

Albany County
Regional Solid Waste Authority Feasibility Study
Final Report

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1. Executive Summary

CURRENT CONDITIONS

Communities in the nine county study area are facing significant changes to the way solid waste is managed. These changes pose significant challenges to the communities, but they also are an opportunity to bring significant improvements in recycling, organics recovery, efficiency and cost savings. **We project that a coordinated regional recycling program could triple the volume of materials currently recovered in the study area.**

During the period of time it takes to develop new facilities, all the existing local public disposal facilities that are currently operating will either close or be privatized. A failure to act soon will mean that communities in the study area will drift into a “default” situation where recycling initiatives are limited and disjointed, and the types and locations of any new facilities will be left predominantly to the private market decisions based on the cheapest means of waste disposal. In their review of the preliminary draft of this report [see Appendix D], the State Department of Environmental Conservation [DEC] noted:

“Privatization of existing facilities will likely compromise existing recyclables collection programs by driving solid waste management to the least expensive alternative, leaving less profitable aspects of solid waste management to whither.”

The City of Albany landfill is under a State order to close. Although the 2010 Capital Region Solid Waste Management Plan estimated that the facility would reach its final capacity in 2016, updated estimates by the City’s engineer currently project that with the eastern expansion its useful life will go through 2020. In any case, the DEC has been very clear that it will not permit continued operation beyond the eastern expansion. Currently, the Albany landfill accepts significant volumes of waste from communities outside the City. The impending closure of that landfill will have implications throughout the nine county study area and beyond.

The Town of Colonie landfill, also a regional facility, will be undergoing significant changes in the near future. On July 28, 2011 the Town Board approved an agreement to privatize operation and management of the Town-owned landfill. Although initial information from the Town for this report indicated that the landfill would reach capacity in 14-16 years, the 25 year agreement with the private company Waste Connections anticipates that applications will be made to DEC to develop new disposal capacity at the site and possibly increase the daily volume of incoming waste. When the details of these future expansion plans are determined, a revised estimate of the useful life of the facility can be made. That will also make it possible to evaluate the impact of the Colonie landfill as a merchant facility on the City of Albany landfill.

Later this year, the waste-to-energy facility in Hudson Falls will go from public ownership and control to private ownership and control. This facility ownership transition will also result in changes to solid waste management in the study area.

Although all the details of their future operations are not currently available, both the Colonie landfill and the Hudson Falls waste-to-energy facility will operate at some level as merchant facilities. That means that, except for the disposal price control mechanisms included in Colonie's contract with Waste Connections relative to waste generated in the town, market conditions for waste disposal will largely influence the prices charged and therefore the locations from which waste is delivered to those facilities. It is possible that one or both of these facilities could take part or all of the volume of waste currently going to the Albany landfill. However, it is also possible that any available capacity at those two facilities [beyond the capacity used for contractually committed waste such as that generated in the Town of Colonie] will be used by communities outside the study area if the facilities could obtain a higher tip fee for that waste. In that case, communities in the study area would be faced with the cost and risk of transporting waste outside the region. In any case, there are likely to be significant implications for communities in the region.

Saratoga County has recently been notified by the DEC that they must prepare a new local solid waste management plan [LSWMP] and comprehensive recycling analysis [CRA] aimed at improving recycling, advancing sustainability, and becoming consistent with the State plan "Beyond Waste". In the notice DEC pointed out that the LSWMP and CRA are prerequisites for solid waste management facility permits and that, without a LSWMP in place certain grant funding may be adversely affected. DEC also notified the county that disposal facilities that receive waste from Saratoga County may be required to stop accepting waste from Saratoga County until an acceptable CRA is approved.

The DEC's requirements to maintain updated LSWMP's and/or CRA's can have far reaching consequences for any community that receives such a notice, which would effectively force a locality to come into compliance or risk a complete shut-down of their solid waste management system. The short and long term impacts throughout the region may be significant. This was underscored by the DEC in their review of the preliminary draft of this report:

"The Department is moving to a higher level of enforcement of Local Solid Waste Management Plans (LSWMP). Therefore, adherence to the terms and conditions within those plans will force smaller communities to expend greater resources to upgrade plans as well as develop their solid waste programs to maintain strict compliance with the local plans. The statewide plan has laid the groundwork for this path. The possible loss of grant funding and inability to permit solid waste management facilities may result if these communities are unable to update their plans or develop their programs in compliance with the statewide plan."

FINDINGS

Unless steps are taken to create a regional solid waste authority, the basic forces of supply and demand will continue to greatly influence what communities in the nine county study area pay for solid waste disposal in the future. Today, some communities are benefiting from the very low prices currently available at private landfills in New York as well as outside the State. However, one cannot depend on that condition remaining

the same for the future. **The depletion and/or privatization of existing disposal facilities in the nine county study area, plus the rising price of fuel, will make long distance transport of waste significantly more expensive in the future.**

The privatization of both the Hudson Falls and Colonie facilities brings into sharper focus the potential for monopolistic pricing by dominant haulers. The formation of a regional authority could be an important step to insure stable prices and progress on recycling, reduction and organics recovery.

A number of solid waste management authorities in other areas have established a track record of financially independent, cost effective and successful operations. Structural problems at other authorities have resulted in situations that can and should be avoided or overcome by statutory and contractual provisions that can be established at the outset by a consensus of local communities. Notably, well run solid waste authorities:

- Are achieving the highest recycling rates in the State;
- Six have developed materials recovery facilities;
- Six have developed long-term local disposal facilities;
- Eight of the twelve active solid waste authorities operate as financially independent entities receiving no subsidy payments from the sponsoring municipalities; and
- Provide predictable and stable solid waste management costs.

In the nine county study area there is a population of over one million people generating over 2 million tons of waste each year which is managed by a combination of private interests, 10 public planning units, and three solid waste management authorities. Currently, based on tonnage data reported to the DEC, 74% of the waste generated in the study area is taken to local public facilities. **There is an adequate volume of waste generated in the study area to support the development of facilities as part of a comprehensive, coordinated system.**

KEY FINDINGS

The creation of a new regional authority is feasible from a cost and operational perspective.

There can be significant benefits to creating a new regional solid waste management authority to serve the communities in the study area including:

- **Cost savings** from combining services, eliminating overlap and duplication, and developing facilities that can capture an economy of scale:
 - **Potential savings from economies of scale could be in the range of \$10.8 to \$15.84 million per year.**
- **Significantly increasing recycling** through a consistent region wide information and management program.
- **Consolidation of services**, pooling of resources, streamlining governance.
- **Consolidation of up to 10 LSWMP's** saving time, staff and money.
- **Protection against market risks** for disposal and transportation.
- **Protection against environmental liability.**
- **Establishment of predictable and reliable long term disposal.**

Despite these benefits, there have been concerns raised that can present hurdles to advancing a regional waste authority including:

- The perception of a “bail out” for the City of Albany.
- The fear that an authority will build a waste-to-energy facility.
- The general fear that a regional waste management facility will be proposed in their community.
- The general distrust of public authorities.

RECOMMENDATIONS

In light of the significant benefits, it is recommended that the communities comprising the study area join now to create a new regional solid waste management authority, and that actions to satisfy their concerns be taken at the outset.

One mechanism to accomplish this could be to develop an inter-municipal agreement to allow communities to opt in as part of an authority formation team and to continue building a consensus on key issues.

In their review of the preliminary draft of this report, the DEC stated:

“Provided adequate assurances are included to assuage concerns regarding general mistrust of the motives behind an authority, the establishment and implementation of an authority is feasible. We support the recommendation that an inter-municipal agreement be established amongst Capital District municipalities to help build consensus prior to the establishment of the Authority.”

IMPLEMENTATION CONSIDERATIONS

The local communities can go a long way to address concerns and to insure the success of the authority by:

- building a strong region-wide consensus;
- promoting transparency;
- prioritizing projects;
- involving local governments; and
- carefully structuring the authority to meet local needs.

The local communities maintain great flexibility in how an authority can be set up, including:

- representation and structure of the governing board;
- methods of oversight and reporting; and
- the nature and extent of the authority's powers, duties and responsibilities.

NEXT STEPS

In the short term, four steps can be taken to further foster the development of a new regional authority.

- The actions delineated below can be undertaken within the framework of an inter-municipal agreement developed by and for communities interested in working together to cost effectively improve their solid waste management and recycling programs.
- The study area communities could seek a grant to complete an in depth analysis of the specific cost savings on an individual planning unit basis achieved by the creation of an authority. Such a study could also include a model of future disposal capacity needs based on information from Waste Connections regarding their expansion plans, if possible, or based on a range of possibilities for future expansion at the Colonie landfill. It could also be helpful to include a legal analysis of how a franchise system for collection services might be authorized under state and local laws.
- Programs such as a coordinated regional household hazardous waste program, and possibly a facility, will establish and enhance communication and cooperation and should demonstrate costs savings for those who participate.
- A similar but much more extensive sharing of services could be achieved by evaluating the consolidation of waste and recyclables collection services. More efficient collection routes could be explored and the environmental benefits and savings could be documented for bringing oversight and administration under a single entity. Private hauling companies could continue to provide curbside collection services, but they would compete for publicly awarded contracts that would be granted to whichever companies

provide the most cost effective collection services in designated collection zones. In their review of the preliminary draft of this report, the DEC noted:

“Under “Next Steps” the proposal to contractually control private company collection routes/practices is particularly attractive. Cost savings could be realized but more importantly environmental benefits such as reduction of carbon emissions could be significant. We strongly support this idea.”

Finally, if an agreement among all or some of the counties in the study area to create a new regional solid waste management authority cannot be reached, it would still be feasible and advantageous for Albany County to pursue a new one county authority. Most of the benefits described herein would remain, albeit on a somewhat reduced scale.

2. Introduction

2.1 Study Area Definition

For the purpose of this study, the Albany region [the study area] is defined as Albany County plus up to eight surrounding counties as listed below and as shown on the map in Figure 1.

Albany County
Columbia County
Greene County
Montgomery County
Rensselaer County
Saratoga County
Schenectady County
Schoharie County
Washington County

2.2 Background

The study area is a region of 5,442 square miles with a population of over 1 million and characterized by a mix of urban centers, suburban communities and rural residential/agricultural areas. Over 2 million tons of all categories of waste are generated each year. Based on tonnage data submitted to the DEC, three local public facilities currently function as the primary disposal facilities:

- The City of Albany Landfill
- The Town of Colonie Landfill
- Warren & Washington Counties Resource Recovery Facility

Albany County and a number of its neighboring communities regularly explore the potential for sharing services as a means to eliminate duplication and save money. A number of regional initiatives have resulted from these efforts including the Capital District Regional Planning Commission, the Capital District Transportation Authority, the Capital District Transportation Committee, the U.S. Department of Homeland Security Urban Area Working Group, the Albany Airport Authority, and the Capital District Youth Center, Inc.

The idea for this study came from Albany County Executive Michael Breslin's advocacy for shared services and exploration of how regional initiatives can improve public services. Conversations with neighboring communities led to letters of support for the Department of State Shared Services grant proposal from:

- Capital District Regional Planning Commission
- County of Rensselaer
- County of Schoharie

- Eastern Rensselaer County Solid Waste Management Authority
- City of Albany
- City of Cohoes
- City of Watervliet
- Town of Berne
- Town of Bethlehem
- Town of Clifton Park
- Town of Schodack
- Town of Grafton
- Town of New Scotland
- Town of Poestenkill
- Town of Rensselaerville
- Town of Rotterdam
- Town of Schaghticoke
- Village of Altamont
- Village of Green Island
- Village of Menands
- Village of Ravena
- Village of Voorheesville

Barton & Loguidice and Gerhardt were retained to identify waste volumes being generated in the region, evaluate current solid waste management practices, identify technologies that may be available to process the region's waste, describe the process to develop facilities using one or more of those technologies, identify the benefits there may be to creating an authority to develop a solid waste management system, and describe the steps necessary to create such an authority.

2.3 Impending "Milestones"

As the Albany County Executive and leaders in neighboring communities considered the solid waste management issues it became apparent that several very important milestones will be reached in the next few years in the Albany region and that decisions will have to be made which will impact solid waste management for the next several decades.

Although the 2010 Capital Region Solid Waste Management Plan estimated that the Albany City Landfill Facility would reach its final capacity in 2016, an updated estimate by the City's consulting engineer currently projects that with the eastern expansion the useful life of the landfill will go through 2020. In any case, the DEC has been very clear that it will not permit continued operation beyond the eastern expansion. This facility currently provides essential disposal service for approximately 94,000 people in the City of Albany plus numerous communities in the region. It is estimated that 73% of the waste accepted at the City landfill is generated outside the City, including significant volumes from outside Albany County. The impending closure of this facility will

necessitate the City and all the other communities currently relying on the City landfill to seek other disposal options, likely outside the area. This underscores both the significance and the regional nature of the impacts that will be created by the closure of the City landfill.

The Town of Colonie approved an agreement with Waste Connections to operate and manage the Town-owned landfill. Although initial estimates provided by the Town for this report estimated that the landfill would reach the end of its useful life in 14 - 16 years, the privatization agreement anticipates that applications will be made to the DEC for the development of an expansion that will provide additional disposal capacity. It is also anticipated that Waste Connections will seek approval to increase the daily volumes taken at the landfill. When the details of these future expansion plans are determined, a revised estimate of the useful life of the facility can be made. That will also make it possible to evaluate the impact of the Colonie landfill as a merchant facility on the City of Albany landfill.

Later this year, the waste-to-energy facility in Hudson Falls will go from public ownership and control to private ownership and control. This facility ownership transition will also result in changes to solid waste management in the study area.

Although all the details of their future operations are not currently available, both the Colonie landfill and the Hudson Falls waste-to-energy facility will operate at some level as merchant facilities. That means that, except for the disposal price control mechanisms included in Colonie's contract with Waste Connections relative to waste generated in the town, market conditions for waste disposal will largely influence the prices charged and therefore the locations from which waste is delivered to those facilities. It is possible that one or both of these facilities could take part or all of the volume of waste currently going to the Albany landfill. However, it is also possible that any available capacity at those two facilities [beyond the capacity used for contractually committed waste such as that generated in the Town of Colonie] will be used by communities outside the study area if the facilities could obtain a higher tip fee for that waste. In that case, communities in the study area would be faced with the cost and risk of transporting waste outside the region. In any case, there are likely to be significant implications for communities in the region.

Public accounts of the 25-year privatization agreement indicate that the Town of Colonie will receive \$23 million in an up-front payment, \$2.3 million per year for the first 5 years, \$1.1 million per year for the next 20 years, \$19.8 million for closure [and \$21 million in an insurance policy], and \$2-\$10.8 million for backing a landfill expansion.

The waste-to-energy facility in Hudson Falls, initially sponsored by Warren and Washington Counties, will be conveyed to the private operator later in 2011 and the counties will have to determine if they will continue to utilize that facility or send their waste to another facility, likely outside the region.

The agreement among the Montgomery-Otsego-Schoharie Solid Waste Authority [MOSA] and the sponsoring counties expires in 2014. The member Counties are actively evaluating their options and Otsego County has petitioned the State legislature to amend the enabling statute to allow Otsego County to withdraw from the authority. Whether or not the authority remains in place, there are no local disposal or recycling facilities and the authority and/or counties must regularly secure capacity through competitive bids.

In 1998 Saratoga County was granted the permits to develop a landfill to serve the County. The landfill was constructed but has not yet been utilized. The County is holding the facility as an “insurance policy” and will decide when and if to use it in the future. Currently, they have no plans to open the facility. However, in correspondence dated March 3, 2011 the DEC has notified the County that they must prepare a new LSWMP and improve their solid waste management and recycling strategies to help ensure that landfill facilities that receive their waste can continue to do so in the future.

Similar to Saratoga County, all the planning units in the study area are facing a requirement to submit updated or new LSWMP’s in the next 1-2 years. This presents an opportunity to consolidate solid waste planning efforts.

The impending closure of the Albany landfill, the private take-over of the Hudson Falls waste-to-energy facility and the private operation and management of the Town of Colonie landfill will have to be considered by the study area communities in evaluating their long-term arrangements for disposal. The success of waste reduction and recycling efforts, the ultimate capacity of the Colonie landfill, and Saratoga County’s decision regarding possible future use of its landfill will all influence the timing and need for additional local disposal capacity.

If the volume of waste currently taken to the City of Albany landfill is taken outside the area to private facilities, that will increase the demand on those disposal facilities, consume landfill capacity, reduce the available supply of disposal capacity and ultimately increase the cost of disposal. Even allowing for the development of new disposal capacity, which appears to be on the horizon with the privatization of the Colonie landfill, without local public facilities all the communities in the region will be subject to the volatility that goes with the private market. There may be times, like the current condition, when communities can benefit from an economic recession and low disposal prices. However, there will also be times when prices increase and in that case communities will have no option but to pay whatever the market demands. Based on experience in other areas, the absence of any local public facilities can lead to one or two large waste companies dominating collection and disposal to such an extent that small haulers are driven out and prices to homeowners and businesses increase.

