## New York State Department of Environmental Conservation

Office of Environmental Quality, Region 5

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May 17, 2006

Mr. George Eades, Executive Director County of Franklin Solid Waste Management Authority 828 County Route 20 Constable, NY 12926

Re: Modification of Franklin County Solid Waste Management Plan

Dear Mr. Eades:

The Comprehensive Solid Waste Management Plan (SWMP) modification, as revised by the Barton & Loguidice letter of April 4, 2006, is approvable.

On September 30, 2005, and on behalf of the County of Franklin Solid Waste Management Authority, you submitted a *Draft Modification* (of the) *Solid Waste Management Plan* for Franklin County. The modifications to the SWMP include, but are not limited to: increasing the annual permitted disposal tonnage at the Authority's regional landfill; accepting solid waste generated out-of-county; the option of utilizing flow control legislation; a future long term landfill expansion; a waste exportation contingency plan; and, an extension of the planning period from 2010 to 2020.

Please have the Directors of the County Solid Waste Management Authority enact a resolution to adopt the SWMP modification. Please submit three (3) copies of the revised solid waste management plan and the enacting resolution to us. When it is received we can approve it as a final document.

If you have any questions, please feel free to call me at (518) 897-1275 or Dave Mt. Pleasant at (518) 623-1230.

Sincerely,

Daniel L. Steenberge, P.E.

Daniel L. Steenberge, P.E. Regional Solid & Hazardous Materials Engineer

#### DLS:jh

c: G. Mulverhill, Chairman CFSWMA

ec: D. Becker

S. Brewer

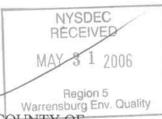
G. Caraviannis

D. Mt. Pleasant

D. Wagner



#### RESOLUTION #35-05/25/2006



TO ADOPT, AS THE SOLID WASTE PLANNING UNIT, THE COUNTY OF FRANKLIN SOLID WASTE MANAGEMENT AUTHORITY'S SOLID WASTE MANAGEMENT PLAN MODIFICATION ("SWMP Modification") DATED SEPTEMBER 29, 2005 AND REVISED APRIL 14, 2006

BY: Guy "Tim" Smith

WHEREAS, the County of Franklin and the Franklin County Solid Waste Management Authority, as planning unit for the County, continue their established commitment to the proper and comprehensive management of all solid waste generated in the County, and consider the continuing implementation and updating of the County's Solid Waste Management Plan an important aspect of that management program; and

WHEREAS, the Final Comprehensive Solid Waste Management Plan for the County of Franklin Solid Waste Management Authority ("SWMP"), dated 1991, requires modifications that are set forth in the SWMP Modification that include but are not limited to: increasing the annual permitted disposal tonnage at the Authority's regional landfill, the option of utilizing flow control legislation, accepting solid waste generated out-of-county, a future long-term landfill expansion, a waste exportation contingency plan, and an extension of the solid waste planning period from the year 2010 to 2020; and

WHEREAS, the information contained in the SWMP Modification, a copy of which is annexed hereto and made a part hereof, has been reviewed by the County of Franklin Solid Waste Management Authority ("the Authority") as the solid waste planning unit for Franklin County; and

WHEREAS, the SWMP Modification has been reviewed by the New York State Department of Environmental Conservation which, by letter dated May 17, 2006 to the Authority's Executive Director, has stated that the SWMP Modification is approvable; and

WHEREAS, the Authority has previously determined, by Resolution No. 6 dated September 29, 2005, as the State Environmental Quality Review Act ("SEQRA") Lead Agency for the SWMP Modification and the actions contemplated therein, that adoption of the SWMP Modification will not have a significant adverse effect on the environment and the preparation of a Draft Environmental Impact Statement will not be required for adoption of the SWMP Modification; and

WHEREAS, Section 360-15.10 of the New York State Department of Environmental Conservation's regulations contains several provisions that must be included in a planning unit's resolution to adopt a *SWMP* modification, and such clauses are included herein as required.

NOW, THEREFORE, BE IT RESOLVED, that the SWMP Modification dated September 29, 2005 and revised April 14, 2006 is hereby adopted by the County of Franklin Solid Waste Management Authority as the solid waste planning unit for Franklin County; and

BE IT FURTHER RESOLVED, that, as required by Sections 360-15.11 and 360-15.10 of the New York State Department of Environmental Conservation's regulations, the County of Franklin Solid Waste Management Authority as the solid waste planning unit for Franklin County will (i) implement the solid waste management programs, projects and plans as identified in the *SWMP Modification*, (ii) submit compliance reports to the New York State Department of Environmental Conservation every two years as required by Section 360-15.12, (iii) submit a plan modification to the New York State Department of Environmental Conservation when required by Section 360-15.11, and (iv) submit updates to the department-approved solid waste management plan when required by the New York State Department of Environmental Conservation pursuant to Section 360-15.11; and

BE IT FURTHER RESOLVED, that the Executive Director of the County of Franklin Solid Waste Management Authority is hereby directed to send the *SWMP Modification* to all parties on the distribution list who received copies of the existing *SWMP* dated 1991, with instructions to permanently insert the *SWMP Modification* into the front of the existing *SWMP*; and

BE IT FURTHER RESOLVED, that the Executive Director of the County of Franklin Solid Waste Management Authority is hereby directed to send three copies of the *SWMP Modification* and three copies of this enacting resolution to the Region 5 Office of the New York State Department of Environmental Conservation.

