



Solid Waste Management Plan

Thomas Jefferson Planning District



2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

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Executive Summary

The following is an update to the Thomas Jefferson Planning District Solid Waste Management Plan. It includes a description of existing and projected population, facilities, and a plan for management of the solid waste generated by the population and industrial and commercial activities of the Thomas Jefferson Planning District. This plan serves as the regional plan for the local governments of Albemarle County, City of Charlottesville, Fluvanna County, Greene County, and the towns of Columbia, Scottsville, and Stanardsville. The plan details proposed systems for recycling, reuse, collection, disposal and treatment of a large variety of wastes, and establishes general goals and policies.

The planning group met regularly over the course of a year to write this plan both to satisfy the Virginia Department of Environmental Quality requirements, and to serve as a basis for strategic planning for solid waste in the longer term.

The group recommends the following basic strategies:

- ❑ **Regional approach:** Regional efforts will yield better results than localized solutions, especially with high costs and capital needs for operations. Joint contracting, collection, disposal and recycling operations can provide budget and resource savings, and allow the region to join markets at a competitive level with larger cities.
- ❑ **Increased recovery:** Recovery of a larger percent of valuable material, such as recyclables and organic matter, leads to a better balance sheet and longer disposal facility lifetimes. This includes more curbside and drop off collection and education.
- ❑ **Reduce total waste:** Source reduction, reuse and recycling decrease the need for disposal, which is generally not considered a desirable option. In order to limit the negative impacts our communities have on others, the total volume of waste disposed of must be kept to a minimum.
- ❑ **Material Recovery Facility (MRF):** Establishment of a MRF to separate recyclables and other valuable material from commingled collection would increase recovery rates.

Some elements of the plan will require additional study.

Adopted by the Thomas Jefferson Planning District Commission on June 29, 2004

Amendment History:

- ❑ **April 5, 2007:** Added Environmental Management Systems as a method to achieve source reduction and reuse.
- ❑ **July 17, 2007:** Added the Zion Crossroads Recycling Center as a solid waste management facility.
- ❑ **June 5, 2008:** Removed Nelson County from the solid waste plan, reflecting the county's withdrawal from the region.

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Introduction and Background on Plan

In 1990, the Virginia Department of Waste Management published regulations for the development of Solid Waste Management Plans. The regulations established minimum solid waste management standards and planning requirements applicable to all cities, counties, towns, or designated regions in the Commonwealth of Virginia.

The first regional solid waste plan undertaken by the Thomas Jefferson Planning District Commission was adopted in 1983 in response to the Virginia Solid and Hazardous Waste Management Act of 1979. Another plan was developed and adopted by all member governments in 1989. The TJPDC adopted its first plan required under the new regulations in 1991. At that time, the Thomas Jefferson Planning District, Virginia Planning District 10, was designated as the “region” for purposes of solid waste management planning.

This plan is designed to meet state planning requirements and to assist member governments with planning and decision making for solid waste management issues over the next 20 years. It is a summary of the findings and recommendations of a steering committee composed of local staff and members of the public appointed by localities. Public input was gathered at meetings in November 2003 and June 2004, and via a small survey, through the help of the Rivanna Solid Waste Authority Citizen Advisory Committee. Staff also made presentations at meetings of locally elected officials and civic group meetings. Economic, environmental, social, transportation and feasibility concerns were taken into account in developing the recommendations in the plan. Short and long term goals are included, as well as some specific projects and timelines for implementation.

The Thomas Jefferson region for solid waste management planning includes the Counties of Albemarle, Fluvanna, and Greene, the City of Charlottesville, and the Towns of Columbia, Stanardsville, and Scottsville. The region has the same boundaries as the Thomas Jefferson Planning District (Planning District 10) with the exclusion of Louisa and Nelson Counties, and the Towns of Louisa and Mineral. The City of Charlottesville and Albemarle County created the Rivanna Solid Waste Authority (RSWA) for waste management, operation and reporting. The University of Virginia is within the planning district and contributed to the development of this document. Louisa County and its towns have their own solid waste management plan. Nelson County is taking part in the Region 2000 solid waste management plan.

Goals, Objectives, and Implementation Strategies

Introduction and Guiding Principles

The following goals, objectives, and recommendations address the waste management hierarchy of Source Reduction and Reuse, Recycling, Resource Recovery and Incineration, and Landfilling as defined by the Virginia Department of Environmental Quality. The 1998 Sustainability Accords, endorsed by the Thomas Jefferson Planning District Commission and its member localities: Albemarle, Charlottesville, Fluvanna, Greene, Louisa, and Nelson, address waste management with one broad goal and six measurable objectives. They are the guiding principles for this Plan.

Goal: The wasteful use of resources and the creation of non-recyclable waste by-products are reduced and, wherever possible, eliminated.

Objective 1: Increase recycling of usable materials.

Objective 2: Minimize the use and unsafe disposal of hazardous material.

Objective 3: Promote a sense of individual responsibility for limiting waste.

Objective 4: Increase individual and cooperative efforts to reduce waste.

Objective 5: Increase the understanding and practice of the six-step approach to waste reduction: rethink, reduce, reuse, buy recyclables, recycle, and material exchange.

Integrated Waste Management Strategy

Each of the following goals under the integrated waste management strategy support the Sustainability Accords and strengthen them with a more in depth examination of methods to achieve them.

Planning

Goal: To work together as a region to develop efficient, coordinated and fiscally sound contracting for solid waste management facilities.

Objective 1: Evaluate opportunities for regional disposal and recycling contracts within the next year and catalog all existing contracts for each locality.

Sustainability Accords

Retain the natural habitat

Ensure water quality and quantity are sufficient to support people and ecosystems

Optimize the use and re-use of developed land and promote clustering

Promote appropriate scale for land uses

Retain farm and forest land

Develop attractive and economical transportation alternatives

Conserve energy

Provide educational and employment opportunities

Increase individual participation in neighborhoods and communities

Strive for a size and distribute the human population in ways that preserve vital resources

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Objective 2: Identify barriers – legal, fiscal, bid packaging, service or other barriers – to regional coordination of contracts and study methods to reduce or eliminate identified barriers.

Recommendations:

- As existing contracts expire or are cancelled, align the dates of new contracts region-wide to facilitate future coordination.
- Develop a common template that sets the parameters for future contracts. (Thomas Jefferson Planning District Commission -TJPDC)
- Continue to execute contracts locally to preclude regional liability problems. (Participating localities)
- Allow bids to include or exclude different contracts, but encourage comprehensive, packaged bids that include both the desirable and undesirable elements.
- Study the feasibility of regionally coordinating contracts for special waste collection.

Source Reduction and Reuse

Goal: To reduce the quantity of waste generated through source reduction, reuse, and other possible waste reduction techniques.

Objective 1: Create a regional education program on source reduction and reuse.

Recommendations:

- Prepare public educational materials that specifically identify ways to purchase goods that: have minimal packaging, are re-usable, can be recycled, or are made of recycled materials.
- Define the source reduction and reuse criteria best suited for large-scale procurement contracts.
- Inform public and private procurement officials of the source reduction and reuse criteria best suited for large-scale procurement contracts.

Objective 2: Support and expand the region's reuse techniques.

Recommendations:

- Support expansion of programs such as Habitat for Humanity Store for the reuse of building materials.
- Study methods to increase the use of the "Encore Shop" at the Ivy transfer station site, including, but not limited to, providing household goods to former homeless persons.
- Study the feasibility of locating additional reuse "Encore Shops" at each landfill and transfer station in the region.
- Support Freecycle as a forum that encourages reuse while requiring no centralized storage location.

Objective 3: Consider ordinances that allow for establishing manufacturing facilities within the region that could remanufacture the region's recyclable materials. (Local governments)

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Objective 4: Support Environmental Management Systems for public and private entities that include source reduction and reuse.



Effective Reuse Facility in Fluvanna County

Recycling

Goal: Expand the region's programs and facilities that provide recycling services to the public and the private sectors.

Objective 1: Study methods to cost-effectively expand existing recycling facilities and locate new facilities.

Objective 2: Achieve a minimum 25% recycling rate in each participating locality and the region.

Recommendations:

- Identify and map all recycling facilities in the region and determine the feasibility of expanding them on-site, including the co-location of recycling and reuse facilities.
- Study the feasibility of coordinating the pickup and transportation of cardboard from businesses to recycling markets.
- Identify prospective locations for future recycling facilities, focusing on growth areas defined in each locality's comprehensive plan.
- Ensure local government comprehensive plans and ordinances consider issues related to siting of recycling facilities.
- Develop recycling and composting programs in the schools.
- Develop and improve availability of recycling information, including a recycling brochure, a unified recycling information website, public service announcements and advertisements, a traveling display, and a speakers' bureau.
- Promote home composting.

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Goal: Expand the collection and types of recyclables collected, including but not limited to fiber recycling, and increase the likelihood of expanding the markets for these recyclables.

Objective: Research the possibility of establishing a materials recovery facility (MRF) within the region. (Local governments, economic development organizations, and the private sector)

Recommendations:

- Determine if a local MRF would be cost effective in handling the region's materials collected for recycling.
- Identify preferred location(s) for siting a MRF with an emphasis on existing locations(s) that already have solid waste management facilities.
- Research potential markets for recyclables collected at a MRF, based on estimates of tonnages to be collected at the MRF.
- Explore the feasibility of expanding the number and types of recyclables collected.

Goal: Maximize the amount of clean wood waste (stumps, trees, limbs, branches, bark, leaves) processed to yield mulch for landscaping and other horticultural uses.

Recommendations:

- Identify potential barriers to private-sector mulch manufacturing operations and alternatives for removing or reducing those barriers.
- Determine if providing a clean wood waste chipper at solid waste facilities would provide cost-effective benefits.
- Investigate the feasibility of expanding the portable wood chipper, either purchased by the region's member governments or their agent, or by contract with the private sector, to be rotated among the regions landfills and transfer stations.



McIntire Recycling Center in Charlottesville

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Resource Recovery and Waste to Energy

Goal: Examine solid waste disposal and energy recovery options to address the disposal and energy needs of the region.

Objective: Monitor all forms of emerging technologies, including bio-fuels and agricultural by-products, designed for reduction, disposal and resource recovery and issue periodic status reports to the public.

Landfilling and Waste Disposal

Goal: Provide a series of environmentally sound solid waste disposal facilities that are convenient to the region's residents.

Objective 1: Maximize the efficiency of transfer stations and anticipate the future need for adding additional transfer stations when existing ones reach daily capacities.

Recommendations:

- Annually monitor the daily traffic and tonnages received at the region's transfer stations and landfills and compare against existing capacity.
- Site any new transfer stations near primary roads with capacity to accommodate the anticipated number of daily trucks and other vehicles.
- Consider rail service as an option to trucks for the hauling of solid waste from transfer stations to disposal facilities.

Objective 2: Investigate the possibility of providing adequate landfill disposal for waste collected at transfer stations within the region rather than hauling solid waste to distant localities.

Objective 3: Minimize the need for the region's residents to use existing and future transfer stations and landfills by minimizing the amount of waste generated through source reduction, reuse and recycling.

Goal: Phase out the region's remaining inactive and unlined landfill cells and replace with lined cells or transfer stations.

Objective: Close inactive landfill sites according to requirements established by the Virginia Department of Environmental Quality.

Solid Waste Collection

Goal: Maximize the ability of residents to dispose of solid waste in a convenient method and at minimum cost.

Objective 1: Provide curbside collection of solid waste and recyclables either through the private or public sectors.

Recommendations:

- Support private sector haulers through individual resident contracts or through public management of contracts with the private sector.
- Coordinate inter-jurisdictional public contracts with the private sector to maximize cost effectiveness, with an emphasis on growth areas defined by local comprehensive plans.

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Objective 2: Establish convenience centers for the collection of solid waste and recyclables in communities where curbside collection is not readily available.

Recommendations:

- Encourage placement of convenience centers in designated growth areas as defined by local comprehensive plans.
- For communities that overlap county or city borders, consider a jointly sponsored convenience center.
- Wherever possible, staff convenience centers to ensure proper disposal and recycling and to maintain site.
- Evaluate curbside collection and convenience centers for the collection of household solid waste and recyclables as the preferred collection sites for the region's residents.

Objective 3: Encourage improved and cost effective curbside collection of household solid waste and recyclables, with an emphasis on designated growth areas.

Recommendations:

- Albemarle and Charlottesville should consider combining curbside collection services within the metropolitan area to determine whether it would provide improvements in service and provide cost savings.
- Consider the consistent collection of recyclables in both Albemarle and Charlottesville.

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Implementation Strategies

Twenty Year Implementation Plan

Year One

Study the feasibility of coordinating contracts for special waste collection and make recommendations to local governments.

Responsible Parties: TJPDC, RSWA, Localities

Study means of expanding the reuse of building materials.

Responsible Parties: Thomas Jefferson Planning District's HOME Consortium, Localities

Identify methods to increase the reuse of collected solid waste material.