If no action is taken to develop a local public system, local communities will be particularly vulnerable to price increases driven by increases in fuel costs and other market conditions largely outside local public control. Transporting waste hundreds of miles in trucks that get 4-5 miles per gallon can become very expensive when fuel costs increase rapidly as has been the case in 2011.

In light of these future developments and consistent with the desire to look at opportunities for consolidation and improved operations, Albany County applied for a shared services grant through the Department of State to explore the feasibility of creating a regional solid waste authority. The County invited neighboring counties and planning units to participate in the study without obligation or a financial contribution at this time.

2.4 Other Local Plans

Over the past several decades there have been several initiatives calling for the creation of a regional entity to address solid waste management issues. In 1989 a study prepared by the State Environmental Facilities Corporation, "Capital District Integrated Solid Waste Management System" made a finding:

"In order to effectively plan and implement the counties' long and short term response to their solid waste problems, state legislation establishing a solid waste management authority is recommended."

A 1992 Local Solid Waste management Plan for the greater Albany area anticipated that in the future the planning unit would operate as an authority. Twice State legislation was introduced to create such an authority but it was never enacted.

In 2010, the Capital Region Solid Waste Partnership Planning Unit [comprised of 3 cities, 8 towns, and 3 villages within this study area] completed a Plan which concluded that implementation of a regional solid waste management authority would:

"...meet all of the objectives associated with the goal of continued provision of reliable and reasonably priced solid waste management facilities and services.... would be able to provide for new infrastructure and programs such as expanded mandatory recycling and SSOW [*source separated organic waste*] composting facility... would also provide a more effective administrative structure than currently exists to facilitate the implementation of new facilities and programs...would also meet all of the objectives associated with the goal of minimizing the amount of solid waste requiring land disposal in the future..."

As is described in Sections 5 and Appendix A, there is a substantial track record for solid waste authorities in the State which provides a road map for success, as well as a guideline for pitfalls to be avoided. **In looking at the**

experience over the past 25-30 years, it is apparent that properly structured, well-run solid waste management authorities have reduced the costs, streamlined operations and administration, spearheaded controversial but necessary facilities, increased transparency, and increased recycling. This occurs for several reasons. An authority that represents multiple communities can capture "economies of scale"- the more solid waste that is treated, the lower the cost per ton. Treatment facilities can be fully and more efficiently utilized, and contractors will sometimes offer better prices for larger amounts of waste.

This also occurs because a solid waste management authority usually replaces several local municipalities or organizations which are managing solid waste, and fewer staff is needed. There are currently 10 planning units within the study area:

- Capital Region Solid Waste Management Partnership
- Town of Colonie
- Columbia County
- Eastern Rensselaer County Solid Waste Management Authority
- Greene County
- Montgomery-Otsego-Schoharie Solid Waste Authority
- Saratoga County
- Schenectady County
- City of Troy
- Washington County

If the participating counties and planning units decide to move forward with this initiative, the disposition of each planning unit and each pre-existing authority would have to be resolved. However, if there was an agreement by the individual counties, authorities, and planning units, then this initiative could create one new authority which could replace three existing authorities. It could also serve as the planning unit for the nine counties in the region, or it could coordinate facilities and programs for any existing planning units that may be left in place.

2.5 The New York State Solid Waste Management Plan

In December 2010 the State Department of Environmental Conservation adopted the State Solid Waste Management Plan "Beyond Waste". The State Plan is self described as a vision for transforming waste management into materials management and a series of goals which local planning units will be required to use as a guide in developing their local plans. Although the State Plan is neither a law nor a regulation, the State's Part 360 Regulations require an approved local solid waste management plan [LSWMP] as a condition for facility permits and some State grants.

The State Plan attempts to shift the focus away from “end of pipe” solutions to “upstream” approaches that will actually reduce the volume of waste that is created. It relies heavily on the concept of extended producer responsibility or product stewardship which would shift part of the burden and cost for disposal from local governments to manufacturers. The State Plan also advocates heavily for the separation and recovery of organics, principally food waste, for recovery through composting or digestion. The State also calls on local governments to achieve significant improvements in recycling. In their review of the preliminary draft of this report DEC made a direct reference to the importance of the State Plan and the ability of local communities to meet their goals [for full text, see Appendix D]:

“The Department is moving to a higher level of enforcement of Local Solid Waste Management Plans [LSWMP]. Therefore, adherence to the terms and conditions within those plans will force smaller communities to expend greater resources to upgrade plans as well as develop their solid waste programs to maintain strict compliance with the local plans..... Without an Authority, it will not be economically feasible for communities to begin to implement the ideas put forth in the Statewide Plan, Beyond Waste...”

The creation of a new regional authority could provide a real advantage to achieving the State’s goals by being able to aggregate large quantities of organic waste and therefore garner the benefit from a facility that could capture an economy of scale. Coordinated public information programs for organics and traditional recyclables could also significantly improve recovery rates.

A regional approach would be consistent with the State’s goals as set forth in the State Plan and the Solid Waste Management Act of 1988. The Act of 1988 established a procedure for the creation of planning units and specifically encouraged regional cooperation as the best means to implement the solid waste management hierarchy of reduction, recycling, energy recovery, and landfill disposal. “Beyond Waste” reinforces the Act of 1988 noting:

“The implementation of solid waste management programs in New York State has historically been the responsibility of local government...municipalities may acquire land for waste management and disposal facilities; construct solid waste management facilities; provide...collection services; conduct facility siting studies;... operate or contract for the operation of facilities; ensure compliance and reporting; enact flow control ordinances; and educate the public...The Act also encouraged local governments to join together to form solid waste management planning units and create LSWMP’s to guide their programs and ensure alignment with the state’s solid waste management hierarchy”.

2.6 Steering Committee and Meetings

The preparation of this study has been guided by a steering committee comprised of representatives of the local governments and planning units in the study area. The committee reviewed the grant proposal and the RFP for professional services as well as the submissions by prospective consulting firms. They reviewed all the data compiled by the consultant, identified current practices and conditions that impact the study, and suggested options for consideration. They reviewed a preliminary draft of this report prior to its public release. The committee members and meeting dates are noted below.

Steering Committee

Michael Breslin – Albany County
Michael Franchini – Albany County
Willard Bruce – City of Albany
Frank Zeoli – City of Albany
Paula Mahan – Town of Colonie
Matthew McGarry – Town of Colonie
David Robinson – Columbia County
Jolene Race – Columbia County
Matthew Curley – ERCSWMA
Dan Frank – Greene County
Gary Harvey – Greene County
R.J. VanValkenburg – Greene County
Doug Greene – Montgomery County
Shayne Walters – Montgomery County
Dennis Heaton – MOSA
John Thayer – MOSA and Montgomery County
Linda von der Heide – Rensselaer County
Jeff Edwards – Schenectady County
Carl Olsen – City of Schenectady
Jeri Murray – Schoharie County
Robert Banks – Washington County

Steering Committee Meetings

August 18, 2010
September 30, 2010
March 23, 2011

The study process was also designed to offer meetings with solid waste management officials from each county or planning unit, identified as stakeholders. Three local communities requested such meetings which were held with a representative of Albany County and the consultants as indicated below.

Stakeholder Meetings

December 7, 2010 City of Albany and Town of Colonie
March 30, 2011 Schenectady County

3. Current Conditions and Practices

3.1 Waste Quantities and Characteristics

The nine county study area spans approximately 5,442 square miles and has a population of over one million and is characterized by a diverse mix of urban centers, the State capital and all the associated government offices, suburban residential and commercial development, and extensive rural-agricultural lands.

In order to estimate the volume and character of waste generated in the study area data from the United States Environmental Protection Agency (EPA), DEC State Solid Waste Management Plan, and planning units in the State were examined. In consideration of all this data, we believe that the per capita estimate used for the March 2010 Capital Region Solid Waste Management Plan is a sound means for this study at this stage, and it was therefore used to develop the estimates in Table 1 below. A closer examination of waste quantities and characteristics may be needed if the regional initiative moves forward with the actual development of facilities.

In order to address the State's priority on the organic components of municipal solid waste, an estimate of the volume of organics in the waste stream and the potential for recovery was made and is shown in Table 2.

In looking at the critical measure of how waste and recyclables are currently handled in the study area, based on tonnage data reported to the DEC it has been determined that 74% of the MSW generated in the region is disposed of in the region at three facilities; The City of Albany landfill, the Town of Colonie landfill, and the Hudson Falls waste-to-energy facility. The remaining 26% is exported outside the region. For construction and demolition debris, the tonnage data reported to the DEC indicates that 44% is disposed at in-region facilities, and 56% is exported. As noted in the introduction, this dynamic will change significantly in the future. Appendix B provides an inventory of major solid waste and recycling facilities in the study area.

Waste destined for disposal both in and out of the region is handled through a combination of public and private transfer stations. For MSW and C&D, the tonnage data reported to the DEC reveals that 42% is handled at publicly owned stations with 58% handled at private facilities.

For both MSW and recyclables, solid waste planning unit profiles compiled by the DEC show that 32% of the study area population is served by a public collection program, with 68% using private subscription service.

The diversion (recycling and composting) and disposal data reported to the DEC by each planning unit involved in the study was compiled. Table 3 below summarizes the diversion and disposal quantities from each planning unit and the resulting diversion rate calculation. The average diversion rate across

the area was calculated at approximately 17%. As many planning units do not have access to data from the private sector, particularly the quantity of recyclables marketed directly to markets by the generator, these numbers typically underestimate the quantity of diverted materials. Nonetheless, this data provides a snapshot of the current diversion of materials from the waste stream. Also included in the table for comparative purposes, is the quantity of material requiring diversion in order to meet the maximum overall diversion rate of 65% percent utilized in Table 1.

Table 1 - Estimated Annual Waste Generation¹ by County (Tons/Year)

| County | Pop. ² | Residential MSW @ 3.60 lb/per./da | Non Residential MSW@ 1.80 lbs/per./da | C&D Waste @ 4.00 lbs/per./da | Non Hazardous Industrial Waste @ 1.15 lbs/per./da | Total Tons/Year | Estimated Recycled/Reduced Material ³ @ 65% | Waste Stream for Disposal Tons/Year |
|--------------------|-------------------|--------------------------------------|--|---------------------------------|--|--------------------|---|--|
| Albany County | 304,204 | 199,862 | 99,931 | 222,069 | 63,845 | 585,707 | 380,709 | 204,997 |
| Columbia County | 63,096 | 41,454 | 20,727 | 46,060 | 13,242 | 121,483 | 78,964 | 42,519 |
| Greene County | 49,221 | 32,338 | 16,169 | 35,931 | 10,330 | 94,769 | 61,600 | 33,169 |
| Montgomery County | 50,219 | 32,994 | 16,497 | 36,660 | 10,540 | 96,690 | 62,849 | 33,842 |
| Rensselaer County | 159,429 | 104,745 | 52,372 | 116,383 | 33,460 | 306,961 | 199,524 | 107,436 |
| Saratoga County | 219,607 | 144,282 | 72,141 | 160,313 | 46,090 | 422,826 | 274,837 | 147,989 |
| Schenectady County | 154,727 | 101,656 | 50,828 | 112,951 | 32,473 | 297,907 | 193,640 | 104,268 |
| Schoharie County | 32,749 | 21,516 | 10,758 | 23,907 | 6,873 | 63,054 | 40,985 | 22,069 |
| Washington County | 63,216 | 41,533 | 20,766 | 46,148 | 13,267 | 121,715 | 79,114 | 42,600 |
| Total | 1,096,468 | 720,379 | 360,190 | 800,422 | 230,121 | 2,111,112 | 1,372,223 | 738,889 |

1. Waste generation estimates based on per person generation rates as reported in the Draft Solid Waste Management Plan for the Capital Region Solid Waste Management Partnership prepared by Clough Harbor & Associates March 2010, and verified by various sources.
2. Population based on U.S. Census Bureau 2010 census population data for New York State counties.
3. Recycled/Reduced Material includes source separated organic waste and recyclables at a 75-80% recovery rate for each waste stream. The estimated recovery rate for each type of waste (food waste, yard waste, paper, plastic, metal, etc.) was multiplied by the estimated percentage of each material in the waste stream to develop the 65% weighted average recovery rate. For the entire 9-county region, the breakdown of diverted waste is approx. 200,000 tons per year of organic waste (see separate table) and approx. 1,171,000 tons per year of dry recyclable materials (roughly a 15/85 split).

Table 2 - Estimated Annual Organics Waste Generation by County (Tons/Year)

| County | Population ¹ | Total MSW @ 5.40 lbs/person, | Organics @ 25% ² | Recovered Organics @ 75% of Total Organics ³ |
|--------------------|-------------------------|---------------------------------|--------------------------------|--|
| Albany County | 304,204 | 299,793 | 74,948 | 56,211 |
| Columbia County | 63,096 | 62,181 | 15,545 | 11,659 |
| Greene County | 49,221 | 48,507 | 12,127 | 9,095 |
| Montgomery County | 50,219 | 49,491 | 12,373 | 9,280 |
| Rensselaer County | 159,429 | 152,190 | 38,047 | 28,536 |
| Saratoga County | 219,607 | 216,423 | 54,106 | 40,579 |
| Schenectady County | 154,727 | 152,483 | 38,121 | 28,591 |
| Schoharie County | 32,749 | 32,274 | 8,069 | 6,051 |
| Washington County | 63,216 | 62,299 | 15,575 | 11,681 |
| Total | 1,096,468 | 1,075,642 | 268,910 | 201,683 |

1. Population based on U.S. Census Bureau 2010 census population data for New York State counties.

2. Percent organics as reported in NYSDEC draft report *Beyond Waste*.

3. Assumes highest achievable recovery rate of organic materials from the waste stream is 75%.

Table 3 - Regional Recycling Percentage by Planning Unit

Note: Many planning units do not have access to data from the private sector, particularly the tons of recyclable materials marketed directly to end-use markets by the generating source, hence the tons of recyclables shown in this table for each planning unit may underestimate the tons of materials actually recycled.

Data taken from 2009 Planning Unit Annual Reports

| Planning Unit | Recycled Materials^{1,2} (tons) | Disposed Materials (tons) | Percentage Recycled | Tons Recycled at Maximum |
|----------------------------------|--|----------------------------------|----------------------------|---------------------------------|
| City of Troy | 4,049.80 | 22,725.15 | 15.13% | 17,403.72 |
| Greene County | 2,273.70 | 18,574.46 | 10.91% | 13,551.30 |
| MOS SWMA ³ | 6,955.00 | 95,938.00 | 6.76% | 66,880.45 |
| Columbia County SWD | 4,928.00 | 10,145.00 | 32.69% | 9,797.45 |
| Saratoga County | 5,666.00 | 242,075.00 | 2.29% | 161,031.65 |
| Town of Colonie DPW ⁴ | 5,639.61 | 42,738.00 | 11.66% | 31,445.45 |
| Capital Region SWM | 93,925.50 | 169,372.27 | 35.67% | 171,143.55 |
| Eastern Rensselaer | 1,470.59 | 7,439.15 | 16.51% | 5,791.33 |
| Warren & Washington | 3,374.95 | 59,049.55 | 5.41% | 40,575.93 |
| Schenectady County ⁵ | 80,351.00 | 147,322.00 | 35.29% | 147,987.45 |
| Total | 208,634.15 | 815,378.58 | 17.23% | 665,608.27 |

1. Recycled values include organics whenever they were recorded and diverted from the waste stream.
2. Assumed Values: Computer monitors weigh on average 45 pounds each, televisions weigh on average 100 pounds each and tires weigh on average 25 pounds each.
3. MOS SWMA stands for Montgomery Otsego Schoharie Solid Waste Management Authority
4. Tons of disposed materials shown for Colonie represent only materials generated within the Town that required disposal.
5. Schenectady County-wide Inter-municipal Planning Unit

4. Waste Processing Technologies

4.1 Summary of Technology Options

The following is a summary of the major technology options which could be considered by a regional authority for use in processing the volume of waste which remains after maximizing recycling [material recovery] and reduction.

Proven Inside the U.S. for MSW Treatment/Disposal

Municipal Solid Waste Landfill

MSW landfills are considered the conventional disposal method for MSW in New York State. Waste is disposed of in state-of-the-art landfill facilities with double composite liner systems, which prevent liquids and contaminants from the waste from entering the surrounding soils and groundwater. Leachate (liquid that has come into contact with waste) is collected and typically disposed of at a wastewater treatment plant. Landfill gas, which is generally rich in methane (~50%) is also collected and combusted to prevent dissipation into the atmosphere. Collected gases can also be beneficially used for energy production. Landfilling is on the lowest rung of the state's solid waste management hierarchy. There are currently 27 MSW landfills operating in New York State. One MSW landfill has been built but never operated (Saratoga County).

