	19	1.7%	1,175	20	1.7%	1,149	20	1.7%
5,264	3	0.1%	5,255	183	3.5%	5,140	180	3%	5,027	177	3.5%	4,916	174	3.5%	4,808	171	3.6%	4,702	168	3.6%	4,598	165	3.6%	4,497	163	3.6%	4,398	160	3.6%	4,301	157	3.7%	4,398	162	3.7%	4,301	159	3.7%
3,190	4,087	128.1%	3,185	49	1.6%	3,115	49	2%	3,046	48	1.6%	2,979	48	1.6%	2,914	47	1.6%	2,850	47	1.7%	2,787	47	1.7%	2,726	46	1.7%	2,666	46	1.7%	2,607	45	1.7%	2,666	47	1.8%	2,607	46	1.8%
4,543	0	0.0%	4,535	227	5.0%	4,435	223	5%	4,337	219	5.0%	4,242	215	5.1%	4,149	211	5.1%	4,057	207	5.1%	3,968	203	5.1%	3,881	199	5.1%	3,795	196	5.2%	3,712	192	5.2%	3,795	197	5.2%	3,712	194	5.2%
1,727	0	0.0%	1,724	34	2.0%	1,686	34	2%	1,649	34	2.0%	1,612	33	2.1%	1,577	33	2.1%	1,542	32	2.1%	1,508	32	2.1%	1,475	32	2.1%	1,443	31	2.2%	1,411	31	2.2%	1,443	32	2.2%	1,411	31	2.2%
1,356	0	0.0%	1,354	16	1.2%	1,324	16	1%	1,295	16	1.2%	1,266	16	1.3%	1,238	16	1.3%	1,211	16	1.3%	1,184	16	1.3%	1,158	16	1.3%	1,133	15	1.4%	1,108	15	1.4%	1,133	16	1.4%	1,108	16	1.4%
1,506	0	0.0%	1,503	8	0.5%	1,470	8	1%	1,438	8	0.5%	1,406	8	0.6%	1,375	8	0.6%	1,345	8	0.6%	1,316	8	0.6%	1,287	8	0.6%	1,258	8	0.7%	1,231	8	0.7%	1,258	9	0.7%	1,231	9	0.7%
466	0	0.0%	465	88	18.9%	455	86	19%	445	84	18.9%	435	83	19.0%	426	81	19.0%	416	79	19.0%	407	77	19.0%	398	76	19.0%	390	74	19.1%	381	73	19.1%	390	74	19.1%	381	73	19.1%
243	0	0.0%	243	121	50.0%	238	119	50%	232	116	50.0%	227	114	50.1%	222	111	50.1%	217	109	50.1%	213	107	50.1%	208	104	50.1%	203	102	50.2%	199	100	50.2%	203	102	50.2%	199	100	50.2%
1,515	0	0.0%	1,512	26	1.7%	1,479	25	2%	1,446	25	1.7%	1,414	25	1.8%	1,383	25	1.8%	1,353	24	1.8%	1,323	24	1.8%	1,294	24	1.8%	1,265	24	1.9%	1,238	23	1.9%	1,265	24	1.9%	1,238	24	1.9%
11,355	0	0.0%	11,336	520	4.6%	11,086	511	5%	10,842	502	4.6%	10,604	493	4.6%	10,370	484	4.7%	10,142	475	4.7%	9,919	467	4.7%	9,701	459	4.7%	9,487	450	4.7%	9,278	442	4.8%	9,487	454	4.8%	9,278	446	4.8%

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
96,870	96,870	96,672	96,474	96,276	96,079	95,883	95,686	95,490	95,295	95,099	94,905	94,710
89,904.47	89,749	87,774	85,843	83,953	82,106	80,299	78,532	76,804	75,113	73,460	71,844	70,263
1,856	1,853	1,816	1,780	1,744	1,709	1,675	1,641	1,609	1,576	1,545	1,514	1,484

11,082.45	7,221	7,080	6,941	6,805	5,998	6,541	6,413	6,287	6,164	6,043	6,186	5,988
229	149	146	144	141	125	136	134	132	129	127	130	126

78,822.02	82,528	80,695	78,902	77,149	76,107	73,758	72,119	70,517	68,950	67,418	65,658	64,275
1,627	1,704	1,669	1,636	1,603	1,584	1,539	1,507	1,477	1,447	1,418	1,384	1,357
4.46	4.67	4.57	4.48	4.39	4.34	4.22	4.13	4.05	3.96	3.88	3.79	3.72

Appendix 1 – Educational Materials

The following educational materials are posted on the Putnam County Health Department's social media pages. Some topics such as Household Hazardous Waste Collection Events and Medication Takeback Days are covered in News Briefs that are posted on the Putnam Health Website and Putnam County Government Website and are picked up by local newspapers. All of the topics that are covered on social media are versatile in medium style; resulting in them also being used as paper pamphlets or handouts at community events.