Responsible Party: TJPDC, RSWA, Localities

Determine how best to encourage private-sector mulch manufacturing operations.

Responsible Parties: RSWA, TJPDC

Monitor daily tonnages received at the region's transfer stations and compare against existing capacity. Monitoring conducted on an ongoing basis.

Responsible Parties: TJPDC, RSWA, Localities

Establish TJPDC as regional centralized archive for reporting to DEQ and create format for annual review of waste stream, market, and programs.

Responsible Parties: TJPDC, RSWA, Localities

Support Freecycle, an online community reuse program, as a way to increase reuse without increasing storage capacity for items to be reused.

Responsible Parties: Community members, Civic groups

Establish regular electronics recycling opportunities.

Responsible Parties: RSWA, UVA, Local businesses

Develop and distribute brochure to inform area residents of recycling program details.

Responsible Parties: TJPDC, Localities

Develop unified recycling information website.

Responsible Parties: TJPDC, Localities

Develop recycling display that can be used at fairs.

Responsible Parties: TJPDC

Establish one documented public entity Environmental Management System including source reduction and reuse strategies.

Responsible Parties: Localities

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Year Two

Improve economies of scale by finding ways to set the parameters for future contracts.

Responsible Party: TJPDC

Develop educational materials that specifically identify ways to purchase goods that support source reduction and reuse.

Responsible Parties: TJPDC, RSWA, Localities, Civic Groups

Complete development of methods to expand existing recycling facilities and determine the location of new facilities in order to achieve or exceed a 25% recycling rate.

Responsible Parties: TJPDC, RSWA, Localities

Study the feasibility of using a portable wood chipper to be rotated among all the region's landfills and transfer stations.

Responsible Parties: TJPDC, Local Governments, RSWA

Explore the possibility of providing adequate landfill disposal for waste collected at transfer stations within the region.

Responsible Parties: TJPDC, Local Governments, RSWA

Promote home composting through workshops and educational materials.

Responsible Parties: Virginia Cooperative Extension, TJPDC, Civic groups

Review local codes to determine possible impediments to implementation of plan goals.

Responsible Parties: TJPDC, Localities

Develop radio public service announcements about recycling.

Responsible Parties: TJPDC, RSWA, Localities

Explore means of print advertising, including newspapers and phone books.

Responsible Parties: TJPDC

Year Three to Five

Define the source reduction and reuse criteria best suited for large-scale procurement contracts.

Responsible Parties: TJPDC, Local Government Procurement Officers

Provide information on the source reduction and reuse criteria best suited for large-scale procurement contracts to public and private procurement officials.

Responsible Party: TJPDC

Coordinate the timing and parameters of all solid waste management contracts in the region.

Responsible Parties: TJPDC, RSWA, Localities

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Study the possibility of establishing manufacturing facilities within the region that will reuse the region's recyclable materials.

Responsible Parties: Local governments, economic development organizations, and the private sector

Assuming it has been found cost effective, identify possible location(s) for siting a materials recovery facility (MRF) with an emphasis on locations(s) that already have solid waste management facilities.

Responsible Parties: TJPDC, RSWA, Local Governments

Study potential markets for recyclables collected regionally and/or through a MRF, based on estimates of tonnages collected at the MRF.

Responsible Parties: TJPDC, RSWA

Site convenience centers in designated growth areas as shown in local comprehensive plans.

Responsible Parties: RSWA, Local Governments

Study the feasibility of rail service as an option to trucks for the hauling of solid waste from transfer stations to disposal facilities.

Responsible Parties: TJPDC, RSWA

Establish speakers' bureau for recycling topics.

Responsible Parties: TJPDC, Civic Groups

Develop recycling and composting programs in those schools where they do not currently exist.

Responsible Parties: TJPDC, Local Governments, Schools

Explore ways to increase interest in recycling among local businesses.

Responsible Parties: TJPDC, Local Governments, Civic Groups

Establish five documented public entity Environmental Management Systems including source reduction and reuse strategies.

Responsible Parties: Localities

Year Ten

Establish a MRF within the region, if proven cost-effective.

Responsible Parties: RSWA, Member Local Governments, Private

Study emerging technologies designed for reduction, disposal and resource recovery.

Responsible Parties: TJPDC, RSWA

Year Twenty

New facilities for solid waste disposal and recycling proposed in this plan are in place and fully operational.

Responsible Parties: TJPDC, RSWA, Localities

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Regional recycling rates exceed 25% annually.
Responsible Parties: TJPDC, RSWA, Localities

Per capita tonnages reduced through source reduction and reuse.
Responsible Parties: TJPDC, RSWA, Localities

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Planned Solid Waste Management Systems

Albemarle*

Establish new recycling convenience centers in Albemarle County, with possible locations in Scottsville, Crozet, and the Earlysville/Airport area. Curbside recycling and yard waste pick-up may be added in developed areas.

*The county is working on a strategic plan for solid waste management, which will include all the programs for the foreseeable future. Parts of that plan are included in this update, and if substantive changes or new ideas are added after this plan is adopted, DEQ will be notified.

Charlottesville

Consider establishment of a downtown paper and cardboard collection system, which might consist of dumpsters, a daily roll-off container, or simply adding these to curbside pick-up.

RSWA

The Ivy Material Utilization Center (MUC) operates at near-capacity on busy days. If growth trends continue, days that are over capacity may be expected in the near future. Possible options are expansion of the permitted capacity of Ivy or locating additional transfer capacity elsewhere. This may include an inert fill or construction and demolition debris (CDD) management site and possibly a new transfer station that utilizes rail and/or is closer to the urban area than Ivy to minimize time and transportation costs and delays.

During peak periods, a line of trucks awaiting off-load may be expected. The possibility of a more efficient drop-off system, for example using top-load trucks, should be studied.

Fluvanna County

The public landfill will be closed in 2007. Fluvanna intends to convert the site to a transfer station that will continue to accept solid waste, recyclables, and other wastes. The county is exploring regional or commercial disposal of waste as an option after the landfill closes. Closure funding development is underway with a revised fee structure.

Greene County

The Greene County transfer station is expected to remain in operation. The transfer station is equipped to handle 150 tons per day so there are no expansion plans at present. Recycling and re-use activities may expand at this site. The central location of the site may preclude the need for additional sites around the County, but the pattern and rate of development may create the need for additional sites in the future.

Meeting 25% Recycling Rate

Participating localities and the region shall attain or exceed a minimum recycling rate of 25% of the total municipal solid waste generated annually. This rate will be met through continuation of existing programs and addition of:

- ❑ More collection centers and curbside pick up for recyclables
- ❑ Bulk and home composting/mulching and yard waste management
- ❑ Business, school, and industry participation
- ❑ Joint locality collection and marketing of materials

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- ❑ Increased recycling, reuse and composting education
- ❑ Increased electronic and polystyrene recycling
- ❑ Increased or improved monitoring of sites where recyclables are collected.

See calculations per locality in the Appendix.



Glass Recycling in Fluvanna County

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Future Treatment Options

Current treatment activities expected to continue include composting sludge, mulching vegetative wastes, and grinding wooden pallets. Fluvanna County will continue to crush glass as long as the landfill is in operation. Waste wood chipping will increase, if studies show that it would be cost-effective, through providing a clean wood waste chipper at solid waste facilities and expanding the portable wood chipper. Other future treatment options include volume reduction actions, such as tire splitting and trash compaction.

Funding Options

Solid waste management activities, including waste disposal and subsidies for recycling, are currently funded using general revenue funds, private money and tipping fees. A portion of the cost of recycling is covered by revenue from sales of recyclable materials. Grants, in combination with local funds, are sources of funding, for special waste events such as hazardous and bulky waste amnesty days. State funds assist in tire cleanup and recycling. Localities will continue to use these funding sources in the future.

Landfill closing funds

The only remaining active landfill is in Fluvanna County. Current plans call for the landfill to be closed in 2007. Closure of this landfill will require the allocation of general revenue funds or an immediate increase in tipping fees, to fully support closure. Closed landfills in Albemarle and Greene Counties have closure plans and local funds allocated for proper closure. Funding options include setting aside a portion of tipping fees and allocating tax revenue.

Future facility development

Currently, the transfer stations operate within permitted capacity. Comparing population projections for 2025 and current per capita waste generation figures shows that only the Ivy transfer station, serving Albemarle County and the City of Charlottesville, will exceed capacity by 2025. The Ivy facility, managed by the Rivanna Solid Waste Authority, relies on local government funds and tipping fees to maintain and expand this facility. In order to decrease the reliance on local funds and still be prepared to meet expanded capacity, RSWA may institute higher tipping fees prior to the time when expansion is necessary to cover additional expansion costs.

Expanded recycling centers will be necessary as the population grows. Greene and Fluvanna counties, as well as RSWA, operate central locations for the collection of recyclable goods. The City of Charlottesville provides curbside collection of recyclables. Current recycling programs are subsidized with local funds since market prices do not cover the cost of collection and transportation to markets. While it is hoped that future recycling markets will yield sufficient revenue to fully support recycling operations, local funds must subsidize recycling programs until such time as it is fully self-sufficient.

The private sector reacts to the demand for products in the provision of services. Currently a private sector composting operation uses revenues from the sale of the compost to cover costs. As market demand increases, facility expansion is expected. Wood chipping occurs in all localities.

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Evaluation of Programs

TJPDC will act as the central clearinghouse for the region and has been designated as the central archive for receiving and recording information on solid waste generation, recycling, and facilities, and to calculate and submit the regional recycling rate. Localities with permitted facilities and joint locality authorities will prepare Solid Waste Information and Assessment reports and submit copies to the Department of Environmental Quality (DEQ) and TJPDC by March 31 of each year. Localities will also submit recycling rate reports to the PDC prior to the April 30 deadline for submission of a regional recycling rate report to DEQ, which the PDC will prepare and submit. The regional recycling rate is the figure used for the solid waste planning unit (all localities in the designated planning region), and is binding for the purposes of the recycling rate mandate and solid waste plans. As provided in §10.1-1411 of the Code of Virginia as amended in 2006, the mandatory recycling rate for the region is 25%. Should the mandatory recycling rate not be met, the PDC will prepare a Recycling Action Plan for the region.

The PDC will establish a committee of local designees, which will meet semi-annually, to review the data and compare it to growth trends and plan goals, and other relevant issues to monitor compliance with this plan and applicable codes, policies, and regulations. Committee members will report back to their elected officials annually.

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Profile of the Thomas Jefferson Planning District

Population and Growth Projections

The Thomas Jefferson Planning District is located roughly in the geographic center of the Commonwealth. The counties of Albemarle, Fluvanna, and Greene, the City of Charlottesville and the incorporated towns of Columbia, Scottsville and Stanardsville make up the Solid Waste Planning District. The City of Charlottesville and the urban portions of Albemarle County, including the University of Virginia, constitute the economic, educational and cultural hub of the region.

As the following population figures show, the region has grown by approximately 19% from 1990 to 2000. Except for the City of Charlottesville, which has lost population, all the jurisdictions have grown substantially.