Waste-to-Energy Facility (Combustion)

A Waste-to-Energy (WTE) facility is a solid waste management facility that combusts wastes to generate steam or electricity and reduces the volume of municipal solid waste (MSW) that would otherwise need to be disposed of by approximately 80-90 percent. These facilities are also sometimes referred to as resource recovery facilities, Municipal Waste Combustors (MWC) or solid waste incinerators with energy recovery. Newer technology allows higher efficiency heat recovery from the combustors, increasing energy production potential. There are currently 10 active WTE facilities in New York State.

Mixed Municipal Solid Waste Composting

Mixed MSW composting is typically an aerobic composting process that breaks down all organic portions of the waste into compost material. Waste is typically collected at the facility as a mixed stream. The process requires intense pre- and post-processing, treatment and sorting to remove inert materials such as plastic or glass, which diminish the quality of compost products. Some MSW composting facilities also accept biosolids. Wastes are typically loaded into a rotating bioreactor drum for two to four days. Screening processes are used to separate unacceptable wastes, which is landfilled as process residue, from the

raw compost which is stored in a maturation area for approximately one month to allow biological decomposition to occur. There are currently 13 mixed MSW composting facilities in operation in the United States, including one in Delaware County, New York.

Proven Outside the U.S. (Europe & Japan) for MSW Treatment/Disposal

Plasma Arc Gasification

Plasma arc gasification is a waste treatment technology that uses electrical energy and the high temperatures created by an electrical arc gasifier. This arc breaks down waste primarily into elemental gas and solid waste (slag), in a device called a plasma converter. The process has been touted as a net generator of electricity, although this will depend upon the composition of input wastes. It will also reduce the volume of waste requiring land disposal.

There are currently 10 plasma arc gasification facilities in operation in Japan and Taiwan, but only one that operates on a large scale (all others are < 50 TPD) and uses mixed MSW as its only feedstock. A small MSW facility (85 TPD) is in operation in Canada. In the United States, St. Lucie County in Florida has obtained a permit to construct a large scale MSW plasma arc gasification facility, but as of this date, has not commenced construction due to vendor and funding issues.

Pyrolysis/Gasification

Pyrolysis systems use a vessel which is heated to temperatures of 750°F to 1,650°F, in the absence or near absence of free oxygen. The temperature, pressure, reaction rates, and internal heat transfer rates are used to control pyrolytic reactions in order to produce specific synthetic gas (syngas) products. These syngas products are composed primarily of hydrogen (H₂), carbon monoxide (CO), carbon dioxide (CO₂), and methane (CH₄). The syngas can be utilized in boilers, gas turbines, or internal combustion engines to generate electricity, or alternatively can be used in the production of chemicals. Some of the volatile components of MSW form tar and oil, and can be removed for reuse as a fuel. The balance of the organic materials that are not volatile, or liquid that is left as a char material, can be further processed or used for its adsorption properties (activated carbon). Inorganic materials form a bottom ash that requires disposal, although it is reported that some pyrolysis ash can be used for manufacturing brick materials.

Gasification is a similar process performed at slightly higher temperatures (1,400°F to 2,500°F) to produce primarily hydrogen and carbon dioxide as syngases.

There are currently two pyrolysis/gasification plants in operation in Japan which have operated with mixed MSW as a sole fuel source with mixed success.

Mechanical-Biological Treatment

Mechanical-biological treatment (MBT) systems are similar to mixed MSW composting systems in that intense sorting is required as the first step in the waste treatment process. This is considered the mechanical phase of the treatment, where recyclable and non-organic materials are removed from the waste stream, prior to the biological treatment. The biological treatment phase involves bio-drying of the remaining organic materials for production of refuse derived fuel, or RDF. RDF can be used in place of fossil fuel products, such as a replacement for coal in electricity production. There are currently over 70 active MBT systems in operation across Europe, with a majority of these facilities operating as pilot scale projects (exact numbers are not available).

Anaerobic Digestion

Anaerobic digestion is a biological process by which microorganisms digest organic material in the absence of oxygen, producing a solid byproduct (digestate) and a gas (biogas). In the past, anaerobic digestion has been used extensively to stabilize sewage sludge, but is more recently under consideration as a method to process the organic fraction of MSW. In anaerobic digestion, biodegradable material is converted by a series of bacterial groups into methane and CO₂. In a primary step called hydrolysis, a first bacterial group breaks down large organic molecules into small units like sugars. In the acidification process, another group of bacteria converts the resulting smaller molecules into volatile fatty acids, mainly acetate, but also hydrogen (H₂) and CO₂. A third group of bacteria, the methane producers or methanogens, produce a medium-Btu biogas consisting of 50-70% methane, as well as CO₂. This biogas can be collected and used for a variety of purposes including electricity production or converted to high BTU natural gas. There are currently over 200 MSW anaerobic digestion facilities operating across Europe. Many of these facilities are smaller scale projects, designed to provide treatment of wastes for small towns and villages. There are two such facilities in operation in Canada, each in the Toronto, Ontario area.

Unproven/Emerging

Ethanol Production

Ethanol production from a mixed MSW waste stream requires an intensive sorting process as the first processing step. All recyclable and inert materials must be removed to produce an organic waste stream for ethanol production. This material is then chopped, fluffed, and fed into a hydrolysis reactor. The effluent of this reactor is mostly a sugar solution, which is prepared for

fermentation. This solution is detoxified and introduced to a fermenter, in which microorganisms convert the sugar to ethanol and CO₂. Next, the solution is introduced into an energy-intensive process that combines distillation and dehydration to bring the ethanol concentration up to fuel grade (99%) ethanol. A solid residue of unfermented solids and microbial biomass is recovered through the anaerobic digestion process, and its marketability as a compost material depends on the purity of feedstock as well as its visual quality. Solid residues can be burned or gasified if alternative methods of reuse are not feasible. Various pilot scale facilities are operating in the United States and Europe, but many have reverted to more homogeneous feedstocks such as wastewater treatment sludge and food processing wastes, because obtaining the homogeneous input stream from mixed MSW has proven difficult.

4.2 Costs Summary

If a solid waste management authority is established for the Albany area, the development of long-term solid waste management facilities would be an integral part of its mission. Preliminary estimates of capital costs and costs per ton are presented below, in 2011 dollars, to illustrate the magnitude of costs that could be involved for the development of a single stream Materials Recovery (Recycling) Facility (MRF), a source separated organic waste management facility (such as an anaerobic digester), a waste processing facility (such as a waste to energy facility), and a new landfill. While different types and sizes of solid waste management/recycling facilities may ultimately be considered by a regional solid waste authority for the Albany area, the preliminary cost information presented below provides a representative range of comparative facility costs.

1. New single stream MRF assumed to process 160 Tons Per Day (TPD) of recyclable materials:
 - a. \$12,500,000 capital cost.
 - b. Potential tip fee of \$ 25 per ton of recyclable material.
2. For estimating purposes, an anaerobic digester system was assumed to process approximately 160 TPD of food and paper waste, and 160 TPD of biosolids or manure, as a stabilizing feedstock, for a combined total of approximately 320 TPD of organic waste at 30 percent solids:
 - a. \$35,000,000 capital cost.
 - b. Potential tip fee of \$108 per ton of food and paper waste.
3. A 600 TPD waste to energy facility could potentially process virtually all of the non-recyclable waste generated by Albany County:
 - a. \$160,000,000 capital cost.
 - b. Potential tip fee of \$93 per ton of processible waste.

4. A 2100 TPD waste to energy facility could potentially process virtually all of the non-recyclable waste generated from the entire 9-county Albany Study Area:
 - a. \$545,000,000 capital cost.
 - b. Potential tip fee of \$71 per ton of processible waste.
5. A 600 TPD landfill could potentially dispose of all of the non-recyclable waste generated by Albany County:
 - a. \$40,000,000 capital cost.
 - b. Potential tip fee of \$41 per ton of waste.
6. A 2100 TPD landfill could potentially dispose of all of the non-recyclable waste generated from the entire 9-county Albany Study Area:
 - a. \$45,000,000 capital cost.
 - b. Potential tip fee of \$22 per ton of waste.

There are a number of requirements that would have to be met to successfully develop one or more of these solid waste management and recycling facilities. These facility development requirements are contained in Appendix C.

4.3 Comparison of Current and Future Disposal Costs

Currently within the study area the non-contract gate fees for disposal of waste ranges from \$60 to \$75 per ton, as is shown in Table 4. This range reflects three primary means of disposal—local public landfills, a local waste-to-energy facility, and long distance transfer to private landfills. The average non-contract gate fee charged for disposal is \$67.25. These fees do not reflect the cost of recycling or other solid waste management services beyond the disposal of municipal solid waste.

The ability to compare current costs to potential future costs is straightforward for the disposal component. As shown in Table 4, the projected future cost of the two primary, proven disposal technologies, landfill and waste-to-energy, compares favorably to current costs if the communities in the nine county study area were to join together in a regional authority. Future costs would be within the range of the current disposal costs.

However, one of the primary reasons for considering the creation of a new regional solid waste authority for the study area would be to significantly increase recycling and advance organics recovery. So, the costs of developing recycling and organics recovery facilities have been shown in Section 4.2, above, and in Table 4 these costs have been added to the cost of disposal to illustrate the cost impact for a theoretical new, integrated system. However, care should be taken

in such a comparison because the two scenarios represent systems with significantly different facilities configurations. It will be up to the authority board to carefully evaluate all relevant conditions and decide what facilities it will develop and what the schedule for development should be. Only then will the true system cost be known.

Table 4 - Disposal Fee Comparison

| Existing Facilities¹ | Average Disposal Fee/Ton Waste | | | |
|--|---------------------------------------|--|--|--|
| City of Albany Landfill | \$75.00 | | | |
| Town of Colonie Landfill | \$60.00 | | | |
| Warren/Washington WTE | \$65.00 | | | |
| MOSA Transfer Stations | \$69.00 | | | |
| Average Disposal Cost | \$67.25 | | | |

| Potential Treatment Facilities/Systems | Potential "Break Even" Disposal Fee/Ton Waste | | | |
|---|--|-----------|-----------------|---|
| | 9-County | | Albany County | Potential Savings/Year for 9-Counties (vs. Albany County Only) ³ |
| | Region | | | |
| Landfilling | \$22.00 | to | \$41.00 | \$13,680,000 |
| Waste to Energy | \$71.00 | to | \$93.00 | \$15,840,000 |
| Landfilling & Recycling | \$45.00 | to | \$60.00 | \$10,800,000 |
| Waste to Energy & Recycling | \$94.00 | to | \$112.00 | \$12,960,000 |
| Landfilling, Recycling, Digestion | \$75.00 | to | \$90.00 | \$10,800,000 |
| Waste to Energy, Recycling, Digestion | \$124.00 | to | \$142.00 | \$12,960,000 |
| Range of Treatment Facilities/Systems | \$22.00 | to | \$142.00 | \$10.8M to \$15.84M |

Notes:

1 - Disposal fee range based on average published "gate rate" tipping fees for MSW/C&D waste at the facilities for 2010/2011. Lower \$/ton tip fees may be charged per contractual arrangements with large haulers and other major facility users.

2 - Average estimated cost per ton range based on facilities sized to handle all specified waste generated within either Albany County, or the 9-County study area, respectively.

3 - Annual savings based on the disposal of 720,000 tons per year in the 9-county study area.

The potential annual savings per county that could result from development of a new 9-county solid waste management facility is illustrated below in Table 5.

Table 5 -- Potential Annual Savings

| County | Population ¹ | % of Study Area | Potential Savings Per Year ² | Potential Annual Savings Per Capita |
|--------------------|-------------------------|-----------------|---|-------------------------------------|
| Albany County | 304,204 | 27.7% | \$4,394,648 | \$14.45 |
| Columbia County | 63,096 | 5.8% | \$911,509 | \$14.45 |
| Greene County | 49,221 | 4.5% | \$711,066 | \$14.45 |
| Montgomery County | 50,219 | 4.6% | \$725,483 | \$14.45 |
| Rensselaer County | 159,429 | 14.5% | \$2,303,173 | \$14.45 |
| Saratoga County | 219,607 | 20.0% | \$3,172,527 | \$14.45 |
| Schenectady County | 154,727 | 14.1% | \$2,235,246 | \$14.45 |
| Schoharie County | 32,749 | 3.0% | \$473,105 | \$14.45 |
| Washington County | 63,216 | 5.8% | \$913,243 | \$14.45 |
| Total | 1,096,468 | 100.0% | \$15,840,000 | \$14.45 |

Notes:

1. Population is per the US Census data for 2010.
2. Based on potential annual savings equal to \$15,840,000 for a 9-counties project, as shown in Table 4, when compared to a project sized only for Albany County.

If these savings were passed on directly to the waste generator by local haulers, regardless of whether the hauling services are publicly or privately procured, then in today's dollars the generator would save \$14.45 per capita per year. For a 4-person household in Albany County, for example, in today's dollars the potential savings for a regional authority project would be about \$58 per year.

Additional savings, both pecuniary and environmental (e.g., there would be less fuel consumption and reduced greenhouse gas emissions), could be realized -- for residences that convert from individually subscribed curbside collection services to publicly controlled curbside collection services -- as a result of an Authority's contracting/franchising of curbside collection services.

4.4 Comparison of Greenhouse Gas Impacts

Each of the waste handling facilities described above would have greenhouse gas (GHG) emissions and sinks (carbon sequestration) associated with the waste treatment process. With the exception of the anaerobic digester, these values were calculated using the Environmental Protection Agency's Waste Reduction Model (WARM). A brief description of these emissions and sinks for each facility is provided below. The analysis showed that each treatment process results in a GHG sink due predominately to the offset of fossil fuel energy use associated with each. Table 6 below provides a summary of the actual GHG sinks associated with each facility.

1. Single Stream MRF – The GHG impacts associated with recycling were calculated based on the diverted quantities given above in Table 1. GHG sinks (reductions) associated with recycling include energy savings in the production process due to the replacement of virgin materials with recycled input feedstocks and carbon sequestration associated with trees that are allowed to remain standing when they are replaced with recycled paper in the production of new paper materials.
2. Anaerobic Digester – The GHG impacts associated with anaerobic digestion (AD) were calculated based on the diverted organic waste quantities given above in Table 2. GHG sinks associated with AD include emissions avoided due to displaced electric utility generation plus carbon sequestration in the finishing compost. GHG emissions include those associated with collection of the material and energy use in the AD process itself.
3. Waste-to-Energy Facility – The GHG impacts associated with waste to energy were calculated for the two facility sizes described above. GHG emissions associated with the facilities include transportation of waste to the facility and stack emissions from the facility. Sinks include emissions avoided due to displaced electric utility generation and decreased energy requirements for production processes using recycled inputs associated with the recovery of steel from the combustion ash. GHG emissions were based on a state of the art, high efficiency waste to energy facility.
4. Landfill – The GHG impacts associated with landfilling were calculated for the two facility sizes described above. GHG emissions associated with landfilling include the generation and fugitive emission of CO₂ and methane gases due to the anaerobic decomposition of waste in the landfill and emissions from transportation of the waste to the landfill facility. GHG sinks are associated with the storage of some carbon in organic material within the landfill, due to incomplete decomposition, that would otherwise have been emitted to the atmosphere. It was assumed that the landfill accepting the waste would be equipped with a state of the art gas collection system and landfill gas to energy facility. For this reason, the GHG sink associated with the avoided emissions from fossil fuel energy generation was also taken into consideration.

Overall, recycling represents the waste processing technology with the maximum GHG reductions. The waste generation numbers utilized in this report reflect the maximum achievable recycling diversion rates for all materials, with the remaining portion of the waste generated still requiring an alternate means of treatment and/or disposal. In comparing waste to energy, anaerobic digestion and landfilling as the method of disposal for the remaining material, the results of the analysis indicate that waste to energy would result in the greatest GHG

emission reductions over the lifetime of the materials. It should be noted that the greenhouse gas impacts associated with temporary construction activities for the facilities listed above were not included in the comparison.

Table 6- Greenhouse Gas Reduction Associated with Waste Processing Technologies

| Waste Processing Technology | Estimated GHG Reduction Per Year ¹ (in metric tons carbon dioxide equivalent) | Average GHG Reduction Per Ton Processed |
|-------------------------------------|---|--|
| Recycling (Regional) | 2,567,429 | 2.54 |
| Recycling (Albany County) | 716,413 | 2.52 |
| Waste to Energy (Regional) | 175,129 | 0.38 |
| Landfilling (Regional) | 145,406 | 0.26 |
| Waste to Energy (Albany County) | 49,033 | 0.39 |
| Landfilling (Albany County) | 40,806 | 0.27 |
| Anaerobic Digestion (Regional) | 25,558 | 0.10 |
| Anaerobic Digestion (Albany County) | 7,091 | 0.10 |

1. Emissions estimates based on the processing of recyclables, organic materials, and solid waste at the waste generation rates and diversion rates given in Tables 1 and 2 of this report.