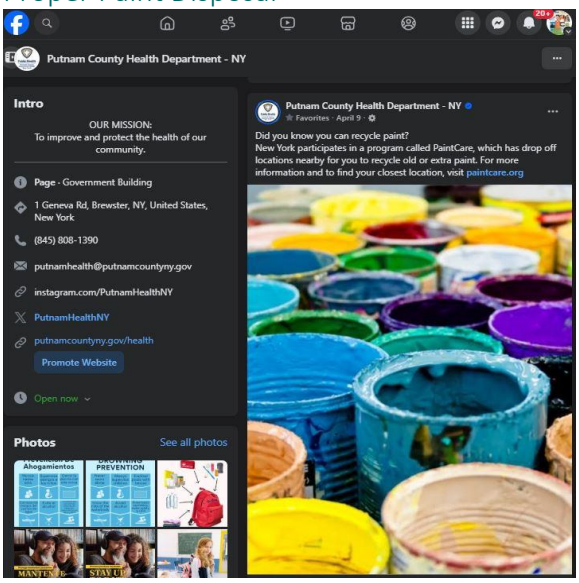
Social Media

Instagram/Facebook

Waste Less Food During the Holidays



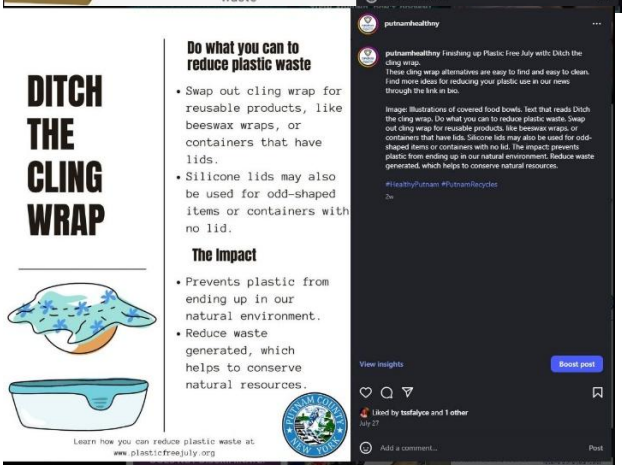
Proper Paint Disposal



Plastic Free July





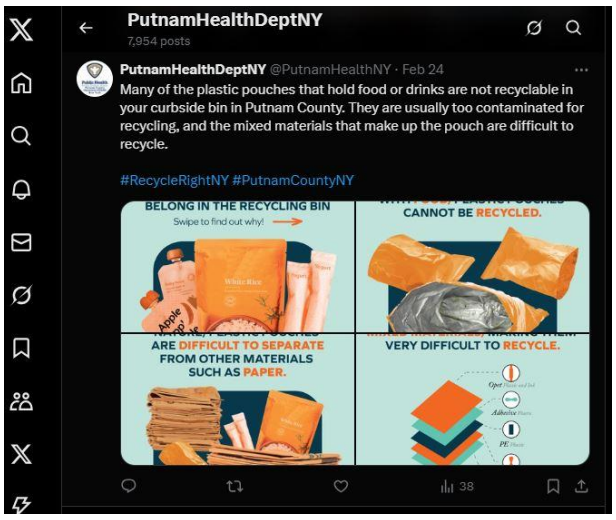




X (formerly Twitter)

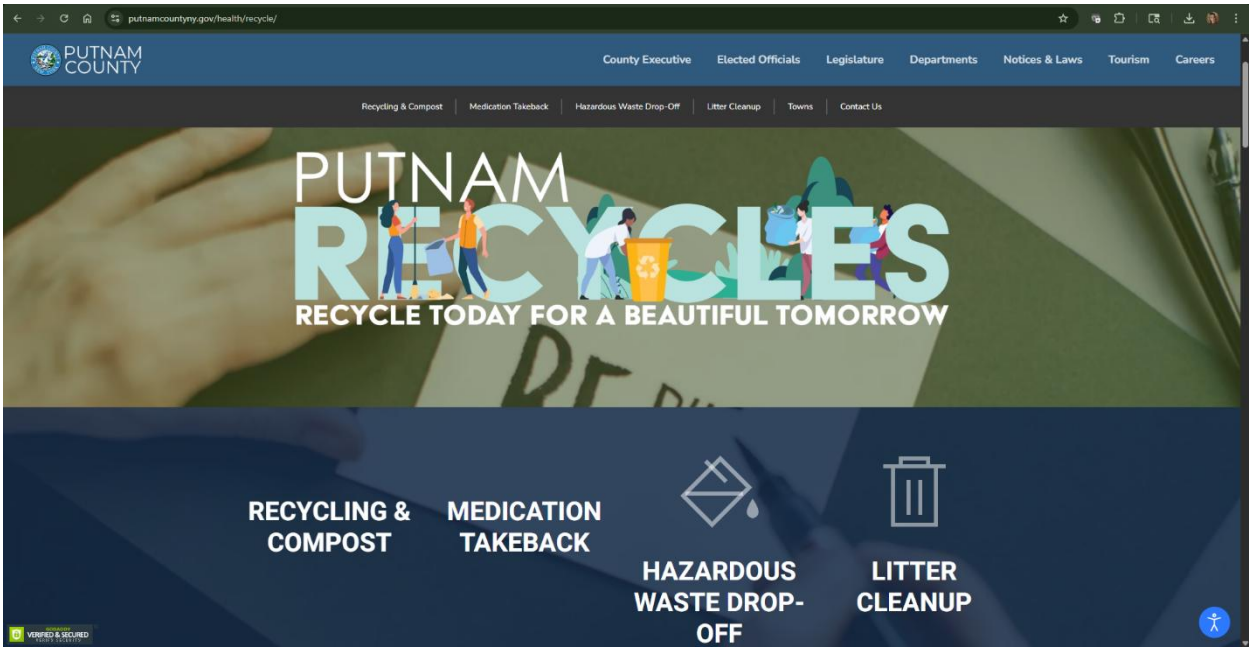
Keep Putnam Beautiful – Litter Pickup & Plastic Pouches don't belong in the Recycle Bin (a report of RecycleRightNY)





Putnam Recycles Website

Homepage https://putnamcountyny.gov/health/recycle/



Recycling and Composting Information



Hazardous Waste Drop-off



Putnam County hosts two Household Hazardous Waste Drop Off Days (HHWD) each year, typically the first weekends of May and October at the Canopus Beach Parking Lot at Fahnestock State Park.