Population History and Projections

Locality	1990	2000	2010	2020	2025	2030
Charlottesville	40,341	40,099	39,600	39,600	39,600	39,600
Albemarle	68,040	84,186	97,200	107,400	112,400	117,400
Fluvanna	12,429	20,047	28,100	34,300	36,750	39,200
Greene	10,297	15,244	19,500	24,000	26,200	28,400
Solid Waste Region	131,107	159,576	184,400	205,300	214,950	224,600

Source: US Census (1990, 2000), VEC projections dated 5/03 (2010-2030)
 2025 figures interpolated between 2020 and 2030

Number of Households

Locality	1990	2000
Charlottesville	16,099	16,861
Albemarle	24,387	31,916
Fluvanna	4,495	7,369
Greene	3,737	5,578

Source: US Census

Median Household Income, in dollars

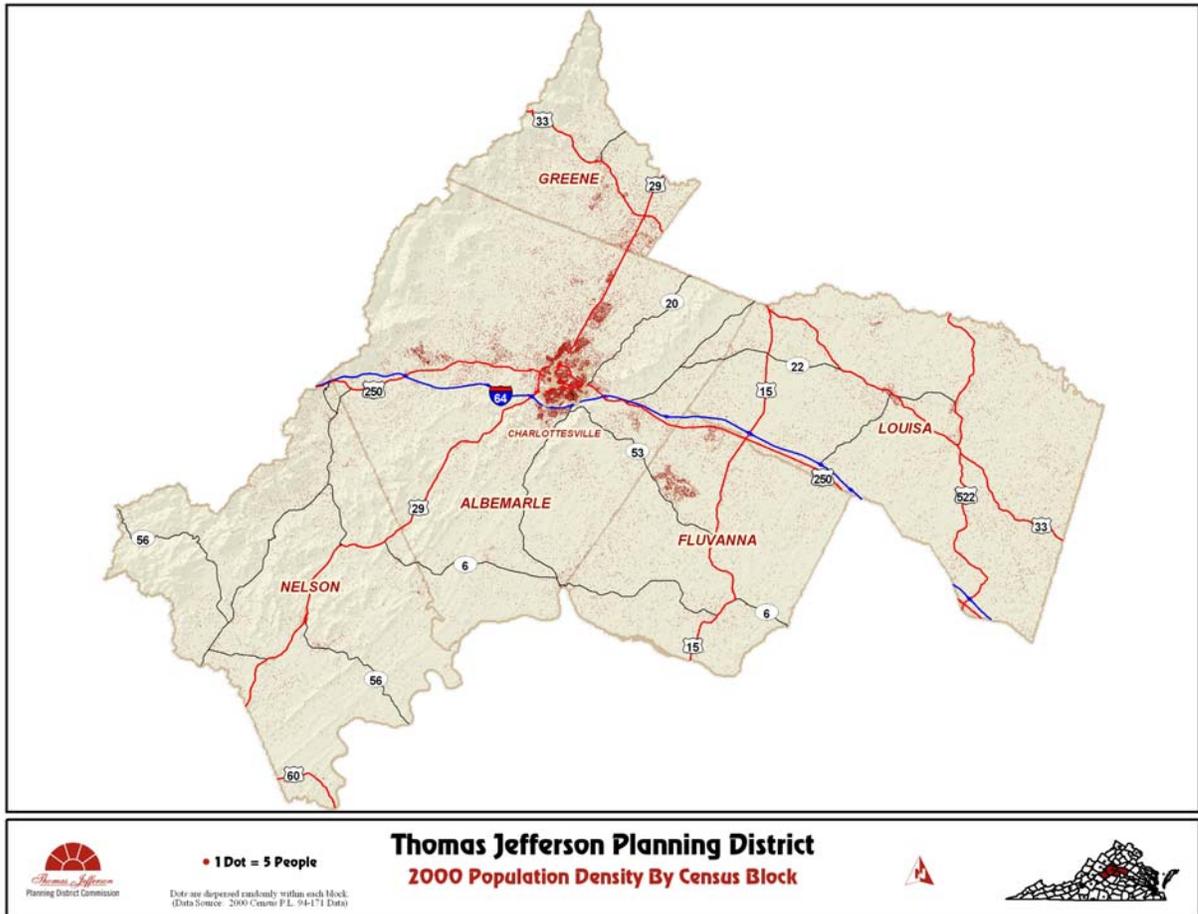
Locality	1990	2000
Charlottesville	24,190	31,007
Albemarle	36,886	50,749
Fluvanna	31,378	46,372
Greene	29,799	45,931

Source: US Census

Development Patterns and Geographic Conditions

Census data and local comprehensive planning information show the major population centers and growth areas. The City of Charlottesville and the surrounding urban ring in Albemarle County are home to roughly half the population of the planning district. Fluvanna and Greene are in the top 15 fastest growing counties in the state. The Route 29 corridor and the I-64/250 corridor are the major residential, commercial, and industrial areas outside of the city and small towns. Most localities have policies in effect to persuade growth around existing centers and reduce the potential for sprawling development over time.

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Albemarle

Albemarle County has defined development areas around the City of Charlottesville and north of the City along the Route 29 corridor, in the area of Crozet to the west of Charlottesville and along Route 250 to the east of Charlottesville. The western side of the County is bounded by the Blue Ridge Mountains and Shenandoah National Park. Outside the development areas, the remainder of the County is rolling Piedmont landscape dotted with a mix of residential, agricultural and minor commercial uses. Residential growth has been occurring both inside and outside of the development areas, but in recent years the balance has tipped to the development areas. The major commercial corridors are Route 29, particularly north of Charlottesville, and Route 250 east, and new commercial development is continuing to take place rapidly in those areas. The Town of Scottsville is located in the southeastern corner of Albemarle on the James River. A small portion of the town is in Fluvanna County.

Charlottesville

The City of Charlottesville is basically “built-out” at this point; some redevelopment and infill is occurring, but population has been declining very slightly. The City is entirely surrounded by the County of Albemarle and has made an agreement with Albemarle to expand no further. Much of the City is residential, with major commercial areas being located in the

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Main Street area (Business Route 250 and the downtown pedestrian mall) and along Route 29. The University of Virginia is the major landholder and employer in the City. The City features a rolling landscape and is bounded by the Rivanna River and Moore’s Creek on its east and south sides, respectively.

Fluvanna

Fluvanna is one of the most rapidly growing counties in Virginia. Most of this growth has been centered on the Lake Monticello development in the western portion of the County, to the northwest of the county seat of Palmyra. This has brought minor amounts of commercial development to serve the residents; however, Fluvanna residents still largely commute to Charlottesville and Albemarle County for employment, goods and services. Fluvanna County terrain is relatively flat compared to the counties to the west, and becomes increasingly gentle as one moves east. The Rivanna River more-or-less bisects the County running northwest to southeast, and the James River forms its southern boundary. The small town of Columbia is found at the confluence of the two rivers in the southeast.

Greene

Greene is another county which has been experiencing rapid growth, primarily in the southeast along the Route 29 corridor. The rapid residential growth in this area is primarily made up of commuters to Albemarle County and Charlottesville. Increasing employment opportunities in the northern part of Albemarle County coupled with rising housing costs in Albemarle have made Greene County an increasingly attractive option for potential homeowners. Some commercial development is occurring along the Route 29 corridor as well, but county residents still travel to Albemarle for many goods and services. Greene County is bounded on the west by the Blue Ridge Mountains and Shenandoah National Park. Similar to Albemarle, the terrain of Greene County falls away into foothills eastward from the Blue Ridge Mountains. The Town of Stanardsville serves as the County Seat and is a hub for residential development.

Economic Growth and Development

The overall economic growth for the region has been very healthy, with various indicators showing a positive variation. This growth can have an impact on land use and transportation patterns, inevitably resulting in increased development. The unemployment rates are low overall for the region when compared with the state, with the state rates at 4.9% and 2.2% for 1994 and 2000 respectively. The regional rates are considerably lower than the national figures of 6.1% and 4.0% for 1994 and 2000 respectively.

Unemployment Rate

Locality	1994	2000
Charlottesville	3.3	1.7
Albemarle	2.4	1.4
Fluvanna	3.8	1.5
Greene	3.9	1.5
TJPDC	3.6	1.7
VA	4.9	2.2
National	6.1	4.0

Source: Virginia Employment Commission

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Reflecting national trends, the greatest increases in jobs in the planning district have been in the service, retail, wholesale, and government sectors, while farm and manufacturing jobs have been on the decline. Major employers in the area include the University of Virginia, Martha Jefferson Hospital, State Farm, GE Fanuc, Dominion Virginia Power, Wintergreen Resort, Lexis Publishing, Crutchfield Corporation, FIC Staff Services, Piedmont Virginia Community College, Klockner-Pentaplast, and the Virginia Department of Corrections.

Transportation Conditions

Transportation within the planning district revolves around Interstate Route 64 on an east-west axis and Route 29, which is the primary north-south axis. Other major transportation corridors include Route 15 through Fluvanna and Louisa counties, which travels roughly north-south, and Route 6, which passes through southern Fluvanna County and into northern Nelson County. Route 33 cuts through Greene County on an east-west axis. These other corridors do not have the capacity for heavier volumes of traffic as do Routes 64 and 29. Narrow roads and hilly conditions in rural areas may make it more difficult for larger trucks to travel, and occasional snow in winter can cause transportation delays of several days at times. Rail service runs both north-south and east-west through the region, including through Charlottesville and most small towns.

Markets for the Reuse and Recycling of Materials

Reuse of household materials is common in the area, and markets include used clothing, sporting goods, and pawn shops, Habitat Shop and other building supply recovery operations, yard sales, rummage sales, etc. Reuse of inert fill is generally accomplished locally. Non-profits accept donations of old cars, appliances, equipment, eyeglasses, and other useful items. Another option is Freecycle, an online message board where items to be given away can be posted and claimed.

Most materials destined to be recycled are shipped out of the region, since there are few local processors or markets. For example, cardboard collected by the Rivanna Solid Waste Authority goes to Georgia. Paper products are, however, the one category that is helping to pay the way for recycling programs locally. National markets affect pricing at the local level, and some materials, like green glass, have been steadily losing national markets, and therefore value. Processing fees for separation of aluminum from steel make collection of metals unprofitable. Coiners' Scrap Iron and Metal, Inc. and other scrap dealers accept metals to be recycled. Coiners' accepts glass and plastic as well.

Organic wastes are readily consumed by a number of public and private mulching operations. Public operations include Charlottesville's leaf collection and Christmas tree programs offered by Charlottesville and Albemarle.

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Existing and Future Solid Waste Management Systems

Current Waste Generation Rates

The following table provides a breakdown of waste generated by type of waste.

TJPDC 2005 Estimated Current Waste Generation Rates (in tons)

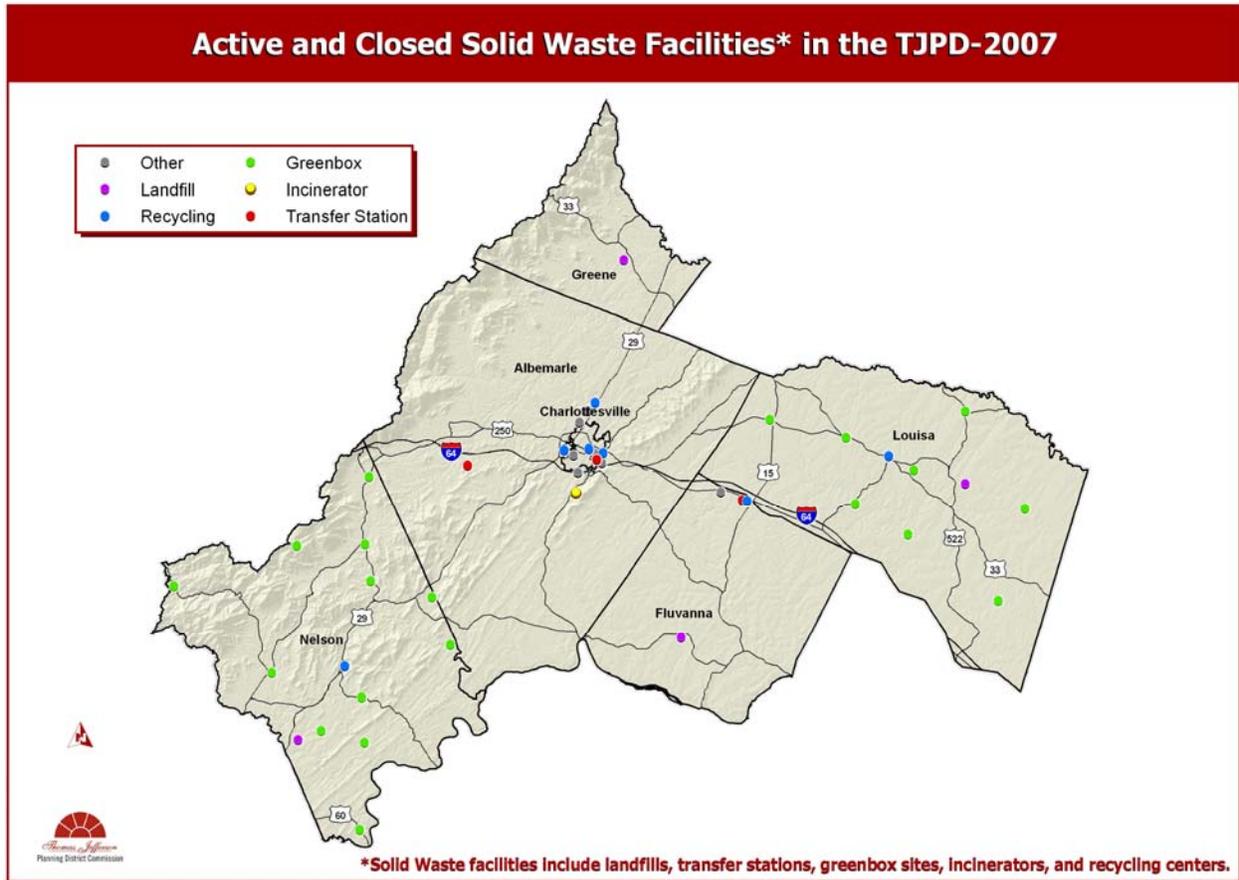
	RSWA*	Fluvanna	Greene	Region
Municipal Solid Waste (MSW)	93,891	13,162	32,923	139,976
Household	93,891	3,052	19,753	
Commercial	0	10,063	13,170	
Institutional	0	47	0	
Primary Recyclable Materials (PRM)	34,487	5,798	3,418	43,703
Paper	14,558	468	1,516	
Metal	12,032	32	415	
Plastic	236	14	75	
Glass	871	283	96	
Waste Wood (chipped or mulched)	0	4,250	1,200	
Textiles	19	0	50	
Yard Waste (composted or mulched)	5,906	0	66	
Commingled/Other	865	752	0	
Secondary Recyclable Materials (SRM)	7,169	34	1,066	8,269
Used Oil, Oil Filters & Antifreeze	781	18	74	
Batteries	210	9	7	
Waste Tires	219	7	85	
Electronics	0	0	0	
Abandoned automobiles removed	1,450	0	900	
Sludge (composted)	3,893	0	0	
Tree Stumps >6"	10	0	0	
Other	606	0	0	
SRM Reuse	0	0	0	0
Construction Waste	0	0	0	
Demolition Waste	0	0	0	
Debris Waste	0	0	0	
Ash	0	0	0	
Other	0	0	0	
Recycling Rate	30.7%	30.7%	12.0%	27.1%
Other wastes	0	0	0	0
Hazardous	0	0	0	
Agricultural	0	0	0	
Mining	0	0	0	
Regulated. Medical	0	0	0	
Spill residue	0	0	0	
Other	0	0	0	
Total Waste	135,547	18,994	37,407	191,948
Population	129,600	24,300	16,700	170,600
Per capita	1.05	0.78	2.24	1.13
Expected waste (Based on EPA .566 avg. per capita)	73,354	13,754	9,452	96,560

*The Rivanna Solid Waste Authority reports the recycling numbers for Albemarle County, the City of Charlottesville, and Town of Scottsville as a combined number.