4.5 Comparison of Energy Impacts

The energy impacts of each facility described above were calculated based on factors reported by the EPA in *Solid Waste Management and Greenhouse Gases – A Life Cycle Assessment of Emissions and Sinks, 3rd Edition, September 2006*. All of the waste treatment technologies analyzed represent an energy savings with the exception of landfilling. A brief description of the estimated energy savings (usage) for each facility is provided below in Table 7.

1. Single Stream MRF – The energy impacts associated with recycling were calculated based on the diverted quantities given above in Table 1. Energy consumption/savings associated with recycling include energy associated with the replacement of acquired virgin materials (mining of metal ore, cutting of trees, drilling of oil, etc.) and transportation energy for recycled feedstocks versus virgin feedstocks.
2. Anaerobic Digester – The energy impacts associated with AD include the generation of electricity from the methane byproduct of the process.
3. Waste to Energy Facility – The energy impacts associated with waste to energy facilities were calculated for the two sizes described above. Energy consumption/savings associated with the facilities include avoided utility fuel due to electricity generation, energy savings due to steel recovery (similar to

the energy savings reported for recycling above), and energy used in transporting waste to the facility and transporting ash from the facility to a disposal site.

4. Landfill – The energy impacts associated with landfilling were calculated for the two facility sizes described above. Energy consumption/savings associated with landfilling include transportation energy related to hauling the waste to the landfill facility and avoided utility energy through the landfill gas to energy facility at the site.

Table 7- Energy Savings Associated with Waste Processing Technologies

| Waste Processing Technology | Estimated Energy Savings Per Year (in Millions of BTUs) | Average Energy Savings Per Ton Processed |
|-------------------------------------|--|---|
| Recycling (Regional) | 24,754,534 | 24.28 |
| Recycling (Albany County) | 6,895,574 | 24.28 |
| Waste to Energy (Regional) | 2,848,145 | 6.23 |
| Anaerobic Digestion (Regional) | 1,835,790 | 7.47 |
| Waste to Energy (Albany County) | 807,215 | 5.48 |
| Anaerobic Digestion (Albany County) | 509,321 | 7.47 |
| Landfilling (Albany County) | -122,388 | -0.80 |
| Landfilling (Regional) | -488,934 | -0.89 |

1. Energy use estimates based on the processing of recyclables, organic materials, and solid waste at the waste generation rates and diversion rates given in Tables 1 and 2 of this report.

As can be expected, recycling and anaerobic digestion represent the treatment options that provide the most energy savings per ton processed, although the energy savings associated with recycling are largely on the manufacturing side and would not be realized locally nor by the operator of a materials recovery facility. Anaerobic digestion is the most efficient means to extract energy from organic materials, but many nonorganic materials will still remain in the waste stream after diversion. Waste to energy offers energy savings associated with managing these materials when compared to landfilling.

5. Track Record of NYS Solid Waste Management Authorities

Authorities have been formed in New York State, initially at the State level and later at the local level, over the course of several decades. The Office of the State Comptroller [OSC] succinctly stated the purpose for creating these authorities in its 2004 report “Public Authority Reform—Reining in New York’s Secret Government”:

“The objective of public authorities is to finance, construct and operate revenue producing facilities for the public benefit, to assist the public sector with projects intended to spur economic development, to provide financial support for non-profit sector projects that serve public needs and/or to coordinate the development or management of resources that transcend traditional public boundaries.”

As indicated by the title of the OSC report, public authorities came under fire over the past several years for abuses, mainly at State level entities but also at some local authorities. This led to a series of laws and regulations known as the public authorities accountability act [and amendments] which require standards and training for board members, ongoing monitoring of governance, financial oversight, filing of financial information, documentation of the public availability of files, and numerous other requirements designed to insure transparency and accountability. Ironically, public authorities are now more tightly controlled by these new regulations than the traditional units of local government.

In looking at the track record of solid waste management authorities the level of success can be characterized by whether they are financially self sufficient, whether they have developed the facilities needed to fulfill the reason they were created, and whether they serve the public as originally envisioned.

Appendix A provides key information on each of the solid waste management authorities created in New York, which can be summarized as follows:

1. Six developed and own materials recovery facilities [MRF’s] to process recyclable materials for marketing (Dutchess, Islip, Oneida-Herkimer, Rockland, Ulster, and Western Finger Lakes);
2. Onondaga and Oneida Herkimer have achieved two of the best recycling rates in the State;
3. Three developed new waste-to-energy facilities (Dutchess, Islip, current Onondaga);
4. Three developed new landfill facilities (DANC, Franklin, Oneida-Herkimer);

5. Seven export waste to disposal facilities located outside of their service area (Dutchess (partial), Eastern Rensselaer, MOSA, North Hempstead, Rockland, Ulster, and Western Finger Lakes);
6. Four have not achieved long-term financial independence (Dutchess, MOSA, Ulster, Western Finger Lakes); and
7. Four multi-county solid waste authorities have been formed (DANC, MOSA, Oneida-Herkimer, and Western Finger Lakes).

6. Benefits and Drawbacks To Creating An Authority

Ultimately the decision whether or not to create an authority is a local decision which will be based on whether the benefits are seen to outweigh the potential drawbacks. In examining the track record of the other New York solid waste management authorities and considering what provisions can be built in to the enabling statute, there are numerous benefits, and a few drawbacks, which are listed in Table 8 and discussed below.

We believe one of the most significant benefits to a new regional authority would be in recycling—a projected four-fold increase over current levels. This would be achieved in a number of ways starting with a plan to unify both the list of eligible recyclables and the instructions on how to separate the material. The fact that the Capital region is a discreet media market as well as an identified socio-economic center lends itself perfectly to a unified recycling message, thereby eliminating the significant confusion that currently results from a myriad of different recycling programs.

We also believe that a new regional authority has the best chance of actually implementing a successful organics recovery program. By coordinating among the wide array of significant food waste generators across the study area, an authority can develop a program with ample volume to be sustainable and more cost effective than many uncoordinated small programs.

A new authority would be able to efficiently pull together all the information necessary to do a regional solid waste management plan, either eliminating or reducing the burden on the existing planning units. This is one example of what may be the most obvious benefits created by consolidation. One comprehensive and coordinated system would make the maximum use of staff resources, allowing technical, operating, and professional staff to perform the necessary duties at multiple facilities and for multiple jurisdictions. There will be new expenses to comply with the State's recently adopted mandates in the Authority Accountability Laws; however, the most efficient way to meet those requirements would be with a single, regional authority.

In their review of the preliminary draft of this report, the DEC noted:

“While there is some collaboration amongst communities within the Capital Region Solid Waste Management Planning Unit, the establishment of a formal Solid waste management Authority would strengthen their ability to enhance recovery and collection programs and realize economies of scale with much greater ability to take advantage of marketing opportunities.”

Ultimately, the development of a publicly sponsored solid waste management system is integrally involved with the private sector and private markets. For example, any public materials recovery facility sends 100% of the recyclables it processes to private mills for remanufacture into new products. The price those mills pay for the

recyclable materials are controlled by global markets. As those markets are strong, the mills will pay higher prices to the public materials recovery facility. Another component of a solid waste management system, collection, is often done by private companies whether by private arrangement or public bidding.

A community must also be cognizant of the private market for disposal as it considers how to manage its non-recyclable waste. This brings to light how a new regional authority could create a significant benefit for the region. If a new regional processing and disposal facility were developed it would largely insulate the area from the potential for significant future increases in the cost of disposal in the private market. Like any other commodity, the cost of waste disposal in the private market place is determined by supply and demand. Over the past 25 years there has been significant volatility in the disposal market [the availability and price of disposal service]. For nearly a decade starting in the mid 1980s disposal prices rose sharply. This spurred the development of new disposal capacity in neighboring states and that increase in supply leveled prices for the ensuing decade. In the last several years the economic recession and associated reduction in waste volumes has caused owners who built disposal capacity to reduce their prices to the lowest level in nearly 30 years. At this time very good rates can be obtained at disposal facilities.

However, no one can depend on that condition for the long term. Conditions throughout the Northeast and beyond will impact the availability and price of disposal capacity.

In looking just at the study area, if the volume of waste currently taken to the City of Albany landfill is taken outside the area to private disposal facilities, that will increase the demand for disposal capacity, consume landfill capacity, reduce the available supply and ultimately increase the cost of disposal.

Even allowing for the development of new disposal capacity as is anticipated for the Town of Colonie landfill, as local publicly controlled disposal capacity diminishes all the communities in the region will be subject to the volatility that goes with the private market. There may be times, like the current condition, when communities can benefit from an economic recession and low disposal prices. However, there will also be times when prices increase and in that case the local communities will have no option but to pay whatever the market demands.

Development of a new local public disposal facility may be more expensive than the current market and for the near-term future, but having that facility will guard against the inevitable price increases in the long term. The existing but unused Saratoga County Landfill might be able to serve this purpose, but Saratoga County's decision making would determine the extent to which this could help anyone outside of its borders.

In addition to the cost of disposal, the cost of transportation can be significant. If a community relies on long haul for disposal they will be vulnerable to the sharp increase in fuel evident again in 2011. High volume tractor trailers that haul waste only get 4-5 miles per gallon so the travel distance to the disposal facility is a significant factor. Developing a local disposal facility will minimize and stabilize transportation costs. It should also be noted that the development of a coordinated regional solid waste management system will create a framework for more efficient and less costly collection of waste and recyclables. At the same time, new initiatives such as the separate collection of source separated organics may be implemented on a more cost effective basis due to economies of scale associated with a regional authority.

The issue of environmental liability is also important in evaluating the development of a public system. If there is no public role, the private sector will typically seek the lowest cost disposal facility and provide additional services like recycling only when markets are positive or they are being paid a premium. In the past, that has sometimes meant that waste went to marginal disposal facilities, almost always without the knowledge or consent of the waste generator. When environmental problems later arise, under state and federal laws the liability and cost to clean up the problems is directed to any and all of the waste generators regardless of the quantity or character of the waste sent to the disposal facility. Literally, the owner of a bakery, for example, that produces low volume low impact waste can be forced to pay for a clean-up caused by a large volume industrial waste generator. The development of a local public disposal facility allows the community to incorporate the best environmental protection systems and to control the origin and character of waste that is accepted thereby minimizing the long term risk for all local waste generators.

Past experience for communities where the disposal facilities are privately controlled illustrate another benefit to a public system. The natural course of private competition usually means that the company that controls pricing at the disposal facility can use that to gain a controlling market share of the collection business. This private control allows for unchecked increases in prices and often the elimination of smaller hauling companies. Public control of pricing at the disposal facility creates an even playing field for all waste haulers and generators that stimulates competition and helps keep prices in check.

In their review of the preliminary draft of this report DEC noted:

“ While there is some collaboration amongst communities within the Capital Region Solid Waste Management Planning Unit, the establishment of a formal Solid waste management Authority would strengthen their ability to enhance recovery and collection programs and realize economies of scale with much greater ability to take advantage of marketing opportunities..... Provided adequate assurances are included to assuage concerns regarding general mistrust of the motives behind an authority, the establishment and implementation of an authority is feasible. Consensus is a key element. “

Table 8 – Benefits and Drawbacks of a Solid Waste Management Authority

| Benefits | Drawbacks |
|--|---|
| 1. Eliminate Overlap and Duplication | 1. Perception of financial waste, abuse of power, unethical activities |
| 2. Consolidate Services | 2. One step removed from political [ballot box] accountability |
| 3. Pool Resources | 3. Involves changes to current local public administration of solid waste management and recycling facilities/ programs (i.e., it's not the status quo) |
| 4. Streamline Governance | |
| 5. Replace up to 3 authorities and 10 planning units with 1 new regional authority. | |
| 6. Save Money | |
| 7. Development of an in-region public system: <ul style="list-style-type: none"> - Guard communities against disposal market risks - Reduce vulnerability to fuel cost spikes - Effectively eliminate environmental liability - Avoid negative consequences of control by one large private company. | |
| 8. Create advantage and efficiency of dealing with large volumes, economies of scale. | |
| 9. Provide an essential and sometimes controversial service in a business-like fashion with public accountability. | |
| 10. Provide the best chance of aggregating the volumes of organics necessary to develop an organics processing facility. | |
| 11. Allow for the creation of a service fee system that encourages reduction and recycling and is based on the level of service actually used or made available [as compared to a fee set by property value]. | |
| 12. Remove facility siting from the “white hot” political climate. | |
| 13. Facilitate planning and implementation of facilities and programs for the long-term benefit of the community. | |
| 14. Regional public information initiatives to promote additional waste reduction and recycling. | |

7. Key Ingredients For Success, Steps For Creating An Authority

The procedure for the actual creation of a new solid waste management authority will first involve the preparation of a draft State enabling statute, based on local decisions on elements of the statute and based on previous similar statutes. Each participating county will then pass a home rule request to the State legislature. The enabling statute will then be approved by the State legislature and signed by the governor. The authority will then be activated when the counties [and/or other local appointing entities] file the appointments to the board of directors with the State.

Drawing on the extensive base of over 25 years of experience with other New York solid waste management authorities combined with the unique conditions in the study area, there are several keys to creating a successful entity that can serve this region.

Build Consensus

First, it is essential to build a strong consensus among the communities as a basis for agreeing to move forward with a regional initiative. This will involve a recognition that there are problems on the horizon and even though they are several years away, action must be taken now to have any chance of having a system in place by the time those problems are at hand. The consensus should reflect each community's clear and complete understanding not only of the potential problems ahead but also what will be expected of them, how they will interact with a new authority, and what changes will result for the homeowners and businesses they represent. The participating communities must "buy in" to the overarching benefits of creating an authority – consolidation of services, elimination of duplication, improved efficiency in the delivery of services, and costs savings – they must also accept that the authority is being created to take concrete actions to resolve or avoid large complex problems. Each community should recognize that they may not always agree with the decisions of the authority.

Establish Public – Private Relationship

We also believe that there should be a conscious recognition at the outset of this process that the creation of a regional authority is a major public policy commitment. It entails a commitment to a measure of public control over the kind of solid waste management system that will be built to serve the region. That is not to say that the authority or the components of its system will be hostile to the private sector. In fact, quite the contrary is true. Most notably, the collection of solid waste, recyclables, and in the future source separated organics is likely to continue to be the province of private haulers through subscription or by municipal bids and contracts. Also, the procurement of a waste processing facility or facilities by the authority is very likely to seek substantial private involvement. However, the nature and extent of private involvement will be decided at a future date when the authority decides the configuration of a system

that best meets the needs of the region. In the final analysis, the authority would be created to build a public system that provides the facilities and services needed and wanted by the residents, businesses and industries of the region – so there has to be at least some measure of public control in any public-private partnership arrangement.

Promote Transparency

From the outset, it is critical to maintain transparency. Albany County has made this a top priority even as discussions of the concept of an authority are just getting started. The highly publicized problems at some authorities now means that all authorities must insure that all their business is conducted openly, that their records are easily accessed by the public, that information is provided to the counties on an ongoing basis, that all budget matters are fully disclosed and documented, that the basis for decisions is well documented and explained, and that misperceptions are quickly and completely corrected. The enabling statute for a new regional authority can include provisions that reinforce the State Public Authority Accountability Act by requiring that the authority submit its annual operating budget to the participating communities prior to adoption and its annual independent audit immediately upon receipt by the authority.

Involve Local Governments

The municipalities within the participating Counties should be kept well informed and current. Some are involved in the delivery of solid waste management services and may need to adjust to new methods for waste handling, collection, and delivery. Whether or not they are directly involved, local governments are on the front line—they are the ones who get the first calls about a change or a new proposal. It will serve the authority well to keep the local governments involved and informed. For all the same reasons, private waste haulers and service providers should be involved in the authority's public involvement program. The public information and education process should be started early, long before possible construction of a new facility starts or a new program is offered.

Prioritize Initiatives

At the very outset of the process to create an authority its initiatives should be prioritized. Based on what we know about the region and based on the priorities of the State [who will ultimately have to approve many of the facilities and programs that are developed], we recommend that the first priority be initiatives that are aimed at waste reduction, improved recycling, recovery of organics, and cost savings.

Carefully Structure Authority To Meet Local Needs

In considering how to best structure the authority it cannot be emphasized enough that this can be controlled by the participating communities. One of the most important things that must be decided at the local level is the representation from the participating

Counties and the corresponding configuration of the board of directors. There are many different ways a governing board could be structured, and for illustrative purposes three options for the board of directors are shown below in Table 9.

Table 9 – Examples of Options for Authority Board Member Appointments

| County | Population | Percent | Option A | Option B | Option C |
|--------------|------------------|--------------|-----------|----------|-----------|
| Albany | 304,204 | 27.7 | 5 | 1 | 2 |
| Columbia | 63,096 | 5.8 | 1 | 1 | 1 |
| Greene | 49,221 | 4.5 | 1 | 1 | 1 |
| Montgomery | 50,219 | 4.6 | 1 | 1 | 1 |
| Rensselaer | 159,429 | 14.5 | 3 | 1 | 2 |
| Saratoga | 219,607 | 20.0 | 4 | 1 | 2 |
| Schenectady | 154,727 | 14.1 | 3 | 1 | 2 |
| Schoharie | 32,749 | 3.0 | 1 | 1 | 1 |
| Washington | 63,216 | 5.8 | 1 | 1 | 1 |
| Total | 1,096,468 | 100.0 | 20 | 9 | 13 |

It should also be noted that the appointments to the authority board of directors can be structured to reflect unique local conditions. For example, if the size of a particular local municipality warrants an appointment to the authority board, specifically by or from that municipality, that can be designated in the enabling statute. If the counties, for example, want appointments to be initiated by the county executive [if that form of government is in place] and confirmed by the county legislature, that can be established in the enabling statute.