The next Household Hazardous Waste Collection Event is tentatively scheduled for October 4. Registration for the fall event will open on September 1. Please email putnamrecycles@putnamcountyny.gov to be notified when registration opens for our Fall 2025 event.

All waste is subject to inspection and will only be accepted in the County's discretion. Please be advised that if any not accepted items as specified above are brought and are determined to present a hazard to residents, workers or the environment, Putnam County reserves the right to take any necessary safety measures, the cost of which shall be the resident's responsibility.

Paint Recycling

New York State participates in the paint recycling program PaintCare, with several drop-off locations in and near Putnam County. For a list of accepted products, as well as a locator, visit paintcare.org

Electronics Recycling

Each town in Putnam County has their own electronics recycling program. Please check with your town for additional information.
Old or broken electronics can also be brought to Best Buy or Staples for recycling. For items that still work, consider a trade-in program, selling or donating the item.

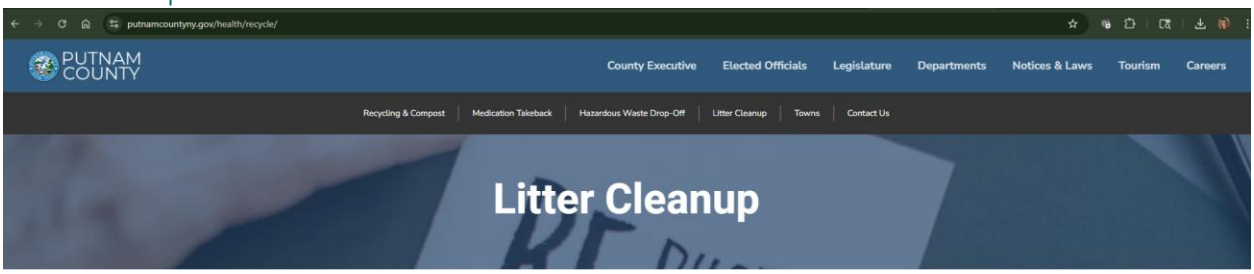
What to Bring:

- Photo Chemicals
- Non-latex driveway sealer
- Pool Chemicals
- Creosote
- Waste Fuels (Kerosene, Gasoline, oil mixtures, brake fluid, antifreeze, auto fluids)
- Flammable liquids (Lighter Fluids)
- Metal polish
- Drain/oven cleaners
- Rug/upholstery cleaners
- Wood Preservatives
- Turpentine
- Stains & Varnishes
- Paint Thinners & Strippers
- Wood Preservatives
- Mothballs
- Rodent poisons
- Flea powders & collars
- Bug spray
- Nail polish remover, hair dye & hair sprays
- Pesticides (Bactericides, Herbicides, Fungicides, Insecticides)
- Chemical Fertilizers
- Adhesives, Resins, Solvents
- Oil-based & Latex paints
- Mercury containing products
- Button cell batteries (from watches, hearing aids) non-rechargeable only
- Fluorescent light bulbs & tubes
- Hand sanitizer (methanol tainted)

What NOT to Bring:

- Electronics, Computers, VCR's (e-waste)
- Used motor oil
- Plastic bags
- Tires
- Unlabeled/unidentified containers
- Household batteries(AAA, AA, C, D, 9V)
- Rechargeable batteries, sealed lead acid batteries, car batteries, tool batteries
- Fire Extinguishers
- Propane Tanks
- Ammunition, explosives, fireworks
- Asbestos products
- Construction debris
- Furniture, toys or clothing
- Smoke Detectors
- Medical waste, old medications
- NO COMMERCIAL BUSINESS ITEMS
- ITEMS IN GARBAGE AND/OR LAWN BAGS WILL NOT BE ACCEPTED

Litter Cleanup



Did you know Putnam County has a Litter Patrol? If you see litter on the roadside, let us know by filling out this form. Your request will be shared with the Litter Patrol to place on their workorder list.

Litter Pick-up Equipment Rental

Planning a community clean-up or beautification project? We offer free rental of litter pickup equipment to help keep your neighborhood looking its best. Residents can borrow high-visibility safety vests, litter grabbers, traffic cones, "Slow Traffic" signs, and orange garbage bags. Whether you're organizing a school project, volunteer day, or neighborhood cleanup, our gear ensures your team can work safely and efficiently. Submit a request with this form: https://forms.office.com/g/VavL7Uucsa

Litter clean-ups are an opportunity for residents to assist in efforts to keep Putnam County roadways clean. Most importantly, these clean-ups should be done in a safe manner and only on county or town roads.

Have a safe and successful litter cleanup:

Safety Checklist for Litter Clean-up Event +

Tips for a Successful Litter Clean-up Event +

Media Releases/News Briefs

Posted online and picked up in local papers

Plastic Free July



Get Ready for Plastic Free July!

29 June 2023

Each July, the Plastic Free Foundation challenges people around the world to refuse single-use plastics as much as possible throughout the month. Many single-use plastics end up as litter in our roads, greenspaces, and waterways, contributing to plastic pollution worldwide. Plastic pollution often affects communities and countries that do not have the resources for clean-ups, impacting the quality of life, wellness, and health of people living in these high pollution areas. Conventional plastic derived from fossil fuels will never biodegrade; it will continue to break into smaller and smaller pieces, eventually becoming micro- or nanoplastics. These tiny plastics stay in the environment forever and have been found in human blood and organs, the long term effects of which are still unknown. Certain bioplastics, made from plants and other organisms, are biodegradable under the right conditions and may provide healthier choices for the future.