"Yes" Raymond Susice, Rick Dattola, Guy Smith, Gary Mulverhill, Henry Travers, Greg Paye

"No"

Absent Paul Herrmann

## **CERTIFICATION**

The undersigned, Secretary to the County of Franklin Solid Waste Management
Authority, hereby certifies that the foregoing is a true and correct copy of a resolution adopted by
he Authority as set forth above.
W

Dated: \_ 5-26-06

Jill A. Wood, Secretary to the Board

(Seal)

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#### **Executive Summary**

The County of Franklin Solid Waste Management Authority (hereinafter referred to as "the Authority" or "CFSWMA") completed its original Final Solid Waste Management Plan ("SWMP") in 1991. In general, the original SWMP called for the establishment of an integrated solid waste management system consisting of a regional landfill, central and intermediate solid waste transfer stations, and recyclables collection facilities. In accordance with the original SWMP, these facilities continue to be in operation today.

The regional landfill is located in the towns of Westville and Constable. It opened in 1994 and currently accepts mixed solid waste and C&D debris. Alternate daily cover materials, in the form of materials which have been assigned a "beneficial use determination" ("BUD") by the New York State Department of Conservation (NYSDEC), are used at the landfill as a cost-saving and revenue-generating measure. Wastes are transported to the landfill directly by private individuals or haulers, or they are transported from one of the Authority's three transfer stations located in the villages of Tupper Lake and Malone, and the hamlet of Lake Clear.

The Authority's recycling system consists of collection facilities at its three transfer stations and at a fourth collection site located in Saint Regis Falls (Town of Waverly). The transfer station located in the Village of Malone also serves as a small Materials Recovery Facility (MRF) and functions as the main processing center and warehouse for the county's recyclable materials. Currently, corrugated cardboard, mixed paper, glass containers, HDPE and PET plastics, metal containers, waste tires, and lead-acid batteries are accepted for recycling. The Authority also provides yard waste composting and brush chipping services at each of its transfer stations, and also recycles discarded appliances following any necessary refrigerant recovery.

Following its adoption of the original SWMP, the Authority has progressively sought to expand its recycling programs to the extent feasible. However, changes in the disposal marketplace that occurred after the original SWMP was adopted have made it difficult for the Authority to fully implement its integrated SWMP. The Authority's integrated solid waste management system was originally intended to be financially selfsupporting without subsidies from tax revenues. The original SWMP planned to rely upon flow control authority to ensure that this financial self-sufficiency could be achieved, by helping to ensure that a steady supply of waste and recyclables would be delivered to the Authority's facilities to generate sufficient revenues to operate and maintain the integrated system. In 1994, however, the validity of flow control was called into question as the result of a U.S. Supreme Court decision. Instead of seeking to enforce flow control as originally planned, therefore, the Authority re-doubled its efforts to minimize costs while it pursued additional sources of system revenues (e.g., additional revenues from the use of alternate daily cover materials). This change in circumstances made it extremely difficult for the Authority, which has invested significant sums of money to establish environmentally sound waste disposal facilities and recycling programs for its residents in accordance with its original SWMP, to continue to provide these services in a cost-effective manner.

The proposed modifications to the original SWMP, as described herein, are being pursued by the Authority as a response to the dynamic changes which have occurred in the solid waste management field, and to provide the Authority with as many tools as possible to ensure a viable, financially and environmentally sound solid waste management system to serve the residents and businesses of Franklin County.

This report proposes to modify the original SWMP in several respects, as listed below.

- · Increase the annual permitted disposal tonnage at the Authority's landfill.
- Provide the option for the utilization of flow control legislation.
- Provide for the option of accepting waste at the Authority's landfill from out-of-County sources.
- Provide for the long-term continuation of disposal at the Authority's landfill by developing a long-term landfill expansion.
- Extend the planning period for the original SWMP by changing its expiration date from the year 2010 to the year 2020.
- Provide a contingency plan to be implemented in the event that the existing permitted landfill space becomes filled prior to having new landfill disposal capacity permitted and constructed.

This SWMP Modification report has been prepared in accordance with the NYSDEC Part 360 Regulations for Comprehensive Solid Waste Management Planning and DEC Policy DSHM-SW-03-15, Extending the Term of a Local Solid Waste Management Plan (LSWMP) Planning Period. In accordance with subpart 360-15.11(e), a detailed description of the proposed modifications and the reasons for these modifications are included in Section I of this report; the revised implementation schedule is included in Section III; and the remaining required components for a SWMP modification are included in Sections IV through VII of this report.