The enabling statute [and the service agreement discussed below] should be structured for the authority to be financially independent. This means that the enabling statute must authorize the authority to establish and collect fees for its facilities as well as a “service availability fee” that can be assessed on all waste generators in the authority service area. The authority may be well advised to name the service availability fee something like the “green fee” and earmark the revenue from it to pay for reduction, reuse, recycling, composting, HHW, education, and other environmental benefit programs and facilities. That would theoretically reduce the sting of a new fee and allow the tip fee charged for disposal to be “at market”, thereby minimizing the impact on local governments and haulers and actually reducing the reliance on flow control.

Even if the participating communities don’t expect to use it, they should make sure that the enabling statute provides the sponsoring counties the ability to enact a local flow control law. Similarly, the enabling statute should designate to the authority the power to exercise eminent domain to acquire property essential for needed facilities. Authorization to establish franchises for collection of solid waste and recyclable materials should also be sought for inclusion in the enabling statute.

Another important factor which can be controlled locally through the statute and/or the service agreement is the disposition of the pre-existing solid waste management authorities and planning units within the study area, including the possible purchase by the Authority of some of their assets.

Carefully Craft Service Agreement

In addition to the state enabling statute, a service agreement will be needed to establish the relationship among the participating communities, to establish the business relationship between the counties and the authority, and to provide a foundation for the authority to issue bonds for the solid waste management system. If properly structured, the agreement can insure that the authority will be financially independent [that is, there will be no subsidy payments by the counties] while also providing the assurance that the annual debt service obligations will be met.

The agreement will need to establish that if the authority is unable to meet its operating and debt service obligations, the counties will make those payments. However, if the following provisions are incorporated, the chance of that happening can be virtually eliminated by 1) the counties pledging to deliver or cause to be delivered all waste generated in their county [flow control], 2) the counties requiring the authority to enforce flow control, and 3) the authority committing to always setting its fees to cover 100% of its operating and debt service expenses.

Devise Start-Up Plan

A means for providing initial funding for a new authority would need to be established. For the first several years, the Authority would need to i) hire key staff (e.g., executive director, engineer/planner, accountant), ii) develop and implement a regional waste reduction and recycling public information program, iii) coordinate the network of transfer stations with an RFP/contract for disposal of waste that can't be managed within the region, iv) complete the evaluations necessary to decide the nature, configuration, and priority of the programs for recycling, HHW, composting and organics recovery, and v) establish a means of funding such facilities and programs, such as:

1. State grant.
2. Authority service availability fee (i.e., green fee) collected from waste generators in its service area.
3. Seed money from member Counties/municipalities.
4. Authority bond issue to purchase facilities from member Counties/municipalities.
5. Combination of above.

8. Findings and Conclusions

1. Recycling levels, as reported by the existing planning units in the region and considering the under-reporting that exists, are very low for many of the planning units. The 2009 data indicates a range of 2.29% - 35.67% with an average of all the planning units in the region of 17.23%. Through a regional initiative coordinated by a new authority it is projected that annual waste reduction and recycling levels in these planning units could achieve a goal of 65% and increase annual volumes from 208,634 tons to 665,608 tons.
2. Creation of a new regional solid waste management authority provides the best opportunity to develop a cost effective and sustainable organics recovery program.
3. The impending closure of the Albany landfill, the private take-over of the Hudson Falls waste-to-energy facility and the private operation and management of the Town of Colonie landfill will have to be considered by the study area communities in evaluating their long-term arrangements for disposal. The success of waste reduction and recycling efforts, the ultimate capacity of the Colonie landfill, and Saratoga County's decision regarding possible future use of its landfill will all influence the timing and need for additional local disposal capacity. The DEC has recently notified Saratoga County that they must update their LSWMP and the DEC noted that an approved LSWMP is a requirement for facility permits and certain State grants.
4. The creation of a new regional authority is feasible from a cost and operational perspective.
5. There would be significant benefits to the creation of a regional authority including cost savings, consolidation of government services, elimination of duplication, realization of an economy of scale in the development of facilities and operation of programs, protection against sharp price increases due to fuel price hikes and other factors, protection against monopolization by one private company. The recent sale of the private hauling company with the largest market share of collection service in the area highlights the need to carefully consider the potential long term implications for the region.
6. There is a substantial base of experience with solid waste management authorities in the State and the track record of the successful authorities has resulted in financially independent operations, the development of well run and cost effective facilities, and programs for recycling that are the best in the State. Problems at some authorities are well documented and can be avoided through the structure of the authority and proper oversight by the participating counties.

7. On an annual basis, there is 1,080,569 tons of MSW, 800,422 tons of C&D, 230,121 tons of non-hazardous industrial waste for a total of 2,111,112 tons of waste generated in the study area. Through an integrated system developed by a regional authority recycling could be increased over current levels an organics recovery facility could be developed, and a facility for the safe handling of non-recoverable materials could be developed within the region.
8. Proven technology is available to process, recover, and dispose of the volume and character of waste generated in the study area. If all the communities in the study area elected to join a new regional authority the number of options available and the costs savings would be the greatest. However, if only Albany County moved forward with the creation of an authority it would still be feasible from a cost and technology perspective.

The cost for development of a range of technologies has been provided; the actual cost will depend on the facilities selected by the authority.
9. There is great flexibility in the set up and structure of a solid waste management authority to serve the region. The local participating communities will be able to a) specify the size and representation of the governing board, b) require oversight and reporting to reach the highest level of transparency, and c) control the powers and duties to be established by the State enabling legislation for the authority.
10. Funding will be needed for the establishment and initial start-up of an authority.

9. Potential Hurdles

1. If the City of Albany landfill closes as is currently projected, there will at that point still be approximately \$44 million in unpaid bonds associated with the facility. Other communities in the study area are concerned that if they join a new authority they should not be saddled with satisfying these bonds. From discussions with the steering committee, there seems to be a consensus that the creation of the authority would have to include a binding provision, likely in the service agreement, that the Albany landfill debt would not become an authority obligation.
2. There is a vocal local contingent which is strongly opposed to the development of a waste-to-energy facility and some perceive this feasibility study as a precursor to such a facility. This perception is not consistent with the discussions among the steering committee. In fact there is a strong consensus that if the regional initiative moves forward the top priority should be on facilities and programs to increase recycling, recover organics, and detoxify the waste stream through programs like household hazardous waste collections. Ultimately, the types of waste processing facilities would be decided by the authority. However, the participating communities can require that the authority only employ proven technology that, at a minimum, meets all DEC and EPA standards.
3. There is concern from some of the smaller population counties that if they join a regional authority their interests will be overwhelmed by those of the larger counties. While this is a difficult issue to overcome, if care is taken in how the authority is structured, particularly the board of directors, and steps are taken to expand the current working relationships among the study area communities, then it would be possible to create a successful multi-county authority.
4. There may be opposition to the creation of a regional authority from large private haulers serving the region. While the creation of an authority will initiate changes, one of the most important benefits is that it will create an even playing field for all waste generators and haulers. This will enhance competition among haulers big and small, which can lower pricing and improve overall collection services. This becomes even more important in light of the sale of the area's largest local private hauler to a national company.
5. There is concern by several communities that they may be the location for a future facility. The study area communities can help insure that any siting process will be open and fair and that a commensurate compensation package will be provided to host communities.

6. Some are focusing on the short term and the fact that there are no pressing problems, rather than focusing on future conditions and the need to begin now to address those conditions to avoid significant problems in the long run.
7. The implementation of an authority and any resulting waste treatment infrastructure could take many years to implement; possibly beyond the useful life of the existing disposal facility options.
8. The current uncertainty about the scope of future expansions at the Colonie landfill, and therefore the extent to which it is likely to be able to accept additional waste from within the study area in future years, limits the ability to develop projections about the timing and sizing of new facilities which may be needed.

10. Recommendations

1. Start planning before it's too late:
 - a. Be ready before local disposal capacity expires.
 - b. Be ready when the economy improves.
 - c. Be ready when state and federal grants are available.
2. Take steps now to create a new, regional solid waste management authority.
 - a. Seek a Department of State Shared Services Grant to:
 - * Develop a model of future disposal capacity needs based on a definitive plan from Waste Connections regarding their expansion plans, if possible, or based on a range of possibilities for future expansion at the Colonie landfill.
 - * Complete a detailed analysis of savings from creating an authority by quantifying savings on a per county or per planning unit basis. This will provide information to the authority formation team necessary to answer specific questions from communities.
 - * Develop an inter-municipal agreement to allow communities to opt in as part of an authority formation team and to continue building a consensus on key elements such as board representation, priority initiatives, method for initial funding, and budget oversight. Once an inter-municipal agreement is in place for all those communities electing to participate, the potential for forming a new consolidated planning unit can be evaluated.
 - * Develop a draft state enabling statute for the regional solid waste management authority [public benefit corporation].
 - * Develop a draft service agreement which specifies the relationship and responsibilities of the member counties as well as the regional authority.
 - * Develop an authority start-up plan and model as a means to foster a consensus among the counties and illustrate how the authority would operate.
 - b. Evaluate the feasibility of a state funded consolidation incentive for communities electing to join the authority, such as purchase of existing facilities that would have future utility for authority operations.
 - c. Take incremental steps to enhance the working relationship among the study area communities, such as:

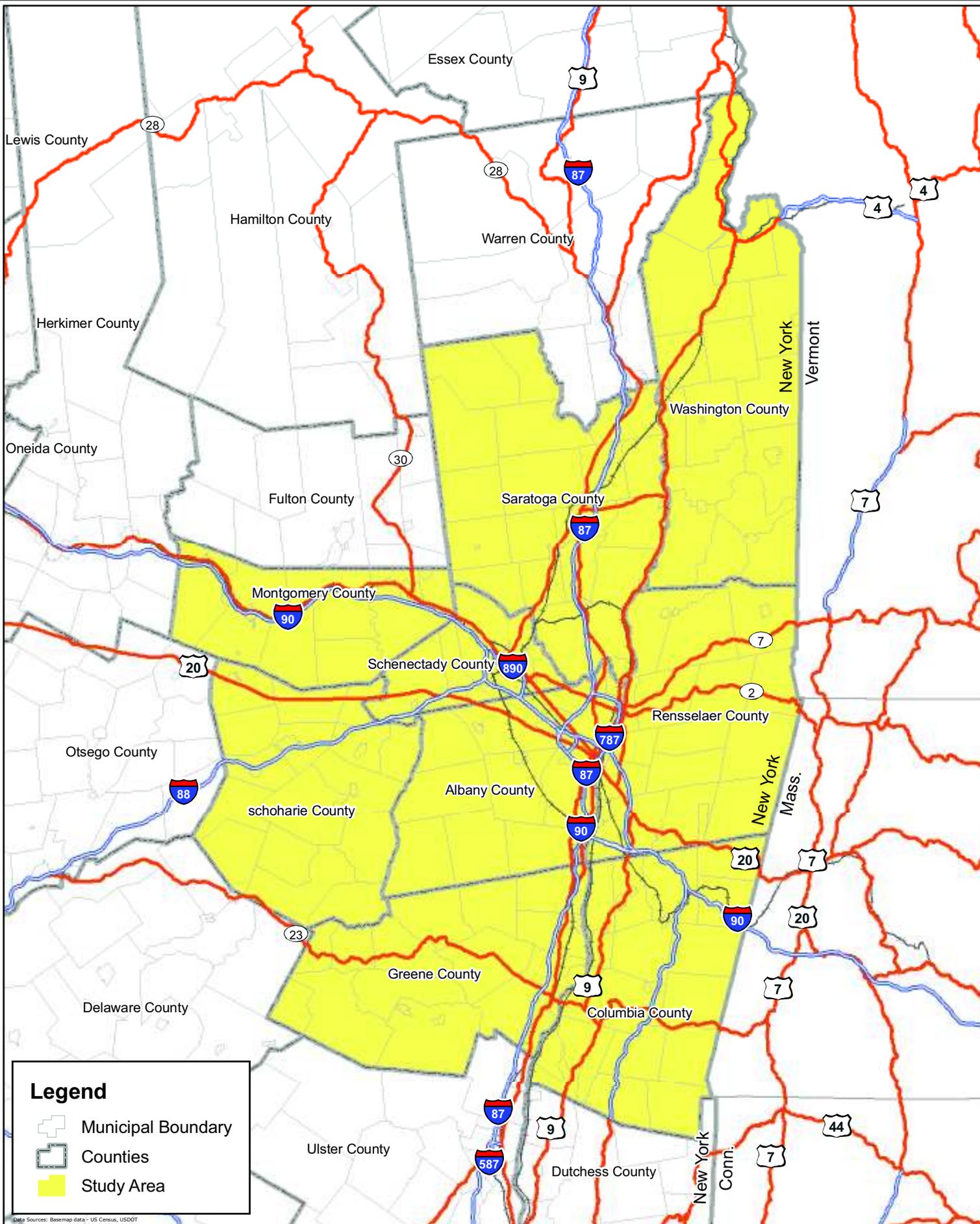
- * Develop and implement a regional waste reduction and recycling public information program.
 - * Evaluate regional HHW service.
 - * Evaluate consolidation of collection services.
3. Meet with NYS officials [DOS, DEC, ABO] to review this study, explore future grant potential, and advocate for:
- a. Funding for solid waste management facilities patterned on the Clean Water Act funding for waste water treatment facilities.
 - b. Support for approaches that advance consolidation.
 - c. Reward initiatives that reduce GHG.

11. Public Comments On Draft Report

On June 27, 2011 the draft report was posted on the Albany County website, announced through a press release by Albany County, and made available for public comment through July 11, 2011. The comments received are attached as Appendix E. All comments were reviewed and evaluated and any changes deemed appropriate were made. It was then circulated to the Steering Committee before release as a final report.

Figure 1

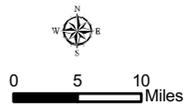
Map of 9 County Study Area



Legend

- Municipal Boundary
- Counties
- Study Area

Data Sources: Base map data - US Census, US DOT



Albany County Regional Solid Waste Feasibility Study

9 County Study Area Map

April 2011

Figure 1

Project No. 923.004

K:\Projects\900\923004\Project\location map - JMB2.mxd

Appendix A

Profiles of Solid Waste Management Authorities in New York

Note: The enabling legislation for these solid waste authorities can be obtained on-line at: <http://public.leginfo.state.ny.us/menugetf.cgi?COMMONQUERY=LAWS> or refer to the Titles of the NYS Public Authorities Law (Article 8, Miscellaneous Authorities) listed below.

1. Dissolved or Inactive Solid Waste Authorities

Title

- 13-D* Broome County Resource Recovery Agency
(§§ 2047-a*--2047-x*).
- 13-K. County of Essex Solid Waste Management Authority
(§§ 2051-a--2051-x).
- 13-L. Greater Troy Area Solid Waste Management Authority
(§§ 2052-a--2052-y).
- 13-A. Multi-Town Solid Waste Management Authority
(§§ 2040-a--2040-u).
- 13. Onondaga County Solid Waste Disposal Authority
(§§ 2015-2037). **Expiration Date: 04/01/1982 DISSOLVED**
- 13-J. Town of Brookhaven Resource Recovery Agency
(§§ 2051-a*--2051-y*).

2. Active Solid Waste Authorities

Title

- 13-I. County of Franklin Solid Waste Management Authority
(§§ 2051-a**--2051-x**).
- 29. Development Authority of the North Country Act
(§§ 2700-2724).
- 13-D. Dutchess County Resource Recovery Agency
(§§ 2047-a--2047-x).
- 13-H. Eastern Rensselaer County Solid Waste Management Authority
(§§ 2050-aa--2050-yy).

- 13-AA. Montgomery, Otsego, Schoharie Solid Waste Management Authority (§§ 2041--2041-x).
- 13-FF. Oneida-Herkimer Solid Waste Management Authority (§§ 2049-aa--2049-yy).
- 13-B. Onondaga County Resource Recovery Agency (§§ 2045-a--2045-x).
- 13-M. Rockland County Solid Waste Management Authority (§§ 2053-a--2053-z).
- 13-C. Town of Islip Resource Recovery Agency (§§ 2046-a--2046-u).
- 13-F. Town of North Hempstead Solid Waste Management Authority (§§ 2049-a--2049-x).
- 13-G. Ulster County Resource Recovery Agency (§§ 2050-a--2050-z).
- 30. Western Finger Lakes Solid Waste Management Authority (§§ 2725-2749).