It certainly is a challenge to give up convenient single-use plastics, but even little steps will make a difference. Here are a few ideas to get started:

1. BYO
   Bring your own... reusable straw, water bottle, leftover containers, and more. Many single-use items made of plastic are used for only minutes and then destined for the garbage heap. Thinking about your day when leaving the house can make a big impact on how much plastic you use. Grab a reusable water bottle or a container for leftovers if you're going out to eat. If you think you might stop for coffee, bring your travel coffee mug with you.
2. Shop smart for groceries.
   Forgo the plastic produce bags whenever possible, or switch to reusable produce bags. Shop at your local farm or farmer's market for produce to avoid foods pre-packaged in plastic. Use a shopping list to reduce impulse purchases that may include plastic packaging.
3. Switch to bar soaps.
   All sorts of soaps are now available in bar form: Hand soap, body soap, shampoo, and conditioner. Bar soaps are often packaged in just paper, which can usually be composted in your backyard. There are even solid lotions, deodorants, and shaving products in plastic-free packaging.
4. Ditch the cling wrap.
   Swap out cling wrap for reusable products, like beeswax wraps, or use containers that have lids- even if they are reusable plastic containers. Use stretchable silicone lids for containers without lids or for odd-shaped items.
5. Party without plastic.
   Skip balloons and plastic decorations. Use banners made from fabric, paper streamers, or paper puffs instead. Replace plastic tablecloths, plates, cups, and flatware with reusable versions. Join a Buy Nothing group on Facebook to receive or borrow these items from like-minded people in your neighborhood.
6. Use cloth diapers.
   In their first two years of life, a baby will use about 6,000 diapers, which are mostly made from plastic. Cloth diapers are easily washed at home and can be used for multiple children. Using cloth diapers doesn't have to be all or nothing- using them only at home will also drastically reduce your family's plastic use. Investing in a set of 12-24 cloth diapers will also mean cost savings for one or multiple children, even after factoring in energy and water costs.
7. Choose paper packaging over plastic.
   Paper packaging has many benefits over plastic packaging- paper biodegrades, it can come from a renewable resource, it can be recycled or composted, and it is more cost-effective in many ways. Look for brands of toilet paper that are available with paper wrapping. There are also delivery services and products that do not use plastic packaging.

Plastic free doesn't mean to throw away all the plastic products you have at home, but to wait until they are used up or need to be replaced to buy longer lasting products. The above list is a starting point for using less plastic in your life. They are all small changes that can add up to big impacts. In the words of the Zero- Waste Chef Anne Maria Bonneau, "We don't need a handful of people doing zero waste perfectly. We need millions of people doing it imperfectly." For more ideas to reduce your plastic use, visit https://www.plasticfreejuly.org/get-involved/

How to Keep Putnam Beautiful (Promoting Litter Patrol)



How to Keep Putnam Beautiful

04 June 2025

The beauty of Putnam County is especially evident in spring and early summer when the trees fill out and plants are blooming. Even driving along county roads lined with trees, one can feel immersed in nature. Unfortunately, roadside litter can be an eyesore in an otherwise serene setting. Other than not contributing to the problem, there are two solutions Putnam residents can use to keep roadside litter at bay: the County's Litter Patrol, and volunteer road cleanups.

The Litter Patrol is staffed by the Arc of Mid-Hudson; their crews pick up litter on county roads. While they rotate different roads across the county, they also respond to reports of litter. Putnam residents can report litter on county roads in a convenient form found on the Putnam Recycles website at putnamcountyny.gov/health/recycle or by clicking here. The form can also be found through the QR code below. The road with litter is added to the schedule and cleaned up shortly after.

Volunteer road cleanups can be done by any Putnam County resident or group on town or private roads. The health department loans litter cleanup equipment, including high visibility vests, litter grabbers, and garbage bags. If you're interested in borrowing equipment or organizing a road cleanup, visit the Putnam Recycles website at putnamcountyny.gov/health/recycle. Safety guidelines and tips for a road cleanup can also be found on this website.

If you see litter on the Putnam Trailway, please notify Parks and Recreation in the Putnam County Department of Public Works through their website, putnamcountyny.gov/parks-recreation.

Press Release

Putnam Prepares for America Recycles Day, November 15

PUTNAM COUNTY DEPARTMENT OF HEALTH

PRESS RELEASE

Advises Recycle More, Avoid "Wish Cycling"

Putnam Prepares for America Recycles Day, November 15;

05 November 2024

BREWSTER, NY—As America Recycles Day approaches, the Putnam County Department of Health is calling on residents and visitors to embrace the challenge to refuse, reduce, reuse and recycle more. Celebrated annually on November 15, the day is an initiative of the non-profit organization Keep America Beautiful, and the only nationally recognized day to promote and celebrate recycling in the United States. The idea behind it is to educate, motivate and make recycling bigger and better.

"There is no doubt that recycling can be confusing," says Victoria DiLonardo, who previously held a position as recycling coordinator, and now works in health education. "But there are many simple things one can do to recycle better and reduce the amount of waste they produce. Each single effort makes a difference."

That is because recycling everyday objects, such as paper, glass and plastic bottles, clothing and electronics, saves energy. Using these recycled materials to create new products means less virgin material needs to be harvested, mined, processed, manufactured and transported. These processes consume energy and increase greenhouse gases.

In Putnam County, curbside garbage and recycling are managed by each town and the health department website makes it easy to find who to contact if questions arise. A link on the Putnam Recycles page can be found here: https://www.putnamcountyny.gov/health/recycle#towns

Curbside recycling has made things much easier and single stream recycling has simplified things further. When in doubt about a particular item, a handy resource is the New York State "Recyclopedia." This search tool and guide at www.recyclerightny.org/statewide-recyclopedia provides reduction, reuse, and recycling instructions for more than 300 common household items. Simply enter the item name into the search bar or explore one of the 13 pictured categories to learn what to do to reduce waste when things are no longer needed.