#### I. Description of Solid Waste Management Plan Modifications

#### A. <u>Introduction</u>

The County of Franklin Solid Waste Management Authority was established pursuant to State law for the purposes of managing the solid waste generated within Franklin County. The establishment of the Authority occurred, in part, due to the policies set forth in the original New York State Solid Waste Management Plan which called for solid waste planning at the local level, and self-sufficiency in the management of municipal solid waste (NYSDEC, 2001). As stated in the New York State Solid Waste Management Plan, 1999-2000 Update (NYSDEC, undated), "it is recognized that solid waste management strategies will need to remain somewhat dynamic if they are to adjust to changes in the solid waste arena as they occur on local, statewide, and regional levels". Indeed, many changes have occurred on each of these levels since the Authority first established its solid waste management plan in 1991. The modifications proposed within this document reflect the dynamic nature of solid waste management and the Authority's need to maintain a viable, financially and environmentally sound solid waste management system to serve the residents and businesses of Franklin County.

The proposed modifications to the <u>CFSWMA's Final Solid Waste</u>

<u>Management Plan</u> (dated 1991) involve the following areas:

- an increase in the annual permitted disposal tonnage at the Authority's Landfill.
- the option of utilizing flow control legislation.
- the acceptance of out-of-County waste under certain circumstances.

- a long-term landfill expansion.
- the extension of the planning period from the year 2010 to 2020.
- a contingency plan to be implemented if the existing permitted landfill space becomes filled prior to having new landfill disposal capacity permitted and constructed.

#### B. Increase in the Annual Permitted Disposal Tonnage

The Authority's current landfill permit allows for the disposal of a maximum of 43,500 tons of municipal solid waste per year, with a daily disposal limit set at 240 tons per day. The Authority plans to submit a NYSDEC Solid Waste Management Facility permit modification to increase the annual tonnage limit to 125,000 tons per year (TPY). This increase in the permitted tonnage limit should enable the Authority to obtain additional revenues without driving up tipping fee rates to substantially higher levels. The revenues from such additional tonnages would help pay for the costs and expenses of operating and maintaining the Authority's solid waste management system, including the costs of recycling, household hazardous waste collection, public education, contingency, closure and post-closure costs, and debt service, among others. Such an increase, when coupled with the removal of a daily tonnage limit, will give the Authority the operational and financial flexibility it needs to maintain a cost-effective and comprehensive solid waste management system.

The proposed increase in the annual tonnage limit to 125,000 TPY includes only municipal solid waste quantities. It does not include the Authority's use of Alternative Daily Cover (ADC) Materials. Since operations began in 1994, the Authority has evaluated many different cover materials to determine which are most efficient and cost effective. The Authority strives to utilize cover materials that are revenue generating and that do not count

against NYSDEC permitted tonnage limits, such as those for which NYSDEC has made a "beneficial use determination" (BUD). The primary BUD materials that the Authority currently uses as daily cover are wood incinerator ash and MSW incinerator ash. Other approved BUD materials include paper mill sludge, petroleum contaminated soils and wastewater treatment plant sludge. On-site mined soils are used for daily landfill cover only when BUD materials are not available. By utilizing BUD materials in this manner, the Authority has been able to reduce its overall net operational costs.

The current Operation and Maintenance (O&M) Manual (dated March, 2005) for the Authority's regional landfill specifies that the quantity of ADC material used at the landfill should be limited to less than 45% of the municipal solid waste stream as determined by weight. This corresponds to approximately 25% by volume when taking into account that the majority of ADC currently being used at the facility is incinerator ash. The O&M Manual contains a matrix which shows the correlation between ADC weight and ADC volume. No modifications to this ADC correlation are currently proposed.

The Authority's current proposal to increase the maximum annual tonnage limit for waste disposal to 125,000 TPY will decrease the useful life of the currently permitted landfill footprint. The extent to which the landfill's useful life would be reduced will depend on the amount of waste actually landfilled and in-place waste densities achieved. Also, it is anticipated that annual tonnage increases will occur on an incremental basis, such that the tons actually landfilled may eventually reach the proposed 125,000 tons per year limit over the course of several years following approval of the new annual tonnage limit. On a preliminary basis, therefore, it is estimated that the

proposed tonnage increase could reduce the landfill's remaining useful life such that full landfill build-out (including Cell 4) could provide approximately 4 to 11 years. These site life projections are provided in appendix A.