Source: local facility operators, DEQ

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Solid Waste Management Facilities: Active and Closed



The following table details the existing and closed waste management facilities in each locality. The table identifies those that have been permitted through the Virginia Department of Environmental Quality and does not provide a complete inventory of closed landfill sites that were either used informally or were not permitted. The closed facilities identified on this table are those for which the locality or authority is responsible for any necessary remediation.

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**Existing Solid Waste Management Facilities in the Thomas Jefferson Solid Waste District:
 Active and Closed by Locality**

Locality	Facility name	Type	Status	Permit Year
RSWA	Ivy Material Utilization Ctr.	Transfer Station	Active	1997
	Ivy Sanitary Landfill	Sanitary Landfill	Closed	1997
	RSWA Compost Facility	MSW Composting Facility	Closed (2001)	1998
Albemarle	Keene Sanitary Landfill	Sanitary Landfill	Closed	1974
Charlottesville	Eldercare Gardens	Regulated Medical Waste (RMW) Incineration	Permitted by Right (PBR) prior to 1994	
	HCMF Heritage Hall	RMW Storage Only	PBR prior to 1994	
	Martha Jefferson Hospital	RMW Incineration	PBR prior to 1994	
	University of Virginia	RMW Incineration	PBR prior to 1994	
	Virginia Ambulatory Surgery Center	RMW Storage only	Active	1998
	Old 5 th Street Landfill	Unlined landfill	Closed	1960's
Fluvanna	BFI Fluvanna County Transcyclery	Materials Recovery Facility	Active	1995
	Fluvanna Correctional Unit#5	RMW Steam Sterilization	PBR prior to 1994	
	Fluvanna County Sanitary Landfill	Sanitary Landfill	Closed	1974
	Fluvanna County Sanitary Landfill	Sanitary Landfill	Active	1983
	Zion Crossroads Recycling Center	Materials Recovery Facility	Planned to open in 2007	2007
Greene	Greene County MRF & Co - Compost	Materials Recovery Facility	Active	1993
	Greene County Sanitary Landfill	Sanitary Landfill	Closed	1974
	Greene County Sanitary Landfill	Sanitary Landfill	Closed	1978

SOURCE: Virginia Department of Environmental Quality and local governments

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Estimates of Future Needs

2025 Projected Waste Generation by Type

Estimates in the following table are based on reported 2005 totals divided by 2005 population estimates and multiplied by the projected population for 2025.

TJPDC 2025 Estimated Future Waste Generation Rates (in tons)

	RSWA	Fluvanna	Greene	Region
Municipal Solid Waste	110,119	19,905	51,652	181,676
Household	110,119	4,616	30,990	
Commercial	0	15,219	20,662	
Institutional	0	71	0	
Primary Recyclable Materials (PRM)	40,448	8,769	5,362	54,579
Paper	17,074	708	2,378	
Metal	14,112	48	651	
Plastic	277	21	118	
Glass	1,022	428	151	
Waste Wood (chipped or mulched)	0	6,427	1,883	
Textiles	22	0	78	
Yard Waste (composted / mulched)	6,927	0	104	
Commingled/Other	1,015	1,137	0	
Secondary Recyclable Materials (SRM)	8,408	51	1,672	10,131
Used Oil, Oil Filters, & Antifreeze	916	27	116	
Batteries	246	14	11	
Waste Tires	257	11	133	
Electronics	0	0	0	
Abandoned automobiles removed	1,701	0	1,412	
Sludge (composted)	4,566	0	0	
Tree Stumps >6"	12	0	0	
Other	711	0	0	
SRM Reuse	0	0	0	0
Construction Waste	0	0	0	
Demolition Waste	0	0	0	
Debris Waste	0	0	0	
Ash	0	0	0	
Other	0	0	0	
Other wastes	0	0	0	0
Hazardous	0	0	0	
Agricultural	0	0	0	
Mining	0	0	0	
Regulated. Medical	0	0	0	
Spill residue	0	0	0	
Other	0	0	0	
Total Waste	158,975	28,726	58,686	246,387
2005 Population	129,600	24,300	16,700	170,600
2025 Population	152,000	36,750	26,200	214,950

2005 rate sources: local facility operators, DEQ

Population estimate sources: Weldon Cooper Center (2005), Virginia Employment Commission (2025)

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Growth will bring with it more solid waste. Since the expected growth is predominantly residential, the types of waste related to development and operation of residential communities should be expected.

With increased land development, vegetative waste from land clearing will increase, and as forests are converted to yards, annual vegetative material will also increase. Land clearing debris may be burned on-site with a permit issued by the Department of Environmental Quality.

Construction and demolition debris (CDD) will also increase as a result of land development. Methods for managing larger volumes of inert waste, including brick, rock, and lumber will be necessary.

Electronics are a major part of the information industry in the region, and a higher than normal amount of this waste is expected, particularly in the urban and university area.

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Historical Waste Generation

Historical waste generation rates can be useful in predicting future needs. The following tables show 1993, 1995, and 2001-2004 waste managed in the region. The rate of per capita waste generation has been growing rapidly, as has population. The initiatives in this plan have the potential to slow down the growth in the per capita rate, or even reverse this trend.

1993 Waste Generation by Type

The following figures are based on the report made to the Department of Environmental Quality by the TJPDC in 1994.

TJPDC 1993 Waste Generation Rates (in tons)

	RSWA	Fluvanna	Greene	Region
Municipal Solid Waste (MSW)	78,822	6,331	2,943	88,096
Household		1,172		
Commercial		5,159		
Institutional				
Primary Recyclable Materials (PRM)	29,971	3,608	816	34,395
Paper	13,524	233	84	
Metal	10,493	2,890	594	
Plastic	662	7	20	
Glass	4,301	125	118	
Waste Wood (chipped or mulched)	514	0	0	
Textiles	0	0	0	
Yard Waste (composted or mulched)	383	353	0	
Commingled/Other	0	0	0	
Secondary Recyclable Materials (SRM)	5,172	113	22	5,307
Used Oil & Antifreeze	75	51	12	
Batteries	0	18	0	
Waste Tires	0	40	10	
Electronics	0	0	0	
White Goods	0	0	0	
Abandoned automobiles removed	0	0	0	
Sludge (composted)	4,288	0	0	
Tree Stumps >6"	0	0	0	
Recycling Rate	30.8%	37.0%	22.2%	31.1%
SRM Reuse	0	0	0	0
Construction Waste	0	0	0	
Demolition Waste	0	0	0	
Debris Waste	0	0	0	
Ash	0	0	0	
Other wastes	0	0	0	0
Hazardous	0	0	0	
Agricultural	0	0	0	
Mining	0	0	0	
Regulated. Medical	0	0	0	
Spill residue	0	0	0	
Other	0	0	0	
Total Waste	113,965	10,052	3,781	127,798
1993 Population	114,200	14,300	12,200	140,700
Per capita	0.998	0.703	0.310	0.908

1993 rate source: local facility operators

Population estimate source: Weldon Cooper Center

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1995 Waste Generation by Type

The following figures are based on reports submitted by member localities to the Thomas Jefferson Planning District Commission in 1997.

TJPDC 1995 Waste Generation Rates (in tons)

	RSWA	Fluvanna	Greene	Region
Municipal Solid Waste (MSW)	62,939	5,818	7,632	76,389
Household		5,818		
Commercial				
Institutional				
Primary Recyclable Materials (PRM)	*	2,187	3,353	-
Paper		45	606	
Metal		1,258	2,364	
Plastic		5	41	
Glass		21	215	
Waste Wood (chipped or mulched)		0	0	
Textiles		0	15	
Yard Waste (composted or mulched)		858	112	
Commingled/Other		0	0	
Secondary Recyclable Materials (SRM)	*	2.0	57	-
Used Oil & Antifreeze		2.0	36	
Batteries		0	0	
Waste Tires		0	21	
Electronics		0	0	
White Goods		0	0	
Abandoned automobiles removed		0	0	
Sludge (composted)		0	0	
Tree Stumps >6"		0	0	
Recycling Rate	38%	27.3%	30.9%	36.7%
SRM Reuse	*	0	0	-
Construction Waste		0	0	
Demolition Waste		0	0	
Debris Waste		0	0	
Ash		0	0	
Other wastes	*	0	0	-
Hazardous		0	0	
Agricultural		0	0	
Mining		0	0	
Regulated. Medical		0	0	
Spill residue		0	0	
Other		0	0	
Total Waste	101,704	8,007	11,042	120,753
1995 Population	117,400	15,900	12,900	146,200
Per capita	0.866	0.504	0.856	0.826

*The report from RSWA only included totals for recyclables and waste. The total tonnage of recyclables reported was 38,765.
 1995 rate source: local facility operators
 Population estimate source: Weldon Cooper Center

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2001 Waste Generation by Type

The following figures are based on reports submitted by localities to DEQ in 2002.

TJPDC 2001 Waste Generation Rates (in tons)

	RSWA	Fluvanna	Greene	Region
Municipal Solid Waste	114,370	6,612	11,353	132,335
Household			6,244	
Commercial			5,109	
Institutional				
Primary Recyclable Materials (PRM)	31,125	4,890	3,437	39,452
Paper		414	1,540	
Metal		358	475	
Plastic		207	1,250	
Glass		0	60	
Waste Wood (chipped / mulched)		3,910	75	
Textiles		0	17	
Yard Waste (composted / mulched)		0	20	
Commingled/Other		0	0	
Secondary Recyclable Materials (SRM)	*	18	691	-
Used Oil & Antifreeze		17	57	
Batteries		1	3	
Waste Tires		0	21	
Electronics		0	0	
Abandoned automobiles removed		0	600	
Sludge (composted)		0	0	
Tree Stumps >6"		0	0	
Other		0	0	
Recycling Rate	31.0%	42.6%	26.6%	31.2%
SRM Reuse	*	0	0	-
Construction Waste		0	0	
Demolition Waste		0	0	
Debris Waste		0	0	
Ash		0	0	
Other		0	0	
Other wastes		0	0	-
Hazardous		0	0	
Agricultural		0	0	
Mining		0	0	
Regulated. Medical		0	0	
Spill residue		0	0	
Other	94,270(CDD)	0	0	94,270
Total Waste	302,565	11,520	15,481	329,566
2001 Population	125,600	21,400	15,800	177,200
Per capita	2.41	0.538	0.980	1.86

*RSWA did not separate SRM recycling from SRM reuse in their report. The combined tonnage was 62,800.

2001 rate source: local facility operators, DEQ

Population estimate source: Weldon Cooper Center

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2002 Waste Generation by Type

The following figures are based on reports submitted by localities to DEQ in 2003.