Progress in increasing recycling has been made over the decades. In fact, according to the Environmental Protection Agency, known as the EPA, the national recycling rate has increased four times over from meager beginnings in 1960 of less than seven percent to a rate of 32 percent in 2018. In Putnam County however, the recycling rate was much lower at just 17 percent in 2023. Increasing awareness and knowledge surrounding recycling, dispelling myths and expanding awareness of waste reduction practices are important priorities.

One question people face when trying to recycle is what to do with an item they are unsure of. Is it better to throw it in the recycling bin or garbage? Here the answer is simple: If in doubt, throw it out. Non-recyclable items can damage sorting machinery and contaminate otherwise good recyclables. This ultimately results in larger amounts being dumped in a landfill. There is a term for this—"wish cycling" and it comes from good intentions. Wish cycling is best avoided to reduce contamination of other recycled products.

Another common dilemma is what do with a used pizza box, which likely has some grease and cheese on it. The Keep America Beautiful website says that the amount of grease and cheese typically in a pizza box is not an issue for the recycling process. This means that pizza boxes with grease and cheese spots less than the size of a credit card can go straight into your curbside recycling bin. Too much grease will interfere with the recycling process by weakening the strength of the recycled paper fibers; cheese dissolves or is eliminated during the pulping, paper-making process. To avoid the possibility of wish cycling it's best to remove large grease spots or chunks of cheese before recycling. Throwing away the bottom part and recycling only the lid is another option.

Residents can learn more and test their recycling know-how at the Keep America Beautiful website here: www.kab.org/recycling/recycling-reality-check-quiz/

The mission of the Putnam County Department of Health is to improve and protect the health of the Putnam County community. The department, nationally accredited by the Public Health Accreditation Board (PHAB) through 2029, serves a community composed of nearly 100,000 residents. Core services are provided through a lens of equity, and include community health assessment, disease surveillance and control, emergency preparedness, environmental health protection, family health promotion and health education. For more information, please visit the County website at www.putnamcountyny.gov, or visit our social media sites on Facebook, X (formerly known as Twitter) and Instagram @PutnamHealthNY.

For online information:

- Environmental Protection Agency (EPA): www.epa.gov/recycle
- Putnam Recycles: https://www.putnamcountyny.gov/health/recycle#towns
- New York State Recyclopedia: www.recyclerightny.org/statewide-recyclopedia
- Keep America Beautiful: www.kab.org/recycling

Appendix 2 The Public Comment Responsiveness Summary

The public comment period for this plan took place from November 17-December 31, 2025. A notice was posted on the Putnam County Department of Health as a News Brief on November 3, 2025, advertising[45] the public meeting that took place on November 18, 2025, from 5:30p-6:50p at the Putnam County Bureau of Emergency Services Training and Operations Auditorium. The draft of the LSWMP was posted on the Health Department's website and can be viewed at the link: https://putnamcountyny.gov/health/recycle#LSWMP and paper copies were made available at the Health Department, the town and village https: At the public meeting, members of the planning unit were present and were accompanied by 5 residents; two residents lived in Philipstown, one in Patterson, one in Carmel, and one in Kent. Comments were accepted by three mechanisms; the first option was for those who attended the public meeting who could ask their questions following the presentation, the second by phone throughout the public comment period by leaving a voicemail at 845-808-1390 ext. 43164, and finally, by electronic form submission throughout the planning period by visiting the link: https://forms.office.com/g/JDRWTcYRJp which has been deactivated as of December 31, 2025 at 11:59pm. The comments received by the planning unit verbally and written, and the responses to each are as follows and are responded to individually or by appropriate grouping. The comments and questions reflected in this responsiveness summary appear in **bold text** and have not been edited for spelling or grammatical accuracy. Certain comments may have been redacted solely to remove identifying information. Based on the questions asked and comments submitted during the public comment period, one minor change was made to the description of a table in Chapter 2; the rest of the plan remains as it was submitted for the public comment period.

The County sincerely thanks all residents who took the time to attend the public meeting, review the draft plan, and submit comments. Public participation and thoughtful feedback are greatly appreciated and play an important role in ensuring transparency, community engagement, and informed planning decisions.

Waste Management

1. **In what way does the planning unit suggest that towns and villages can collaborate with the Health Department to improve how solid waste in this county to reach the same level of oversight as other counties in the Mid-Hudson Region?**

   The planning unit has identified methods for engaging and collaborating with town supervisors, village mayors, schools, and community organizations through task forces, climate smart task forces, and municipal focus groups on an ongoing basis including during the planning process for this plan and as needed as programs and initiatives are identified through quarterly meetings, focus groups or other mechanisms for information gathering as it is perceived to impact the towns and villages.

2. **It would be extremely helpful in the common effort to reduce waste, to provide residents with County options to landfills. Many surrounding counties have current facilities to accept resident waste: hazardous, food scraps, building, etc. Many do it on a daily basis as a drop-**

[45] PCDOH News Brief on LSWMP Public Comment Period, November 3, 2025, https://putnamcountyny.gov/component/zoo/item/notice-of-public-comment-period-for-revisions-to-putnam-countys-local-solid-waste-management-plan?Itemid=143

off program. It is my experience that when people "see" what they are throwing out, they try to modify their behavior and throw out less. Thank you for all that you are doing to reduce "garbage" in Putnam County.

In the new plan, will there by an emphasis on Putnam County taking responsibility for the waste being produced here?