#### C. Flow Control Option

The Authority's solid waste management system was originally designed to operate under a flow control regimen. The Authority sized and designed the solid waste management system to handle all of the municipal solid waste expected to be generated by all the residents and businesses in the County. Franklin County is obligated under its services agreement with the CFSWMA to cause all solid waste (excluding sewage sludge and scrap materials held for recycling) generated within its boundaries to be delivered to system facilities designated by the Authority. In order to meet its obligations under the services agreement, the County enacted a local law relating to the collection and disposal of solid waste in Franklin County. This law is known as Local Law Number 7 of 1992 ("1992 Local Law"), and it contained provisions for flow control. However, in 1994, the validity of this law was called into question as a result of the U.S. Supreme Court decision in Carbone v. Clarkstown, which determined that a flow control law in the Town of Clarkstown, New York (in Rockland County) unlawfully interfered with interstate commerce. Although the facts of that case were substantially different from Franklin County's situation, concern arose that Franklin County's law would be similarly challenged, resulting in great expense to the County.

As a result, the County never enforced the 1992 Local Law. Accordingly, neither the County nor the Authority was able to capture all of the solid waste generated in the County. This had serious ramifications on the Authority's solid waste management system. For example, in 1998 the corporate owner of Waste

Stream Management, Inc. ("WSMI"), the largest waste hauler in the County, contracted to manage the landfill owned by Clinton County, immediately to the east of Franklin County. Based on figures reported by WSMI to the DEC (and obtained annually by the Authority), approximately 8,000 to 10,000 tons of municipal solid waste originating in Franklin County are deposited each year in the Clinton County landfill by WSMI.

The Carbone decision involved a flow control law enacted for the benefit of a privately owned transfer station. A more recent decision creates an important distinction to the Carbone ruling. In 2001, the United States Court of Appeals for the Second Circuit issued its decision in the case of United Haulers et al v. Oneida Herkimer Solid Waste Management Authority et al ("Oneida Herkimer"). In Oneida Herkimer, it was held that Carbone is not applicable to determine the constitutionality of flow control laws which direct waste to publicly owned solid waste management facilities. Instead, it applied a much less restrictive test, the application of which has been upheld in favor of the Oneida Herkimer Solid Waste Management Authority's publicly owned system by the Federal District Court. As of the date of this report, that District Court decision is being appealed back to the Second Circuit. In light of the Second Circuit's original ruling ratifying the validity of a local law which directs waste to a publiclyowned facility, special legal counsel involved in the case - who also provides legal services to the CFSWMA -- consider it highly likely the Court will again find in favor of the public system.

To the extent that the County can enforce the flow control provisions of the Local Law, either as currently written or as may be modified, such enforcement will contribute to the fiscal stability of the Authority's solid waste management

system. In addition, this enforcement will help the Authority to achieve one of the key objectives of its solid waste management plan, which is to provide for the environmentally sound long term management of the municipal solid waste generated within its borders.

The Authority's solid waste management and disposal facilities (i.e., transfer stations, yard waste composting sites, and recyclables drop-off centers), and its recycling operations at the Malone transfer station site, are structured to be financially self-supporting. Revenues from landfill tipping fees and from the sale of recyclable materials are used to operate, maintain, and pay off the debt service for the Authority's solid waste and recycling facilities. These revenues are also used to establish reserve accounts for the future replacement of heavy equipment, and for predictable capital expenses such as liner extensions, closure and post-closure activities at the regional landfill. The Authority developed these facilities to ensure that wastes generated within the County would be disposed of in an environmentally sound manner and to provide a means to process and market the recyclables that residents separate from their trash. In order to ensure the continued long term operation of these facilities, in which the Authority has invested millions of dollars, the Authority considers it prudent to maintain the option of utilizing flow control legislation to ensure that a reliable flow of waste is delivered to these facilities.

#### D. The Acceptance of Out-of-County Waste

Provisions for the acceptance of out-of-County waste are included in Franklin County's 1992 Local Law. This waste is accepted at Authority facilities upon written agreement with the Authority and approval by the board of directors. One current source of out-of-County waste is Essex County, which borders

Franklin County to the southeast. Essex County is in a unique situation, being one of only two counties that are located wholly within the Adirondack Park. In an effort to provide special protections for the Adirondack Park, New York State set forth a policy that essentially prohibits solid waste landfills from being located within the Park (Press Release, 1998). Due to this State policy, which was developed several years after the Authority had adopted its original SWMP, Essex County must seek solid waste disposal services from facilities that are located outside of its own boundaries.

Franklin County's acceptance of waste generated from within Essex

County benefits both counties. It provides Essex County with a reliable, nearby
and economical means of waste disposal that also generates revenue for the

Authority's waste disposal/recycling facilities. While the Authority historically and
currently accepts out-of-County wastes from Essex County and/or other sources,
the acceptance of out-of-County waste is hereby explicitly incorporated into the
Authority's long term solid waste management plan.