TJPDC 2002 Waste Generation Rates (in tons)

	RSWA	Fluvanna	Greene	Region
Municipal Solid Waste	126,915	7,213	12,738	146,866
Household		3,606	7,643	
Commercial		2,885	5,095	
Institutional		721		
Primary Recyclable Materials (PRM)	48,484	7,805	3,357	59,646
Paper	4,914	515	1,583	
Metal	41,799	203	60	
Plastic	131	224	1,166	
Glass	1,062	181	108	
Waste Wood (chipped or mulched)	50	6678	410	
Textiles	60	5.2	20	
Yard Waste (composted or mulched)	0	0	10	
Commingled/Other	468	0	0	
Secondary Recyclable Materials (SRM)	4,754	17	633	5,404
Used Oil & Antifreeze	500	12	51	
Batteries	100	4.7	7	
Waste Tires	177	0	75	
Electronics	0	0.62	0	
Abandoned automobiles removed	700	0	500	
Sludge (composted)	3,043	0	0	
Tree Stumps >6"	0	0	0	
Other	234	0	0	
SRM Reuse	12,566	0	0	12,566
Construction Waste	0	0	0	
Demolition Waste	7,918	0	0	
Debris Waste	4,648	0	0	
Ash	0	0	0	
Other	0	0	0	
Recycling Rate	34.1%	52.0%	23.9%	34.6%
Other wastes	0	0	0	0
Hazardous	0	0	0	
Agricultural	0	0	0	
Mining	0	0	0	
Regulated. Medical	0	0	0	
Spill residue	0	0	0	
Other	0	0	0	
Total Waste	192,719	15,035	16,728	224,482
2002 Population	126,400	22,500	16,200	165,100
Per capita	1.52	0.668	1.03	1.36

2002 rate source: local facility operators, DEQ

Population estimate source: Weldon Cooper Center

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2003 Waste Generation by Type

The following figures are based on reports submitted by localities to DEQ in 2004.

TJPDC 2003 Waste Generation Rates (in tons)

	RSWA*	Fluvanna	Greene	Region
Municipal Solid Waste (MSW)	104,160	9,525	18,085	131,770
Household	104,160	4762	9,585	
Commercial		3810	8,500	
Institutional		952		
Primary Recyclable Materials (PRM)	28,334	1,774	3,602	33,710
Paper	8,210	565	1,710	
Metal	9,139	314	75	
Plastic	130	244	1,050	
Glass	1,168	134	90	
Waste Wood (chipped or mulched)	770	0	620	
Textiles	25	5.7	35	
Yard Waste (composted or mulched)	8,576	512	22	
Commingled/Other	316	0	0	
Secondary Recyclable Materials (SRM)	6,762	7,069	522	14,353
Used Oil & Antifreeze	1,168	20	56	
Batteries	13	4.9	6	
Waste Tires	209	31	60	
Electronics	28	2.2	0	
Abandoned automobiles removed	1,100	0	400	
Sludge (composted)	3,048	0	0	
Tree Stumps >6"	10	0	0	
Other	1,186	7,011	0	
SRM Reuse	718	0	0	718
Construction Waste	0	0	0	
Demolition Waste	0	0	0	
Debris Waste	0	0	0	
Ash	0	0	0	
Other	718	0	0	
Recycling Rate	25.6%	48.1%	18.6%	27.0%
Other wastes	0	0	0	0
Hazardous	0	0	0	
Agricultural	0	0	0	
Mining	0	0	0	
Regulated. Medical	0	0	0	
Spill residue	0	0	0	
Other	0	0	0	
Total Waste	139,974	18,368	22,209	180,551
Population	127,900	23,800	16,600	168,300
Per capita	1.09	.772	1.337	1.073
Expected waste (Based on EPA .566 avg. per capita)	72,391	13,471	9,396	95,258

* The Rivanna Solid Waste Authority reports the recycling numbers for Albemarle County, the City of Charlottesville, and Town of Scottsville as a combined number.
 Source: Local facility operators, DEQ

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2004 Waste Generation by Type

The following figures are based on reports submitted by localities to DEQ in 2005.

TJPDC 2004 Waste Generation Rates (in tons)

	RSWA*	Fluvanna	Greene	Region
Municipal Solid Waste (MSW)	101,502	9,972	30,495	141,969
Household	101,502	5,534	18,297	
Commercial		4,427	12,198	
Institutional		11		
Primary Recyclable Materials (PRM)	33,793	1,794	4,145	39,732
Paper	11,289	408	2,200	
Metal	10,025	235	425	
Plastic	168	329	75	
Glass	1,324	585	110	
Waste Wood (chipped or mulched)	1,840	2	1,220	
Textiles	13	8	65	
Yard Waste (composted or mulched)	9,058	228	50	
Commingled/Other	76	0	0	
Secondary Recyclable Materials (SRM)	7,525	45	1,117	8,687
Used Oil, Oil Filters & Antifreeze	1,349	30	78	
Batteries	210	7	9	
Waste Tires	208	5	105	
Electronics	4	3	0	
Abandoned automobiles removed	800	0	925	
Sludge (composted)	3,820	0	0	
Tree Stumps >6"	0	0	0	
Other	1,134	0	0	
SRM Reuse	23	3	0	26
Construction Waste	0	0	0	
Demolition Waste	0	3	0	
Debris Waste	0	0	0	
Ash	0	0	0	
Other	23	0	0	
Recycling Rate	28.9%	15.6%	14.7%	25.5%
Other wastes	0	0	0	0
Hazardous	0	0	0	
Agricultural	0	0	0	
Mining	0	0	0	
Regulated. Medical	0	0	0	
Spill residue	0	0	0	
Other	0	0	0	
Total Waste	142,843	11,814	35,757	190,414
Population	129,600	24,300	16,700	170,600
Per capita	1.10	0.49	2.14	1.12
Expected waste (Based on EPA .566 avg. per capita)	73,354	13,754	9,452	96,560

* The Rivanna Solid Waste Authority reports the recycling numbers for Albemarle County, the City of Charlottesville, and Town of Scottsville as a combined number.

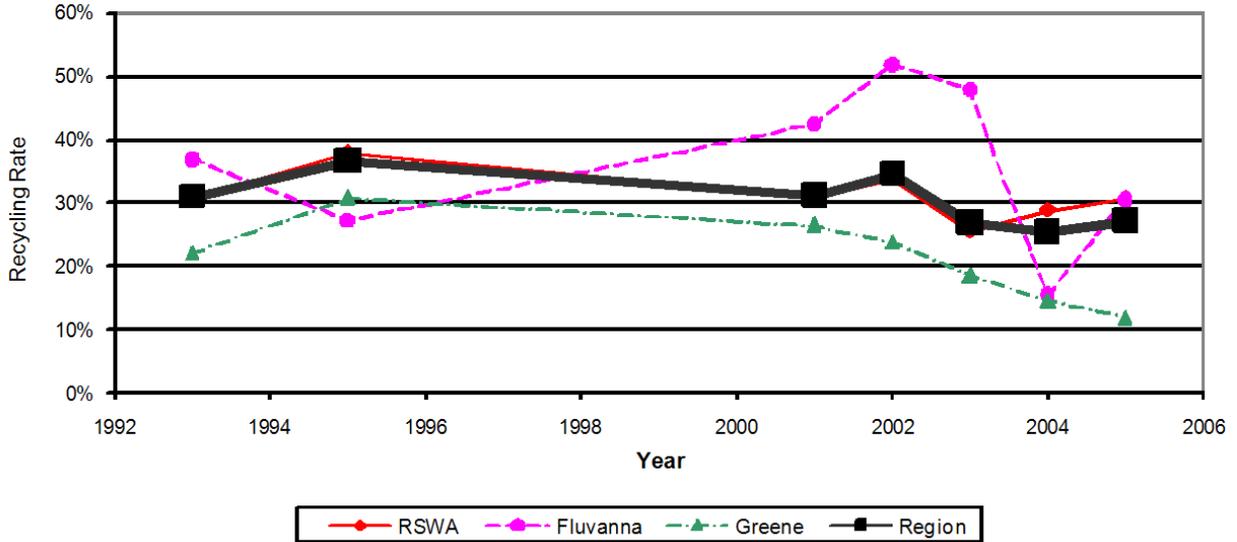
Source: Local facility operators, DEQ

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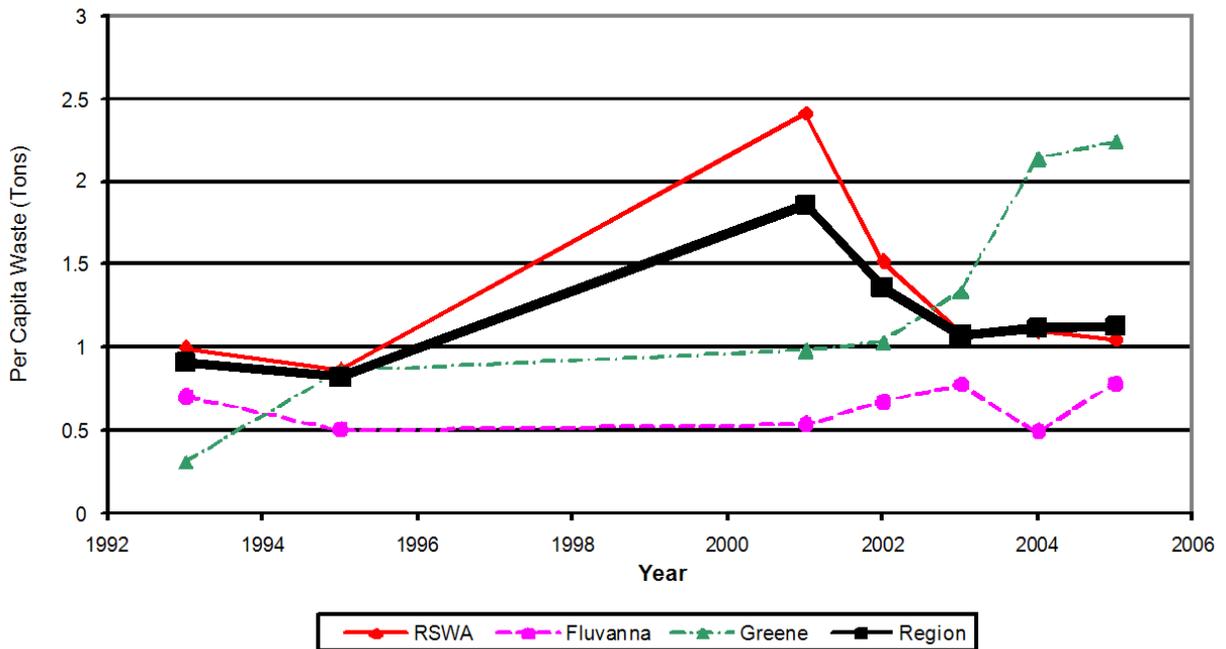
Graphical Summary of Historical Waste Generation and Recycling

The graphs below show the recycling rates and per capita waste generation in the region for 1993, 1995, and 2001- 2005.

Recycling Rates in the Region, 1993-2005



Per Capita Waste Generation in the Region, 1993-2005



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Programs for Collection and Transportation, Storage, Treatment and Disposal by Locality

City of Charlottesville

Collection and Transportation

Weekly residential curbside collection includes recycling, contracted through Waste Management, Inc. Commercial corridors receive daily trash and recycling (newsprint, glass, metals) pick-up. Private companies service some residential sites and dumpsters. Individuals can drive to the Ivy transfer station or McIntire recycling center as well. Each resident may request two bulky item pick-ups a year for appliances, large branches and other over-sized items. Leaves are picked up in the fall in a special program, and Christmas trees are also picked up curbside citywide. Construction and demolition debris must be transported privately. Private companies also service cardboard recycling bins at private businesses. Recycling bins located at many larger apartment complexes, particularly near the University, are serviced by the same contractor that runs curbside pick-up.

Storage, Treatment and Disposal

All of the City's MSW goes to the Browning-Ferris Industries (BFI) transfer station at Zion's Crossroads for short-term storage and transfer to the Amelia County landfill. All recyclables are taken to Coiners' to be processed and shipped to recycling markets. Christmas trees are ground into mulch, which is available free to citizens. Leaves and yard waste are ground into mulch at a private facility in Albemarle County.

Albemarle County

Collection and Transportation

Businesses, industries, and individuals are responsible for making their own waste collection and recycling arrangements, with curbside collection contracts available in the more developed areas of the county. Self-delivery to the Ivy Materials Utilization Center (MUC), the McIntire Recycling Center, or the two county newspaper/glossy paper bins is a necessity for those in the rural areas and an option for all others. The McIntire Recycling center handles newspaper and glossy paper, plastics, glass, metals and other forms of paper. Cardboard is accepted at the Ivy MUC. Collection activity can be inefficient and disruptive when multiple individual contracts exist along one road. The County pays for amnesty days for bulky items, tires, and hazardous waste, via a grant or general funds.

Storage, Treatment and Disposal

Wastes collected at Rivanna's Ivy transfer station are sent to Amelia County for disposal. Sludge from the RWSA treatment plant at Moore's Creek is composted and sold.

Rivanna Solid Waste Authority (RWSA)

Collection and Transportation

RWSA offers no collection services. Private haulers transport wastes accumulated at the Ivy MUC and the McIntire Recycling Center to a variety of final destinations.

Storage, Treatment and Disposal

The Ivy MUC operates a waste transfer station, vegetative (stumps, brush, etc.) waste mulching operation, collection centers for white goods, pallets, tires, and computers, and an Encore Shop for collection of reusable items. The citizens' convenience center, just outside the scales for the transfer station, includes easy drop-offs for accepted cardboard, certain

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household hazardous waste, and trash in bags or receptacles. The MUC is open weekdays from 7:30 a.m. to 4:00 p.m.