Authority Profile

1. County of Franklin Solid Waste Management Authority (CFSWMA).
2. Created in 1988.
3. Serves Franklin County population of 50,274.
4. 7 member board of directors appointed to 3 year terms by the county legislature.
5. Annual operating budget of \$6,000,000.
6. County makes debt payments with reimbursement from Authority; this resulted in annual county subsidy every year until 2010 when additional revenue from a 2006 landfill permit tonnage increase eventually balanced the books.
7. No “service availability” fee.
8. Flow control authorized and enacted in 2009.
9. Eminent domain authorized.
10. CFSWMA owns a regional landfill and 4 transfer stations, with recycling and yard waste composting provided at its transfer stations.

Authority Profile

1. Development Authority of the North Country (DANC).
2. Created in 1985 as a multi-purpose public authority to develop infrastructure (e.g., water, sewer, solid waste, fiber optics, housing) and to provide services to support growth of the Fort Drum military installation.
3. Serves Jefferson, Lewis and St. Lawrence Counties with a combined population of 254,591.
4. 13 member board of directors appointed to 4 year terms. Each county legislature appoints 2 board members, 2 are appointed by the Watertown City Council, and 5 non-voting members are appointed by the governor.
5. Annual solid waste operating budget of approx. \$10,200,000.
6. No subsidy payments from counties.
7. No “service availability” fee.
8. Flow control authorized by DANC’s enabling statute and enacted in Lewis and St. Lawrence Counties in 2009/2010. No flow control has been enacted in Jefferson County.
9. Eminent domain authorized, subject to approval by county legislature where the property is located.
10. DANC owns and operates a regional landfill. Each county is responsible for its own transfer station and recycling facilities. In 2010, DANC has started to help its member counties with solid waste planning and recycling education.

Authority Profile

1. Dutchess County Resource Recovery Agency (DCRRA).
2. Created in 1982.
3. Serves Dutchess County population of 292,878.
4. 7 member board of directors appointed to 3 year terms by the county executive [3], the county legislature [3], and jointly by the executive and legislature [1].
5. Annual operating budget of \$22,000,000.
6. County subsidy of \$3-\$6 million per year.
7. No “service availability” fee.
8. Flow control enabling authorization, but not enacted by county.
9. Eminent domain authorized.
10. DCRRA owns a waste-to-energy facility and a materials recovery facility and contracts the operation of both to private vendors; they hold special events for HHW. [Note—the WTE facility was sized to handle approximately 60% of the waste generated in the county.]

Authority Profile

1. Eastern Rensselaer County Solid Waste Management Authority (ERCSWMA).
2. Created in 1989.
3. Serves 3 towns and 4 villages with a combined population of 22,663.
4. 7 (1 per municipality) appointed by each town/village board to 5 year terms.
5. Annual operating budget of approximately \$750,000 for disposal and hauling contracts plus general administrative expenses.
6. The ERCSWMA budget is paid for by its member municipalities, who pay per capita shares of the ERCSWMA budget per an agreement.
7. No “service availability” fee but unpaid solid waste fees become a lien on property that can be collected as if they were unpaid property taxes.
8. Flow control authorized but not enacted.
9. Eminent domain authorized.
10. ERCSWMA established ERC Community Warehouse in 1995 as an outlet for reusable goods; spun-off in 1997 as a separate non-profit corporation. Has a 20-year disposal contract that is available to its member town and villages, and an 8-year hauling contract that services a member town’s transfer station; both contracts expire in 2012. ERCSWMA also prepares bid documents for its members’ procurement of curbside collection services.

Authority Profile

1. Montgomery-Otsego-Schoharie Solid Waste Authority (MOSA).
2. Created in 1988.
3. Serves the Montgomery, Schoharie, Otsego population of 134,751.
4. 8 member board of directors appointed to 4 year terms by the Montgomery County Board of Supervisors [3], the Otsego County Board of Representatives [3], and the Schoharie County Board of Supervisors [2].
5. Annual operating budget of \$11,045,014.
6. Counties must meet minimum guaranteed annual tonnages [GAT] set by the authority and pay penalties for failure to meet the GAT; Counties also subsidize hauler tip fees.
7. No “service availability” fee.
8. Flow control enabling authorization.
9. Eminent domain authorized.
10. MOSA owns and operates 3 transfer stations and leases and operates 2 transfer stations for the receipt and transport of non-recyclable waste to out-of-county contract landfills; under contract with the counties, MOSA does the post closure monitoring and maintenance for 3 closed county landfills.

Authority Profile

1. Oneida-Herkimer Solid Waste Authority (OHSWA).
2. Created in 1988.
3. Serves the Oneida and Herkimer counties population of 277,984.
4. 10 member board of directors appointed to 5 year terms by the Oneida County executive [3], the Oneida County legislature [4], and the Herkimer County legislature [proportion based on population].
5. Annual operating budget \$26,140,000.
6. No county subsidy payments.
7. No “service availability” fee.
8. Flow control laws at county level, backed by hauler/generator contracts.
9. Eminent domain authorized and used.
10. OHSWA owns and operates a new full-service landfill, materials recovery facility, green waste compost facility, permanent HHW facility, 3 transfer stations. [WTE facility 1985-1995].

Authority Profile

1. Onondaga County Resource Recovery Agency (OCRRA).
2. Created in 1990.
3. Serves population of 438,856 [less Village of Skaneateles].
4. 15 member board of directors appointed to 3 year terms by mayor of Syracuse [6], the county executive [4], the county legislature [3], and the Town of Camillus [1], Town of Van Buren [1].
5. Annual operating budget \$33,193,000.
6. No county subsidy payments.
7. No “service availability” fee.
8. Flow control through municipal laws, county law, municipal contracts, hauler contracts.
9. No power of eminent domain.
10. OCRRA has a public – private partnership for a waste-to-energy facility, [a local ash/bypass waste landfill site was secured but never developed - ash is trucked to a landfill in Western NY]; they own and operate 2 transfer stations; they own and operate a compost facility; they contract for recycling services [material recovery facilities]; they hold special events for HHW; they have an expansive public relations and education program.

Authority Profile

1. Rockland County Solid Waste Management Authority (RCSWMA).
2. Created in 1993.
3. Serves Rockland County population of 300,173.
4. 17 member board of directors appointed to 2 year terms. 10 appointed by county legislature [8 must be county legislators, 2 must be village mayors], 2 appointed by the county executive, and the supervisor of each of the 5 towns in the county is also on the Authority Board.
5. Annual operating budget of approx. \$29,000,000.
6. No subsidy payment.
7. A “service availability” fee is authorized and in place. Facility debt service is paid for by an Area Benefit Charge collected on an ad valorem basis. RCSWMA also collects fees to cover its facility/program operating costs from a Green Waste Unit Charge per parcel and from unit charges per dwelling unit for HHW, Transfer Station, MRF and Sludge Composting [the latter also includes a water usage unit charge for non-residential properties].
8. Flow control authorized and enacted in 2008 with implementation in 2009.
9. Eminent domain authorized but can be vetoed by county legislature within 45 days.
10. RCSWMA owns a MRF, 3 transfer stations, a sludge composting facility, a household hazardous waste collection facility, a yard waste composting facility, and a concrete crushing facility.

Authority Profile

1. Town of Islip Resource Recovery Agency (IRRA).
2. Created in 1982.
3. Serves the Town of Islip population of 322,612.
4. 5 member board of directors is the Town Board.
5. Annual operating budget of approximately \$40,000,000.
6. No subsidy payment.
7. District fee charged to every residential property; \$0 tip fee.
8. Flow control enabling authorization, but “economic” flow control is the actual practice.
9. Eminent domain authorized but unused.
10. IRRA has a public-private partnership for a waste-to-energy facility; ash is sent to Brookhaven landfill; they own and operate a materials recovery facility, green waste compost facility, HHW storage facility, C*D processing and disposal facility, and transfer stations; IRRA also provides collection service to approximately 8,500 homes [10% of total].

Authority Profile

1. Town of North Hempstead Solid Waste Management Authority.
2. Created in 1984.
3. Serves town population of 227,058.
4. All 7 town board members also serve as the Authority Board.
5. Annual operating budget of \$22,000,000.
6. No subsidy.
7. No “service availability” fee.
8. Flow control authorized and enacted.
9. Eminent domain authorized with consent of Town Board and Town Supervisor.
10. The Authority exports its waste off Long Island through its own transfer station, which is operated by a contractor. It holds 4 HHW collection days per year and provides weekly e-waste collection at a drop-off site. It contracts for recyclables processing and there are multiple contracts for curbside collection services in the town.

Authority Profile

1. Ulster County Resource Recovery Agency.
2. Created in 1986.
3. Serves the Ulster County population of 182,742.
4. 5 member board appointed to 3 year terms by the county legislature.
5. Annual operating budget of \$13,553,302.
6. County subsidy of \$ 1,400,000 for 2010.
7. No “service availability” fee.
8. Flow control enabling authorization.
9. Eminent domain authorized.
10. UCRRA owns and operates a materials recovery facility and a transfer station for receipt and transport of non-recyclable waste to out-of-county contract landfill; they hold special events for HHW.

Authority Profile

1. Western Finger Lakes Solid Waste Management Authority.
2. Created in 1986.
3. Originally formed to serve counties of Ontario, Seneca, Wayne and Yates. Currently only serves Wayne and Yates with a combined population of 115,773.
4. Wayne County appoints 6 board members and Yates appoints 2.
5. Annual operating budget of \$1,656,000 in 2009.
6. Wayne County paid subsidy of \$1,632,000 and Yates paid \$37,000 in 2009.
7. No “service availability” fee.
8. Flow control authorized but not enacted.
9. Eminent domain authorized with consent of county where property is located.
10. The Authority provides no disposal or transfer services. It owns and operates a MRF in Wayne County.

Appendix B

Larger Solid Waste Management and Recycling Facilities in the Study Area

All facility capacity data based on quantities listed in the NYSDEC-provided facility permit or registration. All received quantities based on those reported in the facility annual reports to the NYSDEC for 2008.

Active MSW Disposal Facilities

| Name | Owner | Location | TPY Rec'd | TPY Capacity | Est. Life (Years) Remaining |
|-------------------------|---|--------------|----------------|----------------|-----------------------------|
| Rapp Rd Landfill | City of Albany | Albany | 232,330 | 275,000 | 9 |
| Colonie Landfill | Town of Colonie | Colonie | 164,083 | 170,500 | 14-16 |
| Wheelabrator RRF | Warren & Washington Counties (until 2011) | Hudson Falls | 170,317 | 219,000 | 20+ |
| TPY Totals => | | | 566,730 | 664,500 | |

Larger (Permitted) PRIVATELY Owned Transfer Stations

| Name | Location | TPY Rec'd |
|-----------------------------|---------------------------------|----------------|
| EACO B-3 | Canaan – Columbia County | 23,424 |
| Hiram Hollow | Wilton – Saratoga County | 69,259 |
| WMNY – Port of Albany | Albany (C) – Albany County | 54,692 |
| Fort Edward | Fort Edward – Washington County | 9,845 |
| County Waste – Clifton Park | Half Moon – Saratoga County | 112,924 |
| TPY Totals => | | 270,144 |

Larger (Permitted) PUBLICLY Owned Transfer Stations

| Name | Location | TPY Rec'd |
|-------------------------|----------------------------------|----------------|
| Schenectady* | Schenectady – Schenectady County | 71,454 |
| MOSA - Amsterdam | Amsterdam – Montgomery County | 21,975 |
| MOSA – Western | Root – Montgomery County | 15,548 |
| MOSA – Schoharie | Schoharie- Schoharie County | 13,850 |
| Greene County | Catskill – Greene County | 18,574 |
| Greenport | Greenport – Columbia County | 10,428 |
| TPY Totals => | | 151,829 |
| * Privately operated. | | |

Larger (Permitted) PRIVATELY Owned Composting Facilities

| Name | Location | CY/Y Capacity |
|----------------|--------------------------|---------------|
| Hiram Hollow | Wilton – Saratoga Co. | 15,000 |
| CTI Agri-Cycle | Cambridge – Wash. Co. | 64,000 |
| | CY/Y Totals => | 79,000 |

Larger (Permitted) PUBLICLY Owned Composting Facilities

| Owner | Location | CY/Y Capacity |
|--------------------------|--------------------------|----------------|
| City of Albany | Albany | 38,000 |
| Town of Bethlehem | Bethlehem | 86,000 |
| Town of Guilderland | Guilderland | 26,000 |
| Town of Clifton Park | Clifton Park | 60,000 |
| Town of Colonie | Colonie | 28,000 |
| City of Saratoga Springs | Saratoga Springs | 49,000 |
| Schenectady County | Glenville | 86,000 |
| Town of Rotterdam | Rotterdam | 15,000 |
| | CY/Y Totals => | 388,000 |

Larger PRIVATELY Owned Materials Recovery (Recycling) Facilities

| Name | Owner | Location | TPY Rec'd |
|---|----------------------------------|-------------------------|---------------|
| FCR MRF | Casella Waste | Claverack | 14,086 |
| Waste Connections Inc [Sierra Fibers] | Marketable Materials LLC | Albany | 51,090 |
| Metro Waste Paper Recovery (Cascades Recovery U.S., Inc.) | Metro Waste Paper Recovery, Inc. | Albany | 21,280 |
| WM Biers/BBC Aggregate Recycling | WM. Biers, Inc. | Albany | Unk. |
| Kara Fibers RHRF | Kara Fibers Inc. | Fort Edward | 1,797 |
| Fort Edward MRF | Waste Management of New York | Fort Edward | 3,590 |
| Waste Connections Inc [County Waste] | County Waste | Albany | Unk. |
| | | TPY Totals => | 91,843 |

Larger PUBLICLY Owned Materials Recovery (Recycling) Facilities

| Name | Owner | Location | TPY Rec'd |
|------------------|--------------------|-------------------------|------------------|
| Town of Colonie | Town of Colonie | Colonie | Unknown |
| Schenectady MRF* | Schenectady County | Rotterdam | Unknown |
| | | TPY Totals => | Unknown |

* Privately operated, and currently functions as a transfer station for recyclable materials.

Appendix C

Solid Waste Management Facility Development Process

If the development of a regional waste authority is deemed feasible and if part or all of the Counties in the study area elect to empower a new authority to develop an integrated system, among the first tasks of the authority will be to determine a) which, if any, existing public facilities will continue to be utilized, b) what role will the private sector play [e.g., a publicly owned facility can be privately operated], and c) what are the target waste components and tonnages to be managed? Based on what we know at this time, the facility development would fall into 3 categories:

RECYCLING – DRY RECYCLABLES; ORGANICS [2-3 years to new facility opening]

1. Issue 120(w) RFP to procure a long term contract with an existing facility, and/or
2. Establish siting criteria [e.g., based on acceptable travel times from local collection routes; compatibility with nearby land uses] and designate a site for new facility development:
 - a. Complete SEQRA and permitting requirements.
 - b. Issue 120(w) RFP for development of a new facility through a public – private partnership, or
 - c. Proceed with design-build-operation of new public facility.

TRANSFER & DISPOSAL [interim] [2 years to start – operate for 10-12 years until long-term facility opens]

1. Determine optimum transfer station configuration to serve the region based on acceptable travel times from local collection routes through consideration of potential use of existing public transfer stations, construction of a new transfer station or stations, or some combination. [Keeping the number of transfer stations to a minimum is critical, from a cost effectiveness perspective].
2. Complete SEQRA and permitting requirements.
3. Proceed with design-build-operation of new public facility or facilities:
 - a. Facility construction, operation and/or hauling can be done by a private contractor.

PROCESSING & DISPOSAL FACILITY [long term] [12-14 years to facility opening]

1. Establish target capacity.
2. Define waste components to be handled.
3. Review potentially feasible technologies.
 - a. Track record
 - b. Environmental impacts
 - c. Cost
4. Document statutory and regulatory siting standards.
5. Develop facility siting criteria/policies/preferences, such as;
 - a. Remoteness.
 - b. Proximity to waste centroid.
 - c. Proximity to other existing land uses.
 - d. Preferred primary highway classification.
6. Prepare draft siting methodology.
7. Initiate first phase of SEQRA process for technology and siting methodology:
 - a. Establish lead agency.
 - b. Make positive declaration of environmental significance.
 - c. Issue draft GEIS.
 - d. Coordinate public comment period.
 - e. Hold public hearing.
 - f. Develop response to comments.
 - g. Issue final GEIS.
 - h. Prepare findings statement.
8. Prepare and submit a request for Conceptual Review by DEC based on the GEIS with a preferred technology and siting methodology determined to be the best fit for the community and the waste stream.
9. Following DEC conceptual approval of technology and siting methodology, select the technology and the site – May consider the issuance at this stage of a 120(w) RFP to shift the responsibility for most development costs to a private entity who would then prepare documents and provide technical assistance to complete 10-14 below.
 - a. The 120(w) RFP process involves issuance of a Draft RFP, followed by a Final RFP, then an evaluation of proposals and negotiation of a contract with the selected company.