The Authority's ability to obtain contracts or to make other arrangements for the delivery of out-of-County waste to its landfill is subject to the vagaries of the market for solid waste disposal services. The Authority needs, therefore, to be flexible in its approach to securing such additional sources of waste so that it can adapt to the dynamics of the disposal marketplace. In pursuing waste from out-of-County sources, however, the Authority fully intends to work cooperatively with other solid waste management planning units and will take all reasonable measures to help ensure that such waste importation will not adversely impact other planning units' DEC-approved solid waste management plans.

#### E. Long-Term Landfill Expansion

In the original approved SWMP, various options for solid waste management and disposal were evaluated. These included waste reduction, recycle/reuse, waste-to-energy facilities, and landfilling. The long-term disposal method selected by the Authority was landfilling, based upon the relatively low waste generation rate for Franklin County, New York State's policy that favors regional solid waste disposal (as set forth in the NYS Solid Waste Management Plan), and based on the landfill option being more cost-effective than the waste-to-energy option. As a result of this evaluation, the CFSWMA sited, permitted and constructed a new MSW landfill in the towns of Constable and Westville, in conformance with 6 NYCRR Part 360 regulations for the siting and construction of MSW landfills. As noted in a previous section of this report, with a potential future waste disposal rate of 125,000 TPY, the existing landfill's useful life (including cell 4, which has not yet been built) could possibly end as early as the year 2010.

In the near future, the Authority plans to evaluate the expansion of the landfill beyond its currently permitted 20-acre footprint. The landfill is located on a 200 acre site. The Authority recently acquired 60 acres of land adjacent to the landfill site and another 175 acres of land in the immediate vicinity of the site. The purpose of a landfill expansion would be to ensure that locally controlled, environmentally sound and reliable landfill disposal capacity will be available for the duration of the proposed planning period and beyond.

In planning for the proposed landfill expansion, it is anticipated that a minimum of 19 acres of new lined footprint will be sought. Future permitting and construction of this new lined acreage would provide at least eleven years of disposal capacity under the maximum proposed landfill utilization rate of 186,625 tons per year of material (this total includes waste, BUD materials, and soil, as

indicated in appendix A), thereby providing sufficient disposal capacity through the end of the extended planning period (2020) even if this maximum landfill usage rate were to commence immediately. Additional acreage will be needed for ancillary facilities (such as site access roads, leachate conveyance and/or storage, and stormwater management) and to provide a buffer between the active landfill disposal area and neighboring properties. The specific amount of additional acreage needed beyond the liner acreage will depend on the parcel's configuration and its proximity to the Authority's existing landfill infrastructure.

The estimated time frame for having new landfill capacity permitted and constructed is presented in Section III-H (Revised Implementation Schedule), below, in table 3. Due to the potential technical and regulatory issues associated with permitting new landfill disposal capacity, there can be a wide range of opinions regarding how long it will take to permit and construct new landfill disposal capacity. Regardless of what may be deemed a reasonable time frame for permitting and building new landfill disposal capacity, the Authority has a contingency plan (i.e., to export wastes) that will be implemented in the event that new landfill disposal capacity is not available when the currently permitted disposal capacity is fully utilized. Please see Section I-G (Contingency Plan), below, for more information regarding the Authority's contingency plan.

The following sections summarize the need for future expansion of the Authority's regional landfill and the evaluation of alternatives to landfill expansion.

## 1. Need for Landfill Expansion

a) Future landfill expansion will help to ensure that environmentally and economically sound long-term disposal capacity will be available to the residents and businesses of Franklin County.

- b) Future landfill expansion will help to guard against the costs, market uncertainties, increased fuel consumption, and potential environmental impacts and liabilities that would be associated with closure of the Authority's landfill and the resultant long-term reliance on out-of-region disposal capacity.
- c) Future landfill expansion will result in tipping fees and landfill revenue being retained and recirculated within the local economy instead of being exported. It may also help support local job creation and economic development activities.
- d) For the foreseeable future, even with local recycling and reuse programs underway, the public and private sectors will continue to rely upon landfilling for most of their waste management and disposal needs.

#### 2. Alternatives to Landfill Expansion

Alternatives to expansion of the Authority's landfill include the no action alternative (exporting the entire waste stream) and obtaining all necessary permits and approvals to build a new landfill at another location. These alternatives are described below.

## a) No Action Alternative

The no action alternative would result in closure of the Authority's regional landfill once the last phase of its currently permitted 20 acre footprint is built and filled to capacity. The no action alternative would, therefore, require the long distance hauling of waste to another location. This option has its own set of adverse

environmental impacts, including increased fuel consumption and truck exhaust emissions, and is further complicated by the considerable uncertainty regarding the future availability and long-term costs of transportation and disposal at out-of-County disposal facilities. In addition, if any of the potential out-of-County disposal facilities could only accept a portion of the solid waste currently disposed of at the Authority's landfill, and if these facilities would only accept this waste for a varying number of years (due to different permit durations), the Authority would have to deal with the management, legal, cost and liability issues stemming from the use of multiple disposal sites for varying durations of time.