There are no suitable locations for landfills or Waste-to-Energy (WTE) facilities in Putnam County due to watershed constraints identified on page 12 of this plan. The planning unit will continue working with exporters and waste haulers to pursue more sustainable waste management practices and innovative alternatives to disposal, supported by improved data collection outlined in this plan. The absence of county-operated transfer facilities limits the County's ability to fully manage its generated waste.

3. **Why are only some of the inactive landfills located in Putnam County monitored by the NYSDEC and not all of them?**

Some inactive landfills in Putnam County, NY, are being investigated and monitored as part of New York State's Inactive Landfill Initiative (ILI) due to potential impacts on drinking water quality. These sites have been identified for groundwater contamination concerns, particularly the presence of per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane, which may pose risks to public health. Ongoing efforts include groundwater sampling, the installation of monitoring wells, and remediation actions where necessary to prevent contamination from reaching drinking water sources. The NYSDEC continues to assess these sites to determine necessary mitigation measures to protect the environment and public health. A complete table describing the characteristics of the inactive landfills can be found in Chapter 3, Table 3.2. Additionally, the New York State Inactive Landfill Initiative July 2024 Status report is referenced and linked to page 23 of this plan.

4. **When will the municipalities begin to get involved?**

Municipalities within the planning unit were engaged in developing plan components relevant to their jurisdictions, particularly Chapter 3 (waste generation) and Chapter 4 (materials management regulations). The implementation schedule outlines timelines for future focus groups with town supervisors and village mayors, which may shift depending on plan adoption and the duration of DEC review.

5. **The Commission for the Conservation of the Environment (CCE) of Putnam Valley commends Putnam County Department of Health for the commitment to reducing waste and promoting sustainable materials management over the next 10 years. These practices have great impact on both human and environmental health and should be prioritized as such. We appreciate the existing solutions throughout Putnam County and recommend the following as augmentation. More can be done to make waste management practices easier for both individuals and communities. Lack of standardization across towns (and sometimes districts within towns) results in confusing messaging and difficulties in regulating the haulers. Improved enforcement and accountability are necessary at every level, as are upstream reduction. With much of our county's waste being sent to**

Environmental Justice communities, these are moral concerns as much as practical ones. Without pay-as-you-throw models, there is currently a lack of incentive to properly "reduce and reuse" when the easiest solution is to simply discard. More frequent and varied locations for hazardous waste, e-waste, construction materials, refrigerants, and organic recycling could be facilitated by the county, with targeted engagement to larger commercial industries and schools as well as residents. We are excited to read about pilot programs for some of these and encourage minimizing financial and other investment barriers as much as possible. Environmental commissions and groups can be rallied as local education and enforcement. It would be helpful to have a collaborative resource for these entities to communicate through. We can all benefit from each other's knowledge, working together toward a common arch of goals. With your facilitation, we hope to work together towards creating healthier, cleaner communities.

These recommendations highlight ongoing, including the need for greater municipal standardization, clearer messaging, and stronger enforcement and accountability for haulers and generators. While upstream waste reduction, reuse, and incentive-based approaches such as pay-as-you-throw models are valuable long-term tools, this model is not included in the current plan due to unsuccessful implementation in the prior plan. Instead, the planning unit will conduct assessments of new and existing programs and municipal refuse and recycling practices using current waste generation and additional data sources to identify the most effective strategies during the planning period, as outlined in the implementation schedule through ongoing evaluation.

The planning unit acknowledges the moral and environmental justice implications of current waste disposal practices and the disproportionate impacts on other communities which informs planning and prioritization. PCDOH is collaborating with the Hudson Valley Regional Council, other Mid-Hudson counties and the NYSDEC to explore alternative regional solutions.

Access to hazardous waste, e-waste, organics, construction materials, and refrigerant recycling and disposal will be evaluated throughout the planning period based on available resources. This may include new or expanded special waste collection events or the identification of convenient disposal locations countywide. Emphasis on engaging commercial generators, schools, and residents, and on minimizing financial and logistical barriers, will be incorporated into evaluations of both new and existing programs

PCDOH welcomes partnerships in education, outreach, and enforcement, and agrees that stronger collaboration among environmental commissions and community groups would amplify the collective impact. The recommendation for a shared, county-facilitated resource or communication platform is well taken and aligns with the planning unit's goals for coordination and knowledge-sharing. Collaboration with the CCE and other stakeholders will be essential as we work toward cleaner, healthier, and more resilient communities.

6. **I think this is a very comprehensive report, and in the right direction. My suggestions are as follows: a simpler, more direct way and place to drop off e-waste and hazardous waste. If people have to drive far (the haz waste drop off) or have to wait in long lines (the e-waste) they are not likely to dispose of this material correctly. We need a regular drop-off place for both. Also, it would be great to have a food recycling program, or maybe one specifically for**

meat/dairy, which most people can't or don't know how to recycle. I understand Yorktown has a good functioning food scape recycling program that is a drop off.

The household hazardous waste (HHW) program is administered by the County, while e-waste collection programs are operated individually by each town or municipality. The current location of the hazardous waste drop-off was selected based on more than a decade operational experience and data and has proven most suitable given the space, safety, traffic, emergency access and regulatory requirements, which significantly limit viable locations.

A permanent hazardous waste facility is not included in the current plan but may be considered in the future; however, experience elsewhere shows that permitting alone can take up to 10 years before a facility is operational. For now, periodic collection events and regular education on how to properly dispose of household hazardous chemicals remain the most practical solution.

The County continues to evaluate ways to improve convenience, efficiency, and access within safety and State regulatory constraints. Food waste recycling, including meat and dairy, is also a priority, and successful programs like the Town of Bedford's food scrap drop-off, offer models that municipalities may consider based on local capacity. The suggestions are appreciated and will inform ongoing efforts to improve waste management across the county.