10. Initiate second phase of SEQRA process for designated technology on selected site
 - a. Establish or reaffirm SEQRA lead agency.
 - b. Hold EIS public scoping meetings.
 - c. Complete all necessary evaluations of potential and projected impacts, such as:
 - i. Hydrogeology
 - ii. Unique and sensitive environmental areas
 - iii. Regulated wetlands
 - iv. Rare, endangered, threatened species
 - v. Traffic
 - vi. Air emissions
 - vii. Odors and other nuisance factors
 - viii. Environmental justice issues
 - d. Issue draft site specific EIS.
 - e. Establish public comment period.
 - f. Hold public hearing.
 - g. Develop responses to comments.
 - h. Issue final site specific EIS.
 - i. Issue findings statement.
 11. Submit all required permit applications (this can be initiated once the draft site specific EIS is complete).
 12. Commence DEC adjudicatory hearing process:
 - a. Issues conference.
 - b. Determination of issues by DEC ALJ.
 - c. Adjudicate issues [adjudicatory hearing is conducted like a trial with expert witnesses, cross examination, etc].
 13. Receive adjudicatory hearing process results; receive permits; update processing/disposal market analysis; respond to litigation.
 14. If not previously completed, proceed with issuance of a 120(w) RFP for development of a new facility through a public-private partnership, or proceed with the design – build – operation of a new public facility.
 15. Execute facility construction/operation contracts.
 16. Facility construction.
- Start facility operations.

Appendix D

NYSDEC Region 4 Comments on Preliminary Draft of Report

New York State Department of Environmental Conservation

Regional Director, Region 4

1130 North Westcott Road, Schenectady, New York 12306-2014

Phone: (518) 357-2088 • FAX: (518) 357-2087

Website: www.dec.ny.gov



Joe Martens
Commissioner

June 9, 2011

Mr. Michael V. Franchini
Director of Operations
Albany County Office of the Executive
112 State Street – Room 200
Albany, NY 12207-2021

Re: Albany County Regional Solid Waste Authority Feasibility Study Draft of 5-31-11

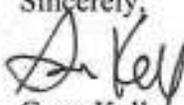
Dear Mr. Franchini,

The Department of Environmental Conservation Region 4 Office is pleased to offer the following comments in review of the subject draft study.

The referenced study provides an excellent overview of the opportunity and benefits of developing a cooperative regional solid waste management authority for the Capital District. Currently the Capital District is composed of multiple municipalities, each managing solid waste with minimal coordination and cooperation between communities. While there is some collaboration amongst communities within the Capital Region Solid Waste Management Planning Unit, the establishment of a formal Solid waste management Authority would strengthen their ability to enhance recovery and collection programs and realize economies of scale with much greater ability to take advantage of marketing opportunities. In addition, the establishment of waste flow control strategies would provide a sound foundation for the long term maintenance of these programs.

1. The report correctly points out that Capital District disposal facilities will be closing or significantly changing operations within the time needed to implement changes. Privatization of existing facilities will likely compromise existing recyclables collection programs by driving solid waste management to the least expensive alternative, leaving less profitable aspects of solid waste management to whither.
2. Under key findings, the report correctly points out that significant cost savings would result from the establishment of an authority by eliminating duplicative services and the realization of economies of scale. In addition, Capital District communities would realize greater capture of recyclables through consolidation and increased revenues. Provided adequate assurances are included to assuage concerns regarding general mistrust of the motives behind an authority, the establishment and implementation of an authority is feasible. Consensus is a key element. We support the recommendation that an inter-municipal agreement be established amongst Capital District municipalities to help build consensus prior to the establishment of the Authority.

3. The Department is moving to a higher level of enforcement of Local Solid Waste management Plans (LSWMP). Therefore, adherence to the terms and conditions within those plans will force smaller communities to expend greater resources to upgrade plans as well as develop their solid waste programs to maintain strict compliance with the local plans. The statewide plan has laid the groundwork for this path. The possible loss of grant funding and inability to permit solid waste management facilities may result if these communities are unable to update their plans or develop their programs in compliance with the statewide plan.
4. Under "Next Steps," the proposal to contractually control private company collection routes/practices is particularly attractive. Cost savings could be realized, but more importantly, environmental benefits such as reduction of carbon emissions could be significant. We strongly support this idea.
5. The report points out the impacts to the projected lifetime and subsequent privatization of the Colonie landfill, but emphasis should be given to the possibility of greatly increased fill rates, and subsequent shortening of the life for this landfill subsequent to its acquisition by a private company. In the short term, this may result in lower tipping and disposal rates, but the longer term impact will be diminished disposal capacity, and coupled with the impending closure of the Rapp Rd. facility, will result in significantly higher disposal costs, and potentially a solid waste disposal crisis for Capital District communities. It is imperative that steps be taken now to begin to advance the establishment of an Authority to avoid these effects.
6. Without an Authority, it will not be economically feasible for communities to begin to implement the ideas put forth in the Statewide Plan, Beyond Waste, which proposes to hold producers of waste responsible for its proper management, as well as removal and alternative management of organics from the waste stream.
7. Table 4 provides the disposal fees for various facilities. The average disposal fee for Albany landfill is given as \$75.00/ton. This fee appears somewhat high; the city is currently in contract with two of the area's largest waste haulers for \$47/ton for up to 600 tons per day. Non -contracted waste haulers pay higher tip fees, but the average would likely be less than the \$75/ton figure provided.
8. Key Ingredients For Success, Steps For Creating An Authority.
This section provides a clear and concise roadmap for the development and creation of a successful solid waste management Authority. It's absolutely critical at each step of the process to carefully bring consensus with clarity and absolute transparency. All stakeholders in the region must be included in the process and have confidence the end result (Authority) will ultimately provide long-ranging benefits for all involved. The Feasibility Study outlines all the necessary tools and steps that will assure a positive outcome.

Sincerely,

Gene Kelly
Regional Director

Appendix E

Comments on Public Review Draft

From: Willard Bruce [<mailto:wbruce5190@gmail.com>]
Sent: Tuesday, June 28, 2011 9:35 AM
To: Mike Franchini; Franchini, Michael; Hans G. Arnold
Subject: Fwd: Trash report

Guys,
Comments on the draft below.....Bill

----- Forwarded message -----

From: Frank Zeoli <zeolif@ci.albany.ny.us>
Date: Mon, Jun 27, 2011 at 3:38 PM
Subject: RE: Trash report
To: twelfward@aol.com, MARSOL@ci.albany.ny.us, parker@ci.albany.ny.us
Cc: wbruce5190@gmail.com, danton@ci.albany.ny.us

Hello All

Table 3 of the County Study released today should be corrected to accurately reflect the material recycling tonnage and percentage from the Capital Region Solid Waste Management Partnership (CRSWMP).

Specifically, That table did not appear to account for 84,082 tons miscellaneous recyclables and recycled C&D debris listed on the 2009 Planning Unit Recycling Report, including:

- 4 tons of commingled containers
- 24,864 tons of asphalt/pavement
- 6,769 tons of concrete
- 40,667 tons of petroleum contaminated soil
- 5,630 tons of construction project soil
- 2 tons of wood
- 6,146 tons of alternative daily cover.

Total reported recycling tonnage in 2009 was 146,372 tons and the total percentage recycled should be 46.36%.

Bill: Can you forward this one to the rest of the committee who received this report

Cashawna: Can you see that the council receives this as well.

Thank You

Frank Zeoli, Director of Recycling
[518-434-2489](tel:518-434-2489) (w) | [518-462-6846](tel:518-462-6846) (f)

zeolif@ci.albany.ny.us | www.albanyrecycles.com

TIME RECEIVED
July 8, 2011 2:03:00 PM EDT

REMOTE CSID

DURATION
60 PAGES
1STATUS
Received

FROM

(FRI) JUL 8 2011 14:00/ST. 13:58/No. 7592419841 P 1



NATIONAL SOLID WASTES
MANAGEMENT ASSOCIATION
NORTHEAST REGION

Via Fax: 518 447 5576 89

Via Email: SWMAComments@albanycounty.com

July 8, 2011

Mr. Michael Franchini
Albany County Director of Operations
112 State Street, Room 200
Albany, NY 12207

Dear Mr. Franchini:

At about 10:30 a.m. today I spoke with Elizabeth -- at your office number (518) 447 7040 -- in the Albany County Executive's Office, regarding the pending July 11th deadline to submit comments on Albany County's pending "Draft Regional Solid Waste Management Authority Feasibility Report." I made this inquiry to find out just how hard the announced comment deadline of July 11th date was; and after checking, she indicated that our submission, if received by COB on Wednesday, July 13th, would be accepted and reviewed in normal order.

I understand that you were out of the office on Friday (7/8) and that the extension of this deadline was made with proper authority. We wish to acknowledge and thank Elizabeth for her fine professional effort here to help us with this minor extension. That said, while we will work to get comments in by this extended 7/13 deadline, we are also inclined to request that Albany County consider further extending the deadline for comments even longer. From what we know, the draft feasibility report hasn't been available for general public review for even 30 days. In many instances, from our experience, comment periods for such comprehensive reports and studies often are kept open for 60 or 90 days.

Thanks for your further consideration of extending the deadline. In the meantime we will use the found time to get our comments on paper and to you by the COB 7/13 extended deadline.

Regards,

Steve Changaris
Manager
NY State Chapter

Steve Changaris • Manager, Northeast Region • Environmental Industry Associations: NSWMA & WASTEC • 290 Turnpike Road, PMB# 407, Westborough, MA 01581 • office: 508.839.4751/ 800.679.6263 • mobile: 508.868.4523 • fax: 508.839.4761 • email: schangaris@nswma.org



-----Original Message-----

From: Andy Arthur [<mailto:andy@andyarthur.org>]

Sent: Sunday, July 10, 2011 9:57 PM

To: SWMAComments

Subject: My Concerns With Regional Solid Waste Management Authority Study

Mike Franchini
Albany County Director of Operations
112 State St., Room 200
Albany, NY 1220

SWMAComments@albanycounty.com

(via electronic mail)

Dear Decision Maker:

I am writing you to express my concerns with the "Regional Solid Waste Management Authority Study", recently completed by Albany County. I became concerned with solid waste issues back in 2003 when I was a college student studying part-time at SUNY Albany, and stumbled upon the Albany Pine Bush, and discovered how wasteful our urban societies really are.

I grew up on my parents land out in Westerlo in Hilltowns of Albany County. We never had trash pick up, in part because we never had a lot of trash. My parents where working class, they struggled to find good paying work after the early-1990s recession. We grew or raised a lot of our food, burned and composted what "waste" we could on our little farm. It was a sin to toss a recyclable can or bottle in with the burnable trash, and food scraps and other organics wasn't just something to be wasted in burn barrel. Some see a carved up animal carcass, I see valuable organic materials. On my parents farm, trips to transfer station where rare. We often took more home from the Westerlo transfer station, then we sent to the Albany landfill.

This was totally different then what I saw going on in the city, where food waste was "just garbage", recycling was at best window dressing or a political statement, and people didn't really care much about the impact of their garbage output. I saw this urban garbage was being dumped in beautiful Albany Pine Bush -- are rare ecological oasis in an urban waste land. This landfill will close soon due to this wastefulness. I couldn't believe city folk would even dream of tossing a valuable aluminum can in the trash.

Today, I also am very aggressive in avoiding waste myself, bringing organic waste out to my parents farm, and hauling the carefully separated recyclables and a minimal amount of trash to the Rupert Road Transfer Station a couple of times of year. I don't have weekly trash pickup here. Just following what I learned growing up, I know it's wrong to be wasteful and generate a lot of trash.

**** I believe we must change how we deal with waste in our cities. ****

Since becoming a resident of Town of Bethlehem in 2007, I have voted in all elections including primaries and school board, and are involved in numerous local political campaigns, particularly when there are true progressive leaders fighting to change our community for the better. I am an active member of Save the Pine Bush, and are constantly advocating for more conservation of the Albany Pine Bush, and for better recycling and especially organic waste recovery policies in our cities.

Below are my comments on the "Regional Solid Waste Management Authority Study"; please review them carefully. Thank you for your consideration! If you have questions, please don't hesitate to call my cell at 518-281-9873 or email andy@andyarthur.org

Sincerely,

Andy Arthur
15A Elm Avenue
Delmar, NY 12054

"The policy of the state shall be to conserve and protect its natural resources and scenic beauty and encourage the development and improvement of its agricultural lands for the production of food and other agricultural products." - Article XIV Section 4, NY State Constitution

**** Point 1: Study Should Analyze Best Way to Get to Zero Waste ****

- Study spends too much time considering how to build and construct a disposal facility. There are more than adequate trash landfills and incinerators to dispose of waste within our state for the foreseeable future.
- Study should define best practices for maximizing recycling and organics recovery, not disposal.
- Many studies have shown that large disposal facilities -- incinerators or landfills -- are expensive to run and canalize recycling efforts.
- If a solid waste agency builds a 1,000 ton per day incinerator or landfill, it will require that much trash. If it can't find that amount of trash, it will reduce recycling efforts to have enough trash to fill the incinerator or landfill. This undermines efforts to get to zero waste or near zero waste by increasing recycling and composting of organic materials.

- Study should include a 20-year plan similar to that of the recently submitted Albany Solid Waste Management Plan that proposes steady reductions in disposal of waste in favor of recycling.

- The study should be Zero Waste goal, where nearly all waste is recycled and organics are recovered. Many communities across the country have adopted a Zero Waste goal and are vastly more aggressive in recycling and organics recovery than what this study is proposing.

**** Point 2: Public Authorities Are Anti-democratic ****

- The study fails to acknowledge the benefits of competition, and how having competing transfer stations or disposal facilities could lower disposal costs.

- Authorities are anti-democratic. Citizens have the right to influence their leaders on what solid waste facilities are built and what solid waste laws are implemented. ** The study should not call for the authority to decide on disposal facilities -- it's up to elected officials to decide. **

- The lack of competition with an Authority will lead to large bureaucratic overhead, waste, fraud, and abuse.

- Citizens and elected officials have a right to know ahead of time what kind of disposal facilities if any would be constructed prior to creation of an authority.

- Local communities should have a voice in process and all decisions should be made by consensus of all communities. A large governmental body makes consensus impossible.

- Communities named in an authority's legislation are stuck in the authority until the legislature amends the law or allows it sunset, regardless of democratic choice. Any solid waste agency should be democratic in nature, and allow communities to freely join or leave it with sufficient notice (e.g. 90 days).

**** Point 3: Study Fails to Acknowledge Alternatives ****

- The study does not analyze the effectiveness of a Solid Waste District similar to those in Vermont. A Solid Waste District would have no employees or bureaucracy, but is a consistent set of regulations and permitting guidelines administered by multiple towns.

- The study fails to show what is wrong with the current ANSWERS structure. While the current ANSWERS disposal facility will close shortly, ANSWERS for many years has relied on communities contracting with private recycling brokers. Why can't communities also contract with private disposal brokers, while maintaining a coordination of solid waste planning through the current ANSWERS board?

- Citizens should be free to choose what hauler and disposal or recycling facility they use. Some may choose a landfill for disposal of their waste, while others seeking a more different option, may prefer extra to have waste hauled to an incinerator. The choice of disposal facility should be a key part of a any plan, to allow citizens weight costs and benefits of different facilities.

- Consider creating a "Green Rating" system for trash haulers. Let consumers choose if what lower-value materials they wish to be recycled, and what kind of disposal facility they wish to pay for.

**** Point 4: Town of Colonie, 8 Other Counties Have Not Expressed Interest in this Proposed Authority ****

- The study claims to be on behalf of a 9-county region. However, only ANSWERS Communities have given formal resolutions in support of this study, and most notably the Town of Colonie has not given a resolution of support of the study. No other town or county, has formally stated their support or opposition to creation of a regional authority. Why not?

- Would Saratoga or Rensselaer Counties want to join the Authority, if they knew a massive 1,000 tons per day incinerator or landfill was going to built in their county, and all of the trash from Albany County through Otsego County was going to be hauled there?

- If other counties and non-ANSWERS towns are interested in creating an authority, they should be at the table now, and their citizens and elected officials should be kept fully informed. All counties, all towns, and all regions MUST have regular meetings on this topic, and a full debate in each community must occur prior joining any solid waste agency.

**** Point 5: 9 County Regional Authority Would Ignore Need for Rural Area Flexibility, Differences in Urban vs Rural Waste Stream ****

- Waste compositions varies by town and by county. Different regions have different disposal needs. For example, farmers and rural residents may burn or bury some of their wastes on site rather than needing a centralized facility. Wastes generated on a farm are significantly different then those generated by a commercial center or urban resident.

- In rural communities, it may make sense to have town owned and operated source-separated organics composting facilities or even disposal facilities for non-toxic farm and household trash. Decentralized composting and disposal facilities (e.g. less then 20 tons per day) will have a far lower impact on surrounding communities then large facilities.