Furthermore, prior disposal practices at out-of-County disposal facilities and the types of wastes disposed from other sources would also expose the Authority to environmental clean up costs and risks. For these reasons, in addition to the cost information provided in appendix B, the Authority considers the no action (waste exportation) alternative to be impracticable and undesirable as a long-term disposal option.

However, as noted below in Section I-G (Contingency Plan), waste exportation may be implemented on a contingency basis in the event that the Authority's existing permitted landfill space becomes filled prior to having new landfill disposal capacity permitted and constructed. Any such waste exportation would be implemented as a short-term or interim component of the Authority's solid waste management plan, to provide for the uninterrupted continuation of

disposal services for wastes generated within Franklin County while new long term landfill disposal capacity is under development by the Authority.

Appendix B presents a cost comparison between future waste exportation – commencing at such time as the currently permitted landfill space is filled – and future disposal at a newly permitted and constructed Authority landfill expansion in Franklin County.

#### b) Build a New Landfill at Another Location

Another alternative to the proposed landfill expansion would be to obtain the necessary permits and approvals to build a new landfill at another location. This would be an enormous undertaking involving the expenditure of millions of dollars over the course of many years. Local opposition to candidate landfill sites would surface throughout the County, and real estate sales would suffer accordingly as tensions mount and fears circulate among concerned citizens who delay selling/buying real estate anywhere near locations under consideration as a new Authority landfill site.

Local opposition to a new landfill site location would translate into an extensive and expensive Department of Environmental Conservation (DEC) permit review process, including a DEC adjudicatory permit hearing, and would likely involve legal challenges to the landfill siting process at every conceivable opportunity. The amount of controversy and disruption of peoples' lives that could be created if the Authority were to search for a new

landfill site cannot be overestimated. Moreover, there can be no assurances that such an endeavor would result in the successful permitting and construction of a new Authority landfill site.

The Authority carried out such a landfill siting process from 1987 through 1991 (brief by more recent landfill siting experiences), which involved the evaluation of 42 potential alternative landfill sites. This ultimately resulted in the permitting, construction and on-going operation of the current Authority landfill site in the towns of Westville and Constable.

Expansion at the current Authority landfill site would consolidate the Authority's 30-year landfill post-closure maintenance and monitoring obligations at one site and would make use of millions of dollars already invested in existing infrastructure (site access road, scale, maintenance and office buildings, leachate storage facilities, and environmental monitoring network).

For these cost, logistical and environmental reasons, it would be impracticable for the Authority to build a new landfill at another location.

## F. Extension of Planning Period from 2010 to 2020

The NYSDEC's rules and regulations for Comprehensive Solid Waste Management Planning (Subpart 360-15 of NYCRR Part 360) require that all solid waste management plans provide for the management of solid waste within the planning unit for a minimum of a ten-year period. The CFSWMA's original Final Solid Waste Management Plan is based on a 20-year planning period beginning

in the year 1990 and extending through the year 2010. The current NYSDEC policy for extending the term of a local solid waste management plan provides for the extension of the planning period through means of a SWMP modification, as long as no significant changes have occurred in the method of managing the solid waste generated in the planning unit (NYSDEC, 2003). In light of this, and with the expiration date for the current SWMP soon approaching, it is prudent for the Authority to apply for an extension of their SWMP planning period at this time. The Authority proposes that the SWMP planning period be extended for a 10-year period, through the year 2020.

Additional details regarding the proposed long-term landfill expansion are provided in Section I-E (Long-Term Landfill Expansion), above, and Sections III-B (Regional Landfill) and III-H (Revised Implementation Schedule), below. Please refer to appendix B for a cost comparison between future waste exportation – commencing at such time as the currently permitted landfill space is filled – and future disposal at a newly permitted and constructed Authority landfill expansion in Franklin County. This waste exportation alternative is discussed further in Section I-G (Contingency Plan), below.

#### G. Contingency Plan

In the event that the existing permitted landfill space becomes filled prior to having new landfill disposal capacity permitted and constructed, the Authority's contingency plan will be to export waste to existing out-of-County disposal facilities — utilizing its existing transfer stations — until such time as the Authority is able to have new landfill disposal capacity permitted and constructed.

Contractual arrangements with one or more existing disposal facilities will be entered into by the Authority to provide for sufficient disposal capacity for wastes generated within Franklin County. The length of any such disposal contracts will depend upon the then current status of the Authority's efforts to permit and construct new landfill disposal capacity. Such disposal contracts will be executed by the Authority following negotiation of an inter-municipal agreement (or agreements) with publicly owned facilities, or via a public competitive procurement process (either public bidding or issuance of a Request For Proposals) that privately owned disposal facilities will have the opportunity to respond to via the submittal of price proposals to the Authority.