The RSWA transfer station accepts municipal solid waste from private citizens and collection vehicles servicing the City of Charlottesville and Albemarle County at \$56/ton, with a \$5 minimum. Small pick-up trucks, 8-foot bed or equivalent, with CDD are also accepted for the same tipping fee. Larger loads of CDD will be directed to the BFI transfer station in Fluvanna County. Clean fill and stumps and brush are accepted as well. RSWA also provides confidential document destruction. Mulch is available for sale to the public. Wooden pallets are ground into chips and used at a nearby power plant for fuel.

There is a paint swap program offered by RSWA at the Ivy MUC. Citizens can drop off or pick up used paints Monday through Thursday. Paint is recycled or disposed of every Friday. Household hazardous waste and tire amnesty days are held at the Ivy MUC.

McIntire Recycling Center is open seven days a week, closing at 5:20 p.m. each day with varying opening times. The center accepts boxboard, file stock, corrugated cardboard, newspapers, glossy paper, phone books, glass, #1 and #2 plastics, and metal and aluminum cans. A book exchange bin is also offered. RSWA contracts with Weyerhaeuser for the paper goods collected. Glass, metals and plastics are taken to Coiners'.

Fluvanna County Collection and Transportation

Individuals, businesses and industries are generally responsible for waste hauling and recycling activities via either contract with a private firm or self-delivery to the transfer station, which is open to the public and accepts MSW, paper, metal, glass, wood, textiles, oil, and batteries. The Zion Crossroads Recycling Center, planned to open in 2007, will accept household recyclables and construction and demolition debris. At Lake Monticello, a private hauler collects MSW and curbside recycling is included for plastics, glass, metal and newspaper.

Storage, Treatment and Disposal

Fluvanna has a 25-acre public landfill off Route 6 on Route 701, which receives about 10,000 tons per year. It is unlined, limiting expansion to the vertical direction. Lateral expansion would require a lining. RSWA has a contract with Fluvanna to bring its wood grinding operation to Fluvanna on an as-needed basis. The Browning-Ferris Industries (BFI) private transfer station is located on 250 east at Zion Crossroads. The facility accepts MSW and large loads of construction and demolition debris (CDD) from RSWA charge account customers. Cash customers are not allowed to use the site. Wastes are loaded into larger trailers and sent to the Amelia County landfill for disposal. The site operates Monday through Friday from 6:30 a.m. to 4:30 p.m. and Saturday 7:00 a.m. to noon. The Fluvanna landfill crushes collected glass for use as local roadway fill. The Zion Crossroads Recycling Center will operate as a materials recovery facility, hauling processed materials to secondary market recyclers and unacceptable materials to an approved solid waste management facility. Hours of operation will be from 7:00 a.m. to 6:00 p.m. Monday through Saturday.

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Greene County

Collection and Transportation

Individuals, businesses and industries are generally responsible for waste hauling and recycling activities via either contract with a private firm or self-delivery. County residents may use the transfer station and recycling center. Waste and recyclables collected include MSW, plastic, glass, paper (newsprint, magazines, and phone books), metals and corrugated cardboard. White goods, appliances, tires, and building materials are also accepted. The county transports material collected at the transfer center via contract with a private firm.

Storage, Treatment and Disposal

Greene operates a transfer station and adjacent recycling center off Route 33 at 358 Mays Road, southeast of Stanardsville. Private haulers transport wastes to the Amelia County landfill.

University of Virginia

Collection and Transportation

Facilities Management is responsible for all solid waste activities. A private company is under contract for collection and shipping of MSW. Recyclables are collected in bins and other systems in dorms and office areas, brought to a central collection point by Division of Recoverable and Disposable Resources employees, and picked up by a private firm. There is also a recycling park on Observatory Hill where people can voluntarily drop off materials.

Storage, Treatment and Disposal

MSW is sent through Ivy transfer to Amelia County. Hazardous and medical wastes are handled through the Office of Environmental Health and Safety, and are incinerated at a vivarium. UVa participated in an electronics recycling pilot program with RSWA in 2003.

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System Capacity for the 20 Year Planning Period

Solid Waste Management System Capacity by Locality

	2025 Population (persons)	2025 Total Projected Annual Waste Generation (Tons)	25% Recycling ¹ (Tons)	Net 2025 Waste (Tons)	Permitted Capacity (Tons per day unless noted)	Annual Capacity at 2025 (Tons)	Available Tonnage 2025/Year (Annual Capacity -Net Waste)
RSWA Transfer Station	152,000	158,975	39,744	119,231	300	93,600 ²	-25,631 ²
Fluvanna Landfill	36,750	28,726	7,182	21,544	131,124 total tons in 2004	0 ³	NA
Greene Transfer Station	26,200	58,686	14,672	44,014	150	46,800 ⁴	+2,786

Sources: Virginia Employment Commission, U.S. Environmental Protection Agency; Virginia Department of Environmental Quality

Notes

- ¹ This Plan establishes a goal of at least 25% recycling by or before 2025
- ² Assuming disposal of 300 tons/day 6 days/week, the annual capacity is 93,600. With a negative capacity of 25,631, RSWA will need to add 86 tons per day assuming operation 300 days per year. This is currently under study by RSWA.
- ³ Net amount of waste generated over 20-year period equals 430,880 tons; therefore no capacity is left. Fluvanna County's landfill committee is proposing a transfer station to come on line in 2007, and the present landfill will be closed. In 2025, Fluvanna County will need adequate capacity to manage approximately 72 tons of waste per day assuming operation 300 days per year.
- ⁴ Assuming disposal of 150 tons/day 6 days/week, the annual capacity is 46,800

Long-Term Disposal Capacity

The Amelia County landfill is currently receiving the region's solid waste from transfer stations. Based on Amelia County landfill capacity at December 2003 of 39,088,210 tons and a landfilled tonnage of 726,983 tons, the capacity of this landfill is 54 years (Source DEQ). The Amelia County landfill has sufficient capacity over the 20-year horizon of this Plan. Additional capacity may be secured from the BFI Henrico County landfill, based on a letter from BFI dated December 3, 2004, included in the Appendices.

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Programs for Waste Reduction and Re-use

Programs available to all residents in the region include donation of vehicles, housewares, clothing and appliances to any number of local non-profits and churches. Private firms advertise their collection of items such as batteries, motor oil, eyeglasses, empty toner cartridges that can be mailed back for free, and computers that can be refurbished and redistributed. Habitat for Humanity operates a store that accepts construction materials for re-sale and re-use.

Charlottesville

Curbside recycling, leaf pick up, Christmas tree pick up, and bulky item (appliance) pickup are all available to City residents. Mulch from the grinding of Christmas trees is available for free at a jointly owned Charlottesville/Albemarle park. Trash cans help reduce litter in the City.

Albemarle

The Encore Shop, part of the Ivy MUC, provides a protected area where people can leave reusable items and pick up items for re-use. Mulch from the grinding of stumps and brush is sold there as well.

Fluvanna

Fluvanna crushes glass accepted at the landfill for use as roadway fill. The Rivanna Conservation Society sponsors a major Rivanna River cleanup each fall.

Greene

The transfer station offers recycling of plastic glass, paper, metals and cardboard. A volunteer run waste exchange program makes clothing and other re-usable items available to the public at no charge. A retailer periodically takes a truck to the County containing off-merchandise for people to take items free of charge. Trash cans help reduce litter in the Town of Stanardsville, and a major volunteer county-wide road cleanup is held every spring.

University of Virginia (UVA)

UVA Facilities Management helps non-profits gather furniture as students move out and abandon useful items. UVA annually collects used electronics for re-use and recycling. UVA holds regular auctions open to the public for the re-use of discarded items.

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Evaluation of Solid Waste Collection

Two systems for solid waste collection operate in the region: curbside collection by private haulers and paid for by residents (except in the City of Charlottesville where curbside collection is additionally subsidized by the City); and collection at the transfer stations and Fluvanna landfill by individuals.

In addition to local subsidy, the City's curbside collection is by contract with the City and thus provided to all residents. This operation is evaluated as contracts expire and new contracts reflect this analysis. In evaluating for efficiency, the County of Albemarle has concluded that a joint contract with the City may be desirable in the urban areas of the County. In rural areas, residents can evaluate the quality of their private hauler and choose from several waste haulers operating in the region.

Procedures for evaluating transfer stations include tracking the weight of material processed over time at each station in order to gauge usage by residents and to plan for added capacity.

Public Outreach Programs

Outreach programs in most localities generally include descriptions of waste management services available to residents on the website, in the annual county services brochure, postings at the courthouse and County Office building, and in ads and articles for special events (waste amnesty days, Christmas tree collection, etc.) in local newspapers. In the RSWA service area, outreach also includes website, public forums, flyers at the recycling center, radio advertisements, and inserts in local newspapers. General public service announcements on radio and television also help educate the public. Adopt-a-Street programs and highway signs promote litter control.

Public participation in solid waste management and planning occurs at advertised meetings of public bodies that discuss and act on the issues. The RSWA has a Citizens Advisory Committee, which meets regularly to discuss budgetary, operational, and environmental issues, and makes recommendations to the Board of Directors. "Keep the County Clean" programs in Fluvanna and Greene promote recycling and waste reduction as well as periodic clean-up days.

Existing Funding Arrangements

Each locality determines the ratio of general revenue funds and tipping fees used to fund solid waste management activities. Each locality has tipping fees for landfilling or disposal at transfer stations. General revenue funds are often used to cover costs of additional facilities, including convenience centers, reuse facilities, and recycling centers. A portion of the cost of recycling is covered by revenue from sales of recyclable materials. Individual localities are also responsible for long-term liabilities, landfill closure, and post-closure costs.

Most landfills and transfer stations in the region operate with a tipping fee that covers much of the cost of collecting, transporting, and disposing of wastes. Convenience centers operate free of charge to the user. General fund tax revenue is often used to cover the difference

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between what tipping fees bring in and total costs, including administration and convenience site operation. Proof of residency at these sites is the local property tax sticker on the vehicle's windshield, which may help residents see the connection between taxes and services. In the City of Charlottesville, a trash sticker must be purchased to participate in curbside pickup, and the income from this is used to help pay for operations and administration.

Recyclables are generally collected for free, and the locality may or may not break even on collection and distribution after getting market value for the materials. Some materials are dealt with at little or no charge to the community. This is also true of re-use items, which can be sold at a low cost to help recover the time and resources needed to collect them.

Grants are another source of funding, and are often used for special waste events such as hazardous and bulky waste amnesty days. State funds assist in tire cleanup and recycling.

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Glossary

Agricultural Waste: solid waste produced from farming operations, or related commercial preparation of farm products for marketing.

Commingled: refers to the collection of recyclable materials in a manner so that the producer does not have to separate the materials by type; this is done after collection.

Commercial Waste: solid waste generated by establishments engaged in business operations other than manufacturing or construction. This category includes, but is not limited to, stores, markets, offices buildings, restaurants, and shopping centers.

Compost: a stabilized organic product produced by a controlled aerobic decomposition process so that the product can be handled, stored and applied to the land without adversely affecting public health or the environment.

Construction and Demolition Debris (CDD): solid waste produced during construction, remodeling, repair or destruction of pavements, houses, commercial buildings, and other structures. CDD includes, but is not limited to, lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, paving materials, and metals and plastics if they are part of the construction material or empty containers for such materials. Paints, coatings, solvents, asbestos-containing material, any liquid, compressed gases, or semisolids and garbage are not CDD.

Debris Waste: waste resulting from land clearing operations, including, but not limited to, stumps, wood, brush, leaves, soils and road spoils.

Domestic (or Household/Residential) Waste: any waste material, including garbage, trash and refuse from households, such as single and multiple residences, hotels, and motels.

Disposal: discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or any constituent of it may enter the environment or be emitted into the air or discharged into any waters.

Hazardous Waste: is defined by the Virginia Hazardous Waste Management Regulation, 9VAC20-60-12 et seq.

Incineration: controlled combustion of solid waste for disposal.

Industrial Waste: any solid waste generated by manufacturing or industrial processes that is not a regulated hazardous waste, including waste from the following manufacturing processes: electric power generation; fertilizer/agriculture chemicals; food and related by-products; inorganic chemicals' iron and steel manufacturing; nonferrous metals/foundries; organic chemicals; plastics and resins; pulp and paper manufacturing; rubber; stone, glass, clay and concrete products; textile manufacturing; transportation equipment; and water treatment. Industrial waste does not include mining waste or oil or gas waste.

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Inert Waste: solid waste that is physically, chemically, and biologically stable, including dirt, concrete, and rock, which are not regulated. Metal, construction debris, stumps, logs, and scrap lumber are regulated as of 1994 and must be disposed in a single-lined cell.

Integrated Solid Waste Management: the practice of managing solid waste using several complementary components, including source reduction, reuse, recycling, resource recovery, and incineration.