- Recycling programs should be tailored towards large generators of waste in a community. An centralized authority could not adequately focus on need to recycle agricultural plastics and agricultural chemicals, while also focusing on recycling of urban organic wastes or electronic waste.

**** Point 6: Polluter Pays, No Taxpayer Subsidies ****

- Any disposal program should operate without taxpayer subsidies.

Polluter pays. There should be no volume discounts - a person who disposes 10 lbs of trash should pay the same proportional rate as a corporation who disposes of 200 tons of trash.

- Those who do not use the services of ANSWERS should not pay for it.

For example a farmer or rural resident who burns or buries non-toxic waste on their property, should not be charged for disposal of that waste. Those who compost on their property should not pay for commercial composting operations.

- No taxpayer subsidies for waste disposal, all services administered by ANSWERS should come from those who seek to recycle or dispose of a material.

**** Point 7: Small is Beautiful ****

- Study over states the benefits of scaling up facilities and bureaucracy.

- Numerous political science studies show that larger bureaucracies are less efficient, more subject to waste, fraud, and abuse. If a bureaucracy employs hundreds of persons it is difficult to maximize productivity and keep employees from watching Youtube at work.

- Avoiding the bureaucracy of an authority, by simply using existing structures reduces cost and waste.

- Large landfills, trash incinerators, recycling plants are more polluting. While large facilities may have better pollution controls than small facilities, large facilities inherently release more pollution in aggregate, have more truck traffic, and more potential for serious harm.

- A 1,000 tons per day incinerator puts out 1,000 tons per day of carbon dioxide. That's 365,000 tons per year of carbon dioxide, that could be avoided -- or possibly a multiple of the number, by increasing recycling or organics composting.

- Ask yourself, would you prefer to live next door to a 20-tons per day unlined town landfill, only consisting of local household trash and farm waste, or a massive 1,000 tons per day incinerator burning unsorted and largely unregulated mixed waste next door? How about being downwind of a neighboring farm's burn barrel vs living next to a 1,000 tons per day incinerator burning mixed waste from far away?

Distant towns that don't care what goes up the smoke stack or leaches into your ground water. Again, while some pollutants may be better controlled by a mega-facility, the reality is other pollutants will increase and be particularly burdensome to the host community.

- No disposal or recycling facility should be larger than 100 tons per day, and all facilities should be decentralized and close to sources of waste generation. Where scale is necessary to

overcome costs of pollution control, it must be as small as possible and use the least toxic processes possible.

- A large incinerator or landfill would incur significant costs and would require a large amount of trash to be disposed on it. This would undermine attempts at expanding recycling efforts.

- Least desirable facilities (incinerators, landfills, recycling plants, composting plants) should be spread over as many communities as possible to be fair and democratic. It should not just target poor rural or urban communities, but include facilities in wealthy suburban communities too.

- No one community should have the burden of disposal of waste for a nine-county region. It is especially obscene to site a large disposal facility in a rural or farming region, where many farmers may have traditionally disposed of their own waste on-farm, and are not responsible for the entire region's long-term solid waste problem.

From: Carol Tansey [mailto:carol_tansey@hotmail.com]

Sent: Monday, July 11, 2011 12:44 PM

To: SWMAComments

Subject: Request for public comment extension

To Whom It May Concern:

I am a senior citizen - and am hard-pressed to make a careful reading of the Solid Waste Management Authority Feasibility Study. I want to be an active, participating citizen.

Please extend the 2 week public comment period. I have not yet completed reading the Study.

Thank you.

Carol Tansey
115 New Krumkill Rd. #716
Albany NY 12208
Tele: 489-0616

From: Barbara Warren [<mailto:warrenba@msn.com>]
Sent: Monday, July 11, 2011 3:33 PM
To: SWMAComments
Subject: Comments re: Solid Waste Authority

Attached please find out comments.

Barbara Warren
Executive Director
Citizens' Environmental Coalition
33 Central Ave.
Albany, NY 12210
518-462-5527 Phone
518-465-8349 Fax



Main Office: 33 Central Ave, 3rd Floor, Albany, New York 12210
Phone: (518) 462-5527 • Fax: (518) 465-8349 • E-mail: cectoxic@igc.org

Websites: www.cectoxic.org • www.ecothreatny.org • www.toxicfreefuture.org

August 11, 2011

Mike Franchini
Albany County Director of Operations
112 State St., Room 200
Albany, NY 12207 by July 11, 2011.
SWMAComments@albanycounty.com

Dear Mr. Franchini

We are formally requesting an extension of the public comment period on this proposal. For a proposal of this magnitude it is usual to have a minimum of a 60 day public comment period. Instead there has been only 2 weeks.

There are several important points to note about authorities:

- 1) They are not really "public" authorities in that they operate completely outside of public oversight for management, major policy decisions and day to day operations. officials.
- 2) They represent the antithesis of a normal functioning democracy. Can you imagine the difference if you suggested the creation of a dictatorship to manage solid waste?
- 3) Authorities are responsible for more than 90% of all outstanding state debt. In August of 2010 New York State Comptroller DiNapoli issued a report on public authorities in New York State. Outstanding public authority debt totals over \$214 billion. Even more astounding is the fact that 94% of all state-funded debt was issued by public authorities without voter approval, reflecting an average increase of 9% per year since 1985.

We object to an authority because the process leaves the public out of major solid waste decisions. More importantly the creation of this authority and leaving the public out of these future decisions is really about advancing unsustainable, costly and environmentally unsound options like waste to energy incineration.

Sincerely,

A handwritten signature in black ink that reads "Barbara J. Warren". The signature is written in a cursive style with a large, stylized initial 'B'.

Barbara J. Warren

Executive Director

From: James Travers [\[mailto:jatrav@yahoo.com\]](mailto:jatrav@yahoo.com)
Sent: Monday, July 11, 2011 3:53 PM
To: SWMAComments
Cc: CountyExec; Peter Clouse
Subject: Comments on Solid Waste Management Authority Study

I most respectfully request that the public comment period on the Solid Waste Management Authority Study, which ends today, be extended to 60 or at least 30 days.

Albany County has taken 1.5 years to prepare this 73 page report, but has allowed members of the public most unfairly only a two week comment period which included the 4th of July holiday weekend.

As many are away vacationing during this time of the year, it is only fair that the comment period be extended.

The only publication that I and others are aware of announcing the 14 day comment period, was indicated in an Albany Times Union [newspaper article](#) published on June 27, 2011.

I remain unaware of any other official public notice announcing the public comment period.

Sincerely,

James Travers
Town of Coeymans

From: elyse [mailto:ekunz@mhcable.com]
Sent: Tuesday, July 12, 2011 5:33 PM
To: SWMAComments@albanycounty.com
Subject: Solid Waste Study

Please extend the public comment period for the Regional Solid Waste Management Authority Study.

Two weeks over the Fourth of July holiday is exceptionally unfair to the public when Albany has taken over a year to prepare the study. The impact of this waste authority will be profound and the public should be given ample opportunity to review and comment on this study. Anything short of 60 days is grossly unfair to the many people who will be affected.

In addition, I am opposed to the siting of any kind of landfill, waste incinerator, or waste to energy facility in the Town of Coeymans as part of the operation of this regional authority.

Thank you,
Elyse Kunz
Coeymans, NY

From: Steve Changaris [<mailto:schangaris@nswma.org>]
Sent: Wednesday, July 13, 2011 3:54 PM
To: SWMAComments
Cc: CountyExec
Subject: Albany Solid Waste Authority Feasibility Report

Via Email

Wednesday, July 13, 2011

ATTN: Mr. Michael Franchini
Albany County, Dir. Of Operations

Thank you for giving us a couple of extra days to file these comments.

A hard copy will be sent overnight by COB today.

Regards,

Steve Changaris
Manager
NY State Chapter

Steve Changaris • Manager, Northeast Region • Environmental Industry Associations: NSWMA & WASTEC • 290 Turnpike Road, PMB 497, Westboro, MA 01581 • **office:** 508.839.4751/800.679.6263 • **mobile:** 508.868.4523 • **fax:** 508.839.4761 • **email:** schangaris@nswma.org

**Comments of the
National Solid Wastes
Management Association
New York State Chapter**

**On the
Albany County
Draft Regional Solid Waste Management
Authority Feasibility Report**

**Submitted to the
Office of the
Albany County Executive
Honorable Michael G. Breslin
July 2011**

**By: Steven Changaris
Regional Manager
NSWMA Northeast Office**

Comments of the National Solid Waste Management Association, NY State Chapter
On the Draft Regional Solid Waste Authority Feasibility Study

INTRODUCTION

NSWMA represents an industry that is dedicated to the environmentally protective and economically efficient management of recyclables and wastes. And further, as private companies, we place great value on the exercise of choice, and market competition, in the delivery of these environmental services as being good for both the environment, and for the bottom line of those using these services.

We have a vision of a sustainable society that reduces waste, recycles more and recovers value from discards to the maximum extent practicable and properly disposes the wastes that remain. As our motto states, we approach our job by thinking of ourselves as being “Environmentalists

Everyday". In effect we are reality-checkers who must negotiate, adapt to, and address the day-to-day and evolving conditions associated with collecting recyclables and handling wastes. We are in a unique position to offer well informed perspectives on the realities of how recyclables and solid wastes are managed today, and how they will be best managed tomorrow. We are grateful for this opportunity to provide comments on Albany County's current draft feasibility report about how wastes and recyclables might be managed in the county and region in the future.

ABOUT US

The National Solid Wastes Management Association (NSWMA) is a 45 year old Washington, DC based trade association of private solid waste companies that collect, handle, recycle, compost and dispose the discards and waste materials generated by the citizens, communities, institutions and businesses of America. Our members operate in all fifty states, and many have an active and significant presence in the solid waste system currently operating under the state and local laws, regulations and rules of New York in Albany County and the counties within this study's purview.

The NSWMA membership is comprised of small "mom and pop" haulers; and, small to medium to large privately held companies that collect and/or process recyclables and wastes; and publicly traded national companies that provide integrated waste services from collection to recycling to transfer to disposal and more.

In New York, private waste facilities and companies are already among the state's most environmentally proactive and regulated industries. We are regulated by laws, rules and regulations established at all levels of government, including the federal, state, county, special waste planning unit level and at the most local level, the municipal level. Private companies, under strict NY State Department of Environmental Conservation permitting requirements, operate the state's largest landfills, waste-to-energy trash combustion facilities, waste transfer and processing facilities, recycling facilities, compost sites, recycling and waste collection operations and related plants.

We employ thousands; we pay taxes and special fees to all levels of government; we invest, with private capital, in the physical infrastructure necessary to manage NY wastes and recyclables, as well as in the fleets of collection vehicles and related infrastructure necessary to collect and manage these discards and waste materials; and last, we also partner directly, and indirectly, with all kinds of governmental entities in NY to see that modern, environmentally sound waste management infrastructure, that is protective of the public health and safety, exists for them and all New Yorkers.

5 KEY INDUSTRY CONCERNS

A New Waste Authority is Not Needed: Creating a new super regional waste authority is not necessary to improve recycling rates; minimize waste production; or, to create the new infrastructure to take the management of solid wastes to the next level. In fact the creation of

such an authority will likely inhibit environmental progress by establishing a “command and control” governmental monopoly approach to the management of these materials. Such a new authority runs the risk of: 1) creating a vast lost opportunity for environmental innovation; and, 2) creating higher prices for all those who use waste related services. Such governmental monopolies drive innovation, choice and competition out of the equation for system users. Every citizen; community; institution and business in Albany County and the region has the tools today immediately available to be as environmentally friendly as necessary in the management and handling of the discards and waste materials they generate.

Public v. Private Facilities: The record does not support the notion that public waste and recycling facilities are necessarily a superior choice -- or a less costly option -- or have less environmental impacts -- than privately held facilities and is simply, as a premise in this study, fundamentally flawed and inaccurate. It is a view that should be not be used at all; but, in the event it is, it must be used with the utmost caution in any public policy debate or study about how best to manage a community’s or region’s recyclables and wastes. All waste and recycling facilities in NY are strictly regulated by NY State Department of Environmental Conservation; and, local authorities too. As such, we believe private and public facilities to be equal; and, should be treated as such in all public policy debates, reports and reviews. Further, the cost to government for any waste related service, when provided by privately held facilities, is always the result of competition -- *since before it can be provided, the winning provider had to undergo an open competitive procurement process.* Publicly owned and operated waste and recycling services are never subject to this competitive driver; a driver which serves as a fantastic check to make sure safe, quality environmental services, with the greatest efficiency and least costs, are being provide.

Waste Authority History: The record clearly shows that waste authorities, both in NY and throughout the region, have not performed with the consistency that would justify the direct cost of creating and operating a new super-regional one as called for in this report. Further, to be clear, once established, any future bonded indebtedness of this authority will become new fiscal liabilities for all county and municipal governments, and other system users including the institutions and businesses operating in the region. There is a saying about the best government is one that is as close to the people as possible. In this context, this means the responsibility for recycling and waste services should be kept local, within communities and as close to the people who pay for them as possible. Edicts regarding the management of recyclables and wastes emanating from a one, centralized and insulated super-regional waste authority -- without elected directors responsible to the voters -- spread out over nine counties and dozens and dozens of municipal governments, will cause great conflicts and will trip-up the region’s well established governing procedures for providing and growing such vital local services.

Affordable NY at the Crossroads: Former NY Governor Mario Cuomo once said, “It is not government’s obligation to provide services, but to see that they are provided.” His son, now the current Governor, from the onset of his administration earlier this year, has boldly taken the reigns of what he has generally characterized as New York’s broken, multi-layered, oft at cross-purposes system of governance with its myriad specialized units and concurrent over-the-top taxing and special fee and assessment authorities. In this context one has to take a hard look at the premise of this feasibility report since it contemplates the creation of such a new unit of

government. As a broad matter of policy, given the systemic and structural fiscal problems facing all levels of government in NY, a better policy path for Albany County and the region would be to explore which simple steps and actions could be undertaken -- by existing officials and units of government responsible for recycling and waste programs -- that would yield the highest policy rewards like improving recycling rates; increasing diversion and other forms of re-use; and, minimizing the amount disposal as much as possible. The NY State Chapter of NSWMA, as the industry's trade group, stands at the ready to assist all public officials to achieve these kinds of goals.

Public v. Private Capital: NY state law requires local waste planning units to plan so that environmentally protective waste services are available for their constituencies who use these services. There is nothing in the law that says these services have to be provided by the government. In those limited cases where they are, that is where the planning unit becomes the provider of these services, private capital and new private environmental infrastructure is largely shut out. At this time, again given NY's severe fiscal problems, it is most appropriate to suggest that waste planning efforts for Albany County, and the other counties in the report's purview, shouldn't focus on continuing with the creating a new waste planning unit and its related costs and bureaucracy. Rather, the efforts of local officials responsible for recycling and waste services should be re-focused and be directed to change "the command and control government as waste provider culture" that exists within NY. This existing planning culture should be reformed and realigned so that the government sets the direction and provides the leadership, so that private industry can do its part to build the infrastructure and set-up the programs to attain the goals and attendant benefits of having a well run environmentally secure and cost effective system based on the principles of the integrated waste management hierarchy. With this change and new signal, the private sector will be in a much better position to further improve existing infrastructure and to site, build and operate new environmental infrastructure and programs with private capital, and to see that it will be provided competitively to all within the region.

Other Resources: The link below is to our recent monograph on recycling and waste service privatization.

<http://www.environmentalistseveryday.org/docs/research-bulletin/Research-Bulletin-Privatization.pdf>

The letter below appeared in the Times Union during the time it was running a feature series on waste related issues in the Capital Region earlier this year.

timesunion.com

Use private funds to pay for waste

Published: 12:25 a.m., Friday, February 11, 2011

The Jan. 30 story, "Buried in trash," highlighted many waste and recycling issues and focused on the fact that the Albany city-owned landfill has only a couple of years of capacity left. It raised the specter of a monopolistic flow control regime that will raise costs without providing additional environmental

benefits. With budget deficits and burdensome tax levels, New York needs to scale back such layers of government, not create new ones.

The facts show that the best environmental and economic options for waste and recycling services involve choice, competition and economic efficiency.

The Capital Region's waste and recycling infrastructure is a mix of public and private sector facilities. The region has an adequate waste and recycling infrastructure. It meets the highest standards of modern integrated waste management: sustainability, lowering our carbon footprint, reducing and recovering the maximum amount from our discards and disposing of the remaining waste in state-of-the-art facilities.

The solutions offered in the article won't address the challenges that exist, and will create real problems. The easiest, most effective way for the region to get the best deal for these services is to pay for the waste and recycling infrastructure with private capital, not government bonds; to give all citizens, communities and businesses choice in their service provider who will comply with the region's waste and recycling goals; and to ensure that all providers have equal opportunity to compete for customers.

STEVE CHANGARIS
NY State Chapter Manager
National Solid Wastes Management Association

Read more: <http://www.timesunion.com/default/article/Use-private-funds-to-pay-for-waste-1008415.php#ixzz1DgdEjmef>