The Authority will only enter into a disposal contract (or contracts) with a disposal facility that is duly authorized and permitted to accept mixed municipal solid wastes that are generated within Franklin County. The specific disposal facility or facilities that would be utilized under this contingency plan for the disposal of wastes generated in Franklin County will be determined based on contract negotiations and the public competitive procurement process referenced above. Examples of existing disposal facilities that could be considered for such a disposal contract include but are not limited to the Schuyler Falls landfill, the Development Authority of the North Country landfill, and the waste-to-energy facility in Hudson Falls.

As part of its contingency plan, the Authority will require any disposal facility that it may contract with to provide disposal capacity at specific disposal prices to sludges and other waste materials generated within Franklin County that it has historically provided disposal capacity for at the Authority's landfill, even if such sludges or other waste materials are not transported to the out-of-County disposal facility through one of the Authority's transfer stations. This approach will enable sludges, large loads of construction and demolition debris,

and other waste materials that may not be suitable for handling or cost effectively handled through the Authority's transfer stations to be hauled directly to a disposal facility designated by and under contract with the Authority to provide for the disposal of wastes generated within Franklin County.

Under this contingency plan, the Authority will continue to staff and operate the transfer stations during any such waste exportation activity. However, due to the longer haul distances involved in transporting waste to out-of-County disposal facilities, it is anticipated that the Authority will contract with a private company – following a public competitive procurement process — for waste transfer hauling services to ensure that it will have an adequate number of waste transfer trucks, drivers and trailers to handle such long distance waste transportation requirements. Such contracted waste hauling services will be utilized as necessary to supplement waste hauling undertaken by Authority employees with the Authority's transfer trucks and trailers.

The Authority will plan for and will be prepared to implement this contingency plan in a timely manner that will assure Franklin County residents, businesses and institutional facilities of a reliable and uninterrupted disposal service. The Authority will, therefore, initiate implementation of its waste exportation contingency plan at whichever one of the following points in time provides for a longer planning and implementation period: (1) when one-half of the disposal capacity in Cell 4 of its currently permitted landfill remains or (2) when no more than two years of disposal capacity is projected to remain in Cell 4 based on then current landfill usage rates.

#### II. Overview of Franklin County's Current Solid Waste Management System

#### A. Major Milestones from 1991 Approved Solid Waste Management Plan

The major milestones set forth in the Authority's original SWMP, for the implementation of the Authority's integrated solid waste management system, are outlined below. The status of each milestone is summarized in the parentheses following each bulleted item. More details on several of the milestones are provided in Section II B through II E, which follow.

- Closure of the 17 municipal landfills which existed at the time of the original SWMP (completed).
- Site, construct and begin operation of long-term regional landfill (completed, see Section II C for more details).
- Establish a recycling system consisting of collection, storage, and processing facilities, and marketing arrangements, with as much builtin flexibility as possible (completed, see Section II E for more details).
- Establish central, intermediate, and rural transfer stations (completed, see Section II D for more details).
- Establish a C&D debris landfill in the southern portion of the county to provide a convenient, more cost-effective means for C&D debris generators to dispose of this waste (not completed, due to prohibitive costs).
- Evaluate the potential for C&D recycling (completed).
- Establish a regional materials recovery facility (completed, see Section II E for more details).
- Hire a recycling coordinator (completed, see description in this Section II A, below, for more details).

Administer the Authority's solid waste management system through a local law, which also addresses the loss of material to out-of-County facilities (law was enacted but never enforced, see Section I C and this Section II A, below, for more details).

With the exception of establishing a stand-alone C&D debris landfill (which has not been implemented due to prohibitive costs associated with construction and operation of such a facility), the Authority has implemented all of the major milestones as outlined in its original SWMP. However, the implementation of several of these milestones has not been without difficulty.

As stated previously, Franklin County never enforced the flow control provisions of its local law relating to the collection and disposal of solid waste due to the 1994 U.S. Supreme Court decision in the *Carbone v. Clarkstown* case. As a result, neither the County nor the Authority was able to capture all of the solid waste generated in the County. An obstacle faced by the County and the Authority in implementing the integrated solid waste management plan has been the lack of flow control authority. The Authority's solid waste management system is financially self-supporting and is not subsidized in any way by tax revenues. The Authority therefore depends on a steady supply of waste and recyclables to its facilities to generate sufficient revenues to operate and maintain these facilities. The lack of flow control is one element that has made it extremely difficult for municipalities, such as Franklin County and its Authority, who have invested significant sums of money to establish environmentally sound waste disposal facilities and recycling programs for their residents, to continue to provide these services in a cost-effective manner.

One of the casualties of the inability to direct all of the waste generated within the County to the Authority's facilities, and the resulting decrease in revenues generated, has been the Recycling Coordinator position. This position was filled during the early stages of the SWMP planning period, but had to be cut due to lack of funding in subsequent years. The lack of a dedicated full-time recycling coordinator inhibits the Authority's ability to expand its recycling program, conduct the needed public education and outreach programs, and seek the best markets for its recyclable materials.