Food Scrap Recycling & Composting

7. **Will food scraps recycling be expanded to more than just vegetable peels and if it is, how will it be implemented?**

The conversations about food scrap recycling will take place once focus groups are underway with the municipalities and any other interested organizations that may be able to assist are identified and engaged. The expansion is going to depend on the infrastructure of those programs and the feasibility for each town or village.

8. **Is there a possibility of a composting facility within the County?**

Municipal food scrap recycling programs can include several approaches such as offering food scrap collection at farmer's markets, establishing curbside pickup services, creating a county-facility composting operation, and reviewing or updating the county code to ensure regulations support effective food scrap recycling/management. The implementation schedule includes three phases for a composting facility in the county as a pilot program and the same for municipal food scrap recycling. The multi-phase effort ensures adequate research, planning, design, and implementation for food scrap recycling and a composting system/facility. The research will focus on identifying the program's structure, securing support from leadership at the local level, and identifying funding streams/grants. Phase 1 starts with 'weigh and sorts' at county-owned buildings to assist with identifying appropriate sites, permitting needs, and developing a collection plan. Phase 2 will focus on preparing for a pilot by purchasing and installing bins, creating signage, and conducting outreach and training for facility staff. It then progresses to the launch of the pilot during which food scrap collection will begin, weekly data collection and facility check-ins conducted, and a community awareness and engagement campaign rolled out to share the program's successes overtime. Phase 3 will involve evaluating the overall effectiveness of the pilot and if successful and

sustainable, the expansion of the program to include municipal facilities such as town buildings or potentially making it available to the public.

Reuse & Recycle Directory

9. **Not a question, but a comment in support of having recycling information in one place because people want to recycle but, in many cases, they find it confusing. If they know where and how to recycling items, many, if not most, will do it.**

   Additional information on the Reuse and Recycle Directory can be found in Chapter 5 on page 51 of this plan.

School Programs for Recycling and Education

10. **Thank you for presenting this plan. It is comprehensive and clearly very well researched and thoughtfully developed. My specific concern relates to school districts, based on my personal experience as a teacher in a local public school district for 30 years. I am now retired. While working at a middle school in the district, I served as advisor for an environmental club that operated the school's recycling program. All recycling collection and dumpster dumping were done by students under my supervision. I assumed this role after a previous advisor transferred to another building. When I retired, no one was willing to take over as advisor, and as a result, all recycling in the building ceased. This is a serious issue that needs to be addressed. School systems generate an enormous amount of waste and should not be exempt from a mandatory recycling program. Recycling should not depend on the willingness of a teacher to run a club or on student labor. While I fully support student involvement from an educational standpoint, school districts themselves must be held accountable for maintaining recycling programs. Custodians already collect trash daily; adding recycling collection and disposal is an additional but manageable responsibility. The scale of school district waste is too large to leave this to student volunteers. Secondly, during my time as club advisor, I worked for years to eliminate disposable Styrofoam trays in school cafeterias. Styrofoam is a highly damaging pollutant, and the environmental impact of thousands of trays being discarded daily is substantial. Styrofoam should be banned countywide with no exemptions. Our club raised funds to purchase reusable trays, and the school district installed appropriate dishwashers. However, within a year, the reusable trays were discarded and the cafeteria returned to Styrofoam. While I do not know the current status of cafeteria trays at that school, I suspect Styrofoam may still be in use. Although running a cafeteria is a complex task, it can be done without disposable Styrofoam trays. Convenience should not outweigh environmental responsibility. Thank you for listening and for taking on this important and challenging work.**[46]

    The County appreciates the commenter's insight and long-standing experience in public education. While public school districts operate independently, they are subject to applicable recycling and source separation requirements. When concerns arise, the Putnam County Health Department is available to provide guidance and, when appropriate, follow up to support adherence to State and Local regulations.

[46] This comment was revised to redact the mention of a specific district and school to maintain focus on the importance of adhering to source separation and polystyrene alternatives.

The Plan emphasizes collaboration with school districts to assess current waste and recycling practices, identify specific needs, and provide educational and technical support. The County will work with districts to share best practices, develop building-level refuse and recycling guidance, and offer curriculum materials that promote environmental stewardship among students. These efforts are intended to support sustainable, staff-supported programs that integrate student participation as an educational opportunity.

The County recognizes the environmental impacts of polystyrene products and will distribute State-developed educational materials on the polystyrene ban to relevant stakeholders (not just schools). While broader restrictions would require legislative action, the Plan supports continued evaluation of polystyrene reduction strategies through education, policy review, and engagement with institutions to encourage feasible alternatives.

Recycling Centers

11. **I am a member of the Kent Recycling Center. It is an absolutely wonderful part of our community. It does so much to reduce waste, as well as build community spirit. I strongly urge the support of the center and encourage the development of other centers in the county. At this point the Kent Recycling Center is not taking new members because they are at capacity. It would be such a great move to figure out what resources they need so they don't have to turn people away. And this wonderful resource should be available to all Putnam County residents.**

The County cannot mandate the creation or expansion of town-operated recycling centers, nor can it require one municipality to accept residents from another. However, the County can play a coordinating and supportive role by facilitating communication between municipalities, identifying best practices from successful centers such as the Kent Recycling Center, Philipstown Recycling Center and Patterson Recycling Center, and providing technical assistance or planning support where feasible. The County will also explore opportunities to pursue grants, partnerships, or pilot programs that could help towns assess capacity needs, improve existing facilities, or evaluate the feasibility of new or expanded recycling centers to better serve residents countywide. The County does not have any current plan to open a county-wide recycling center.