Landfill: an area of land where solid waste is buried.

Leachate: the liquid resulting from precipitation percolating through landfills and containing soluble or suspended degradation products of waste.

Litter: all non-biodegradable material discarded illegally on public or private land.

Materials Recovery Facility (MRF): a solid waste facility for the collection, processing and recovery of material such as metals from solid waste or for the production of fuel from solid waste.

Monitoring Well: a well point below the ground surface at a landfill site used for obtaining periodic water samples from groundwater for analysis.

Mulch: woody waste consisting of stumps, trees, limbs, branches, bark, leaves and other clean wood waste that has undergone size reduction by grinding, shredding, or chipping.

Municipal Solid Waste (MSW): waste that is normally composed of residential, commercial and institutional solid waste and residues derived from the combustion of these wastes.

Non-Regulated Landfill: a landfill accepting certain inert materials not regulated by the state, including rubble, concrete, broken bricks, and bricks and blocks.

Principal Recycled Material (PRM): paper, metal (except automobile bodies), plastic, glass, yard waste, wood, and textiles. This does not include large diameter tree stumps.

Recycling: the process of separating a given waste material from the waste stream and processing it so that it may be used again as a raw material for a product, which may or may not be similar to the original product. Recycling does not include processes that only involve size reduction.

Resource Recovery: the creation of usable energy from solid waste through the burning of solid waste to produce steam or electricity or other fuels.

Re-use: the practice of repeating use of a material rather than disposing of or recycling it.

Sanitary Landfill: an engineered land burial facility for the disposal of solid waste which is so located, designed, constructed and operated to contain and isolate the solid waste so that it does not pose a substantial present or potential hazard to human health or the environment.

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Septage/Sludge: Any solid, semisolid, or liquid waste with similar characteristics and effects generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, air pollution control facility, or any other waste producing facility.

Solid Waste: any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from industrial, commercial, mining and agricultural operations, and from community activities, but not including (i) solid or dissolved material in domestic sewage, (ii) solid or dissolved material in irrigation return flows or in industrial discharges which are sources subject to permit from the State Water Control Board, or (iii) source, special nuclear, or byproduct material as defined by the Federal Atomic Energy Act of 1954, as amended.

Solid Waste Management: Systematic administration of activities which provide for the collection, source reduction, storage, transportation, transfer, processing, treatment, and disposal of solid waste or resource recovery.

Source Reduction: reducing the amount of waste generated by an activity at the point of creation. This may occur through the design, manufacture, and sale of products and packaging with minimal volume and toxicity and longer lifetimes.

Source Separation: the segregation of various materials from the waste stream at the point of generation for recycling. For example, household glass and newsprint collection apart from trash.

Supplemental Recyclable Material (SRM): waste tires, used oil, used oil filters, used antifreeze, automobile bodies, construction waste, demolition waste, debris waste, batteries, ash, sludge or large diameter tree stumps.

Tipping Fee: a fee levied in the disposal of solid waste, generally at a landfill. The fee is usually on a per-ton basis, but can be on other units of measure, such as per-truck.

Transfer Station: any solid waste storage or collection facility at which solid waste is transferred from collection vehicles to haulage vehicles for transportation to a central solid waste management facility for disposal, incineration, or resource recovery.

Treatment: Process designed to change the physical, chemical, or biological nature or composition of any waste to render it more stable, safer for transport, or more amenable to use, reuse, reclamation, or recovery.

Vegetative Waste: decomposable materials generated by yard and lawn care or land-clearing activities and including, but not limited to, leaves, grass trimmings, and woody wastes such shrub and tree prunings, bark, limbs, roots, and stumps.

White Goods: stoves, refrigerators, water heaters, and other large appliances.

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Yard Waste: decomposable waste materials generated by yard and lawn care and including leaves, grass trimmings, brush, wood chips, and shrub and tree trimmings. Yard waste shall not include roots or stumps that exceed six inches in diameter.

Terms not defined above have the meanings assigned to them by RCRA, EPA and/or DEQ.

Appendices

Thomas Jefferson Planning District Commission (June 29, 2004)

Jeri Allen, Chair
Greene County

Kevin Lynch, Vice Chair
City of Charlottesville

Philip Anns
Greene County

Craig Barton
City of Charlottesville

Fred Boger
Nelson County

Connie Brennan
Nelson County

Norma Hutner
Fluvanna County

David Morgan, M.D.
Louisa County

Eric Purcell
Louisa County

Grant Tate
Fluvanna County

Sally Thomas
Albemarle County

David Wyant
Albemarle County

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Solid Waste Plan Update Committee Members

Albemarle County and Town of Scottsville

Paul Muhlberger, County Engineer

City of Charlottesville

Judy Mueller, Director of Public Works

Fluvanna County and Town of Columbia

Fritz Franke, Acting Landfill Manager and Recycling Coordinator

John Robins, Director of Public Works

Greene County and Town of Stanardsville

Julius Morris, County Administrator

Allen Morris, Solid Waste Manager

Jesse Hurt, Director of Public Works

Nelson County

Steven Carter, County Administrator

Susan McSwain, Recycling Coordinator

UVA

Cheryl Gomez, Director of Utilities

RSWA

Lonnie Wood, Acting Director

Bruce Edmonds, Recycling Coordinator

Anne Bedarf, Environmental Specialist

Public

Chris Gensic, RSWA Citizens Advisory Committee Chair

Paulette Albright, Keep Nelson Beautiful

William Hale, Louisa County

TJPDC Staff

Harrison B. Rue, Executive Director

Bill Wanner, Senior Regional Planner

Chris Gensic, Regional Planner

Rochelle Garwood, Environmental Planner

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Locality Recycling Rate Calculations

2005 Recycling Rates: Actual vs. National Average Estimates

	2005 Recycling Rate		2001 EPA National Averages	National Averages in Pounds Per Day Per Person	Percent
RSWA	30.7%		Generation of MSW	4.41	100%
Fluvanna	30.7%		Recovery for Recycling	0.99	22.5%
Greene	12.0%		Recovery for Composting	0.32	7.2%
TJPDC	27.1%		Discards After Recovery	3.10	70.3%

Sources: Localities; U.S. Environmental Protection Agency

Calculated rates for 2005

Regional Recycling Rate = (Total regional recycled/(Total regional MSW + Total regional recycled))*100

2005 total MSW

RSWA	93,891
Fluvanna	13,162
Greene	<u>32,923</u>
Regional Total	139,976

2005 total recycling (PRM+SRM)

RSWA	34,487+7,169
Fluvanna	5,798+34
Greene	<u>3,418+1,066</u>
Regional Total	51,972

Regional Recycling Rate = (51,972/(139,976+51,972))*100 = 27.1%

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Public Input from RSWA Forum – November 11, 2003

Major Themes

RSWA should have powers expanded to include more, if not all, aspects of management.
The fees for disposal should be higher, and much higher than that of recycling.
The region is only getting more populated and adding more businesses – need a plan.
Recycling must be easy and convenient to the user.

Specific Thoughts

What level of government service is expected?
Should localities subsidize solid waste services or should users pay all costs directly?
Balance health vs. environment, without subsidy, would cost force some to illegally dump?
Discontinuing recycling is not an option at all.
Flat rates provide little incentive to change
Using single bag stickers is better than annual – encourages reduction in waste.
If you can simply pack another bag into your trash bin, you will. Annual sticker costs affect those with more than one can in greater way – may encourage switch to recycling.
The City recently doubled the charge for trash stickers, a good start, should charge full cost.
Check old CAC survey for locations of new drop centers (Crozet, Scottsville, Hollymead)
Use schools and parks (natural gathering places) for drop centers.
UVA has a model drop-off facility near Slaughter.
Out-of-state waste issue – how can we deal with it, charge higher tips?
Bottle Bill cleaned up litter in Vermont, will this work in Virginia.
Have there been any studies to see if illegal dumping has increased with fees up?
Is there any goal to reduce overall solid waste produced in the state (per capita?)
Some localities have mandates (VT), should we consider it? Would the Dillon Rule affect?
Arlington and Staunton have mandatory rates – check their code and system.
Should it be voluntary or mandated? Either way, better systems must be in place.
(example: downtown mall paper and cardboard bins for businesses)
We should be charging those who overpackage and waste the most.
Why does Rivanna not tip enough to cover its fees? This creates constant deficit.
(Used to operate even, but changes in Ivy, incl. CDD have affected budget)
Cost of all solid waste mgmt. should be covered by tipping fees (as used to be the case).
What are the agreements between the City, County and RSWA for cost sharing, etc.?
RSWA does collect from Zion landfill tip fees.
A tax may not be a good idea, but consumer should feel effect on wallet (full cost).
Loss of CDD tips has really hurt the budget – should have built Cell 5 – but environmental regulations to build this make it very expensive.
City and County should have coordination rather than competition.
- all users have same costs and services provided.
- can RSWA have more power and manage entire system operation?

If transportation is more than half of total cost, would closer facilities lower cost?
Blue Ridge Hospital as potential location
Consider access to rail lines when locating new facilities – trash doesn't require On-Time Delivery in trucks.
A sort facility would allow users to put all commingled into bin for pickup. Makes jobs.
Curbside pick-up should expand rather than contract.

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Markets will develop for materials as we collect enough to show a density of availability.

Plastic lumber may wish to locate here.

Toner recycling business is profitable (we have a local company by Coiners)

Canvas shopping bags should be the norm, reduce all this petroleum plastic. Educate users.

Can we affect the packaging of products from companies outside our area?

Citizens need to inform leaders, businesses, and other citizens of the need for better mgmt.

Letter writing and advertising campaign.

Messages in City/County tax bill flyers

Does the state mandate a recycle rate? Yes 25%, which the region surpasses

How is it possible that we recycle 34% if blue bag is only .6% or so?

Some materials like old car bodies, are included in this figure

The state guidelines for these figures are being re-vamped, may affect rates.

Why can't we afford it if everyone wants it?

Markets for materials have dropped recently

Regulations have increased costs

Environmental clean-up at Ivy is very expensive but necessary.

One person tried to start a private pick up of materials after county cut curbside – had to go to Nelson – lost money.

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Extract from Public Hearing and Adoption, June 29, 2004

EXTRACT

Thomas Jefferson Planning District Commission
Minutes of the June 29, 2004 Meeting

Public Hearing on the Draft Solid Waste Management Plan: Mr. Lynch stated that the Plan has been drafted and reviewed by all the localities. In addition, the updated version is posted on the TJPDC web site.

Mr. Lynch asked if anyone from the public had comments, and there was no response.

Ms. Hutner noted on pg. 6, Objective 3 her concern that Fluvanna could not guarantee it. After discussion it was decided to change the language to read, "Local governments should consider ordinances that allow for establishing manufacturing facilities within the region that could remanufacture the region's recyclable materials".

Ms. Brennan indicated that Nelson County had not yet adopted the plan. Mr. Anns did not know if Greene County had acted on the plan and asked if the Commission adopts a plan, does it mean the whole region has to implement it. Mr. Rue referred to pg. 14 and pointed out that the monitoring and reporting will be handled by public agencies and the TJPDC. In addition, pg. 12 lists planned solid waste management systems by each locality with individual descriptions.

Dr. Morgan asked if there are negative impacts if the goals are not met. Mr. Lynch indicated the previous plan was not enforced. Dr. Morgan added if there are no negative ramifications of the plan and it is just an overarching plan, he does not see a problem for the Board to adopt it. Mr. Rue stated that the intent is to induce cooperation, coordination and to set target goals. He added the best thing that derived from this is the possibility of negotiating waste management contracts, together. Mr. Rue also referred to pg. 9, the implementation strategies for the next 20 years.

Mr. Tate moved to adopt the Solid Waste Plan Management Plan subject to any other comments from Greene County, as amended. Mr. Wyant seconded the motion. All were in favor, none opposed.

Attested to:



Harrison B. Rue
Secretary
Thomas Jefferson Planning District Commission

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Advertisement for Public Hearing

JUNE 04

The Daily Progress

P.O. BOX 9030
CHARLOTTESVILLE, VA 22906
TELEPHONE: (434)978-7210

CERTIFICATE OF PUBLICATION

TO: *Thomas Jefferson Planning District Commission*

I HEREBY CERTIFY THAT THE ATTACHED NOTICE WAS PUBLISHED IN
THE DAILY PROGRESS, A NEWSPAPER IN CHARLOTTESVILLE, VIRGINIA,
AND APPEARED IN THE ISSUE(S) DATED JUNE 22, 2004.
MAY _____ 2004.

PUBLISHING FEE: \$ 490.50

GIVEN UNDER MY HAND THIS 27 TH DAY OF JUNE 2004

Kathleen Hicks
KATHLEEN HICKS, CREDIT MANAGER

NOTICE OF PUBLIC HEARING

**Thomas Jefferson
Planning District Commission
2004 Solid Waste Management Plan
Tuesday, June 29, 2004
7:00 p.m.
300 East Main Street
Charlottesville, VA 22902**

The Thomas Jefferson Planning District Commission will hold a public hearing to solicit public comments on the draft 2004 Solid Waste Management Plan. The Plan details the existing and planned waste management facilities in the City of Charlottesville and the counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson. The Plan also sets goals, objectives, and recommendations for the future of solid waste management in the region.

Copies of the Plan and additional information may be obtained at the offices of the Thomas Jefferson Planning District Commission, 300 East Main Street, Charlottesville, VA on the Charlottesville Downtown Mall, telephone number (434) 979-7310.

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

Resolution from Louisa County Withdrawing from Region

FITZGERALD A. BARNES, Chairman
Patrick Henry District

WILLIE L. GENTRY, Vice Chairman
Cuckoo District

WILLIE L. HARPER
Mineral District

ALLEN B. JENNINGS
Jackson District



County of Louisa

Post Office Box 160
Louisa, VA 23093
540-967-0401 • FAX 540-967-3411
www.louisacounty.com

DAVID B. MORGAN
Green Springs District

ERIC F. PURCELL
Louisa District

JACK T. WRIGHT
Mountain Road District

C. LEE LINTECUM
County Administrator

December 7, 2004

Harrison Rue
Executive Director
Thomas Jefferson Planning District Commission
P.O. Box 1505
Charlottesville, VA 22902-1505

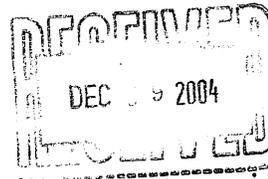
Dear Harrison:

At its meeting on December 6, 2004 the Louisa County Board of Supervisors adopted the enclosed resolution adopting and submitting its own Solid Waste management Plan for the Louisa County and the Towns of Louisa and Mineral.

If you should have any questions, please let me know.

Sincerely Yours,

C. Lee Lintecum
County Administrator
County of Louisa



LOUISA
540-967-0401

GOOCHLAND
804-556-3732

RICHMOND
804-648-4115

CHARLOTTSVILLE
434-979-0479

GORDONSVILLE
540-832-3112

PALMYRA
434-589-3090

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

FEB-14-2005 14:51

540 967 3411

540 967 3411 P.02

RES04.147

**BOARD OF SUPERVISORS
COUNTY OF LOUISA
RESOLUTION**

At a regular meeting of the Board of Supervisors of the County of Louisa held in the Louisa County Office Building at 5:00 p.m. on the 6th day of December 2004, at which the following members were present, the following resolution was adopted by a majority of all members of the Board of Supervisors, the vote being recorded in the minutes of the meeting as shown below:

<u>PRESENT</u>	<u>VOTE</u>
Fitzgerald A. Barnes, Chairman	Yes
Willie L. Gentry, Jr., Vice-Chairman	Yes
Willie L. Harper	Yes
Allen B. Jennings	Yes
David B. Morgan, M.D.	Yes
Eric F. Purcell	Yes
Jack T. Wright	Yes

On motion of Mr. Gentry, seconded by Mr. Purcell, which carried by a vote of 7-0, the following resolution was adopted:

A RESOLUTION APPROVING THE SOLID WASTE PLAN

WHEREAS, Virginia Department of Environmental Quality requires an updated solid waste plan to be submitted; and

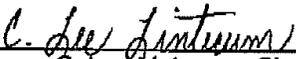
WHEREAS, Louisa County and Joyce Engineering, Inc. have prepared the required plan; and

WHEREAS, this plan has been reviewed by all interested parties and has met all legal requirements for public review.

NOW, THEREFORE BE IT RESOLVED, on this 6th day of December that the Louisa County Board of Supervisors does hereby endorse and approve this plan and directs that the Louisa County Solid Waste Plan be submitted to the Virginia Department of Environmental Quality.

A Copy, teste:





C. Lee Lintecum, Clerk
Board of Supervisors
Louisa County, Virginia

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

Letter from BFI



BFI Waste Systems of Virginia, Inc.
2001 Charles City Road
Richmond, Virginia 23231



December 3, 2004

Mr. Harrison B. Rue
Executive Director
District 10 – Thomas Jefferson
300 E Main Street, 1st Floor
P.O. Box 1505
Charlottesville, VA 22902

Dear Mr. Rue:

BFI Waste Systems of Virginia, Inc. (BFI) plans to construct and operate an expansion of the Old Dominion Landfill located at 2001 Charles City Road, Henrico County, Virginia. Pursuant to Virginia Code 1408.1.B.6, BFI is required to contact the localities in the Commonwealth to notify them that they may reserve disposal capacity in this landfill up to the requirements specified in the applicable approved solid waste management plan. BFI respectfully requests that you forward this letter to all solid waste entities or authorities for the counties, cities, and towns within your district.

To the locality, BFI is offering you the opportunity to reserve disposal capacity in the proposed landfill expansion up to the requirements specified in your approved solid waste management plan. If the locality signs the acceptance agreement, then BFI agrees to guarantee the Old Dominion Landfill will reserve the requested disposal capacity for *the locality* upon the acceptable negotiation and execution of a disposal contract between both parties. BFI and *the locality* must sign a contract that stipulates the conditions of the agreement. By signing the denial statement, *the locality* agrees that it does not wish to reserve disposal capacity. If the acceptance agreement is not returned within 60 days from the date of this letter, it will be assumed that *the locality* has refused the offer to reserve disposal capacity.

Please return the attached document to Resource International, Ltd., P.O. Box 6160, Ashland, VA 23005, Attn: Anthony Creech

Sincerely,

BFI Waste Systems of Virginia, Inc.
2001 Charles City Road
Richmond, Virginia 23231

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

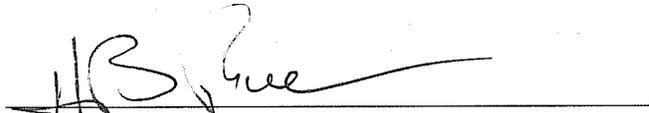
**Extract from Public Hearing and Adoption of Amendment, July 12,
2007**

EXTRACT

Thomas Jefferson Planning District Commission
Minutes of the July 12, 2007 Meeting

Public Hearing – Amendment of Solid Waste Plan: Keith Lancaster presented information about the Construction and Demolition (C&D) Processing Facility, with a collection center for household recyclables, being developed by Southern Development at Zion Crossroads. The Fluvanna Board of Supervisors approved the special use permit for the facility last August. The Planning Commission approved the sketch plan last November. The Department of Environmental Quality issued the Permit by Rule. The final site plan was approved on June 29, 2007. Public hearings on the facility itself have been held throughout this process. This public hearing is to consider the amendment to the Regional Solid Waste Management Plan (SWMP) to include the Zion Crossroads Recycling Center as a solid waste management facility. **On a motion by Grant Tate, seconded by Fred Boger, the Commission approved the amendment to the Regional Solid Waste Management Plan as presented.**

Attested to:



Harrison B. Rue

Secretary

Thomas Jefferson Planning District Commission

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

Advertisements for July 12, 2007 Public Hearing

JUL-11-2007 (WED) 07:44 SOUTHERN DEVELOPMENT

P. 003/003

The Daily Progress
P.O. BOX 9030
CHARLOTTESVILLE, VA 22906
TELEPHONE: (434)978-7210
CERTIFICATE OF PUBLICATION

TO: Southern Development

I HEREBY CERTIFY THAT THE ATTACHED NOTICE WAS PUBLISHED IN
THE DAILY PROGRESS, A NEWSPAPER IN CHARLOTTESVILLE, VIRGINIA,
AND APPEARED IN THE ISSUE(S) DATED JUNE 21, 28, 2007.
MAY _____ 2007.

PUBLISHING FEE: \$ 398.76

GIVEN UNDER MY HAND THIS 1ST DAY OF JULY 2007.

Kathleen Hicks
KATHLEEN HICKS, CREDIT MANAGER

Notice of Public Meeting
Thomas Jefferson Planning
District Commission
Amendment to the
Solid Waste Management Plan
Thursday, July 12, 2007
7:00 p.m.
401 East Water Street
Charlottesville, VA 22902

The Thomas Jefferson Planning District Commission (TJPDC) will hold a public hearing to solicit public comments on a major amendment to the Solid Waste Management Plan (SWMP). The request is to include the Zion Crossroads Recycling Center facility into the SWMP. The Zion Crossroads Recycling Center plans to operate a construction and demolition debris materials (CDD) recovery facility. The facility is permitted to receive a maximum of 1,000 tons of CDD materials per day and will include a Citizen Recycling Center provided for Fluvanna County residents to drop off household recyclable materials. The Recycling Center will be located at Hunter Branch Industrial Park (Lot 2) located at 73 Hunters Branch Road, Troy, Fluvanna County, Virginia.

The plan and an information packet that describes the facility and its construction and operation will be available for public view at the following locations: the TJPDC located at 401 East Water Street, Charlottesville; and the Southern Development office building located at 170 South Pantops Drive, Charlottesville. Citizens are also encouraged to submit written comments prior to the public hearing, but no later than July 12, 2007 to Rochelle Garwood, TJPDC, 401 East Water Street, Charlottesville, VA 22902, or by e-mail to garwood@tdc.org. These comments will become part of the permanent record and be considered in the development of the amendment.

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

PUBLISHER'S CERTIFICATE

State of Virginia
County of Louisa

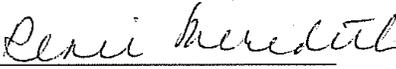
The CV Corporation of Virginia and Cathy Collins, publisher of *The Central Virginian*, a weekly newspaper published in the county and state aforesaid, hereby certifies that the attached notice for the following:

Notice of Public Meeting, Thomas Jefferson Planning District Commission -
Amendment to the Solid Waste Management Plan

was published in *The Central Virginian* on Thursday, June 21 and June 28, 2007.

Given under my hand this 9th day of July, 2007.

THE CV CORPORATION OF VIRGINIA

By: 
Renie Meredith

Publication Charges: \$141.90 weekly

NOT PAID

Notice of Public Meeting
Thomas Jefferson Planning District Commission
Amendment to the Solid Waste Management Plan
Thursday, July 12, 2007
7:00 p.m.
401 East Water Street
Charlottesville, VA 22902

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The plan and an information packet that describes the facility and its construction and operation will be available for public view at the following locations: the TJPDC located at 401 East Water Street, Charlottesville and the Southern Development office building located at 170 South Pantops Drive, Charlottesville. Citizens are also encouraged to submit written comments prior to the public hearing, but no later than July 12, 2007 to Rochelle Garwood, TJPDC, 401 East Water Street, Charlottesville, VA 22902 or by e-mail to rgarwood@tjpd.org. These comments will become part of the permanent record and be considered in the development of the amendment.

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

Letter from Nelson County Requesting Withdrawal from Region

BOARD OF
SUPERVISORS

THOMAS D. HARVEY
North District

HARRY S. HARRIS
South District

ALLEN M. HALE
East District

THOMAS H. BRUGUIERE, JR.
West District

CONSTANCE BRENNAN
Central District



STEPHEN A. CARTER
Administrator

DEBRA K. McCANN
Director of Finance and
Human Resources

December 12, 2007

Harrison Rue
Executive Director
Thomas Jefferson Planning District Commission
PO Box 1505
Charlottesville, VA 22902-1505

Dear Mr. Rue,

At its meeting on July 10, 2007, the Nelson County Board of Supervisors approved the enclosed resolution to adopt the Member Use Agreement and the Articles of Incorporation in order to become a member of the Region 2000 Services Authority. At its meeting on October 9, 2007, the Nelson County Board of Supervisors also approved the enclosed second resolution after Amherst County decided not to join the new Authority. The incorporation of the Authority is now in process, and, once complete, Nelson County will become part of the Region 2000 Solid Waste Management Plan.

Nelson County must be withdrawn from the Thomas Jefferson Solid Waste Management Plan (TJSWMP) in accordance with 9 VAC 20-130-220. However, under the Region 2000 Member Use Agreement, Nelson County may continue its participation with other localities in special waste events or recycling efforts. At the November 16, 2007 meeting of the Thomas Jefferson Solid Waste Working Group, the Recycling Coordinator for Nelson announced the County's desire to continue its participation in Household Hazardous Waste Events at the Ivy Materials Utilization Facility, and Nelson will continue to cooperate with the members of the TJSWMP in efforts to improve recycling in the area.

2006 TJPDC Solid Waste Management Plan
Amended as of June 5, 2008 – Draft

If you require additional information or documents, please let me know. Nelson's decision to withdraw from the TJSWMP is not due to dissatisfaction with the Planning District, but, as a member of the new Region 2000 Services Authority, the County will be able to better manage the high cost of solid waste disposal. Thank you for your consideration.

Respectfully,



Stephen A. Carter
County Administrator

Cc: Susan McSwain, Solid Waste & Recycling Coordinator
Clarke Gibson, Region 2000 Services Authority Director

SAC/sem