Financial Structure of Proposed Changes

12. **This plan seems to be almost completely devoid of a proper financial accounting of the various changes and additional requirements that are proposed, property taxes in the county including the waste management components are already very high by national standards. I hope legislators consider the cost/benefit before considering approving this plan on behalf of their constituents. Many of us are perfectly happy with the current setup.**

On page 41, in the Solid Waste Programs section under Data Gaps and Informational Needs, the plan identifies that the Planning Unit, the County, will conduct a formal survey of existing waste collection, transportation, processing, and disposal infrastructure. This survey is intended to assess current system capacity, efficiency, gaps, and associated costs. It will include municipal contracts with haulers, sanitation program costs, and tipping fees at primary facilities located outside the County that receive waste generated within the Planning Unit.

At this stage, detailed costs for the proposed activities, projects, and programs listed in the implementation schedule beginning on page 66 are still pending and cannot be finalized until the plan is approved by the NYSDEC.
Once the necessary data is gathered, a cost/benefit analysis for each activity, project, and program will be presented to the Legislature before any changes are made where legislative input and approval are required. This ensures that decisions are informed, transparent, and made with consideration for residents and municipalities.

It is also important to note that the additional requirements outlined in the plan are based on existing statutory and regulatory requirements under the New York State Environmental Conservation Law. The plan does not mandate immediate changes for residents or municipalities upon adoption. Rather, it serves as a planning framework that allows the County to prepare for future regulatory, operational, and environmental needs while reinforcing and improving current recycling and waste refuse practices.

Planning for the future, while strengthening existing programs, helps ensure long-term system reliability, regulatory adherence, and cost control.

Comments from the New York State Department of Environmental Protection

13. **Chapter 2 of the SWMP mentions that 5.5 million gallons of septage was generated in Putnam County in 2024; however, this data is not included in Table 2.1 (pg. 20). DEP is curious as to whether this was simply an oversight or if septage is categorized and tracked differently than other forms of waste.**

    A revision was made to the description to include the language "The amount of biosolids generated in Putnam County is included in Table 2.1 as reported by Septic Waste haulers in the permit application and is an aggregate of septage, sewage, and sludge." Additionally, Table 2.1 included a total of 3,430,000.00 Gallons indicated as Biosolids - WWTP – Sludge, therefore a footnote was added to table 2.1.

14. ***COMMENT:*** **In general, please note that new or modified solid waste management facilities within 300 feet of a watercourse or New York State regulated wetland, or within the limiting distance of 500 feet of a reservoir, reservoir stem, or controlled lake, require DEP review and approval of a stormwater pollution prevention plan (SWPPP) pursuant to Section 18-41 of the Watershed Regulations.**

    Putnam County acknowledges this requirement for future planning considerations.

Appendix 3 The Legislative Resolution for Plan Adoption

PUTNAM COUNTY LEGISLATURE

Resolution #252
Introduced by Legislator: Nancy Montgomery on behalf of the Health, Social, Educational & Environmental Committee at a Regular Meeting held on October 6, 2026.

APPROVAL – ADOPTION OF THE PUTNAM COUNTY LOCAL SOLID WASTE MANAGEMENT PLAN (LSWMP) FOR 2025–2034

WHEREAS, pursuant to 6 NYCRR Part 360 and the requirements of the New York State Department of Environmental Conservation ("NYSDEC"), municipalities and planning units are encouraged to develop and maintain Local Solid Waste Management Plans ("LSWMPs") to address the management of solid waste generated within their jurisdictions; and

WHEREAS, the County of Putnam has prepared the Putnam County Local Solid Waste Management Plan for the planning period 2025–2034 ("LSWMP") in accordance with NYSDEC guidance and requirements; and

WHEREAS, the LSWMP evaluates existing solid waste management practices, waste generation trends, recycling and diversion activities, infrastructure, and future planning needs within Putnam County; and

WHEREAS, the LSWMP establishes goals, policies, and implementation strategies intended to promote sustainable materials management, increase recycling and waste reduction efforts, improve public education and outreach, and protect public health and the environment; and

WHEREAS, the Putnam County Department of Health, through its Environmental Health Services Division, has coordinated the development of the LSWMP with participation and input from municipalities, agencies, stakeholders, and the public; and

WHEREAS, the County Legislature finds that adoption of the LSWMP is in the best interests of the residents of Putnam County and supports the County's ongoing commitment to responsible environmental stewardship and sustainable solid waste management practices; now, therefore be it

RESOLVED, that the Putnam County Legislature hereby adopts the Putnam County Local Solid Waste Management Plan for the period 2025–2034; and be it further

RESOLVED, that Putnam County shall implement and maintain the solid waste management system as described in the final Local Solid Waste Management Plan and undertake reasonable efforts to carry out the goals, policies, and implementation strategies identified therein; and be it further

RESOLVED, that Putnam County shall prepare and submit biennial updates to the New York State Department of Environmental Conservation in accordance with applicable requirements of 6 NYCRR Part 360 and related NYSDEC guidance; and be it further

RESOLVED, that the Clerk of the Legislature is hereby authorized and directed to forward copies of this Resolution and the adopted Local Solid Waste Management Plan to the New York State Department of Environmental Conservation and any other agencies as may be required.

BY POLL VOTE: ALL AYES. MOTION CARRIES.

APPROVED

10/19/26

COUNTY EXECUTIVE **DATE**

State of New York
ss:
County of Putnam

I hereby certify that the above is a true and exact copy of a resolution passed by the Putnam County Legislature while in session on October 6, 2026.

Dated: October 9, 2026

Signed:

Diane Trabulsy
Clerk of the Legislature of Putnam County