The modifications to the Authority's SWMP, as described in Section I of this document, and as outlined below, are necessary for the Authority to achieve one of the key objectives of its solid waste management plan, which is to provide for the environmentally sound long term management and disposal of the recyclables and municipal solid waste generated within its borders.

#### B. Current Components of the Solid Waste Management System

The Authority's solid waste management system consists of a sanitary landfill, three transfer station locations that receive MSW and recyclables, and one satellite location that receives MSW and recyclables only on Saturdays. All facilities have been developed and implemented in accordance with the Authority's approved final SWMP.

## C. Regional Landfill

The CFSWMA's Regional Landfill is located on a 200 acre site in the towns of Constable and Westville, in Franklin County, New York. The entrance to the site is located on County Route 20. The area surrounding the site is rural. The landfill was sited in accordance with 6 NYCRR Part 360 rules and regulations.

The original MSW landfill footprint was designed with four cells that were roughly equal in size. The total area of the landfill footprint was approximately 20-acres. Cell 1 was constructed in 1993 and opened in 1994. It was filled to capacity in 1998. Cell 2 was constructed in 1998, and Cell 3 was constructed in 2003. As of the date of this report, solid waste is currently being disposed of in Cell 3. Cell 4 has not yet been built.

The landfill accepts mixed municipal solid waste generated by residents, institutions, and commercial entities. It also accepts selected industrial wastes, construction and demolition debris, sludge, asbestos, ash, and petroleum contaminated soil. The following materials are prohibited from disposal at the Authority's regional landfill:

Septic tank pumpings Radioactive wastes

Pesticides and chemicals Liquid waste (<20 % solids)

Explosives Junked vehicles

Sealed containers Hot ashes

Scrap metal Regulated hazardous waste

Waste oils Tires

Vehicle batteries Large dead animals

Untreated regulated medical waste Separated recyclable materials

Since the landfill first opened in 1994, many steps have been taken to improve operating efficiencies and bottom-line costs. A number of significant improvements are highlighted below:

• Increased waste density by replacing a 35,000-pound landfill compactor with a 75,000-pound compactor. This change occurred in 1999 and resulted in increasing waste compaction density by approximately 15%, which further conserved air space and increased landfill life.

- Developed a program with the County to use lower cost labor provided by County welfare recipients (Workfare) at no cost to the Authority.
- Developed in-house engineering capability to reduce engineering consultant costs.
- Replaced outside contractors with Authority personnel in construction activities for certain aspects of landfill cell expansion and closure. This work has resulted in substantial cost savings over contractor-provided services.

In addition to improving the operational efficiencies at the landfill as outlined above, the Authority has also implemented several changes designed to enhance waste volumes, increase landfill capacity, and generate additional revenue. These changes include:

- Adopting a variable tipping fee procedure in 1995. This established a market-responsive procedure by which the Authority could set individual tipping fees for out-of-County direct-haul solid waste based on quantity, type, and alternatives to such disposal. By doing do, the County has been successful in attracting new waste streams at competitive prices.
- Accepting BUD material from outside the County for use as alternative daily landfill cover. This change occurred in 1995 and has helped to increase revenues by charging for a material that replaces the use of on-site soils for daily cover.

- Obtaining an increase in the landfill's daily average permitted capacity from 100 tons per day to 145 tons per day, and increasing the total annual tonnage limit to 43,500 tons. In addition, the landfill was permitted to receive a daily maximum of 240 tons per day. These changes occurred in 1996.
- Actively marketing landfill airspace. The marketing program includes sales calls to current and prospective landfill customers. Competition is also continuously monitored to determine appropriate competitive strategies.

Waste quantities received at the landfill since 1998 and future waste generation projections are presented in table 1.

#### D. Solid Waste Transfer Stations

The Authority's three major transfer stations are located in the villages of Tupper Lake and Malone, and in the hamlet of Lake Clear. All three of these facilities accept solid waste and recyclable materials from residential and commercial customers. A fourth facility is a satellite collection site that is located in Saint Regis Falls (Town of Waverly). This satellite location accepts MSW and recyclables and operates on Saturdays. MSW and recyclables are primarily separated at the source and brought to these transfer stations by residents and haulers. The materials are then further inspected and sorted at each facility. MSW is loaded into Authority-owned containers and transported in bulk volumes by Authority-owned vehicles to the regional landfill for disposal.

Table 1 - Franklin County Waste Generation and Recycling Figures

1998   1999   2000   2001   2002   2003   2004     Franklin County Population (persons) (*2)   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3   1/3							Year					
1998   1999   2000   2001   2002   2003   2004     In County   13,866   20,128   24,160   28,653   27,819   27,913   29,667     Incinerator ash ons   24,835   28,579   33,162   41,198   38,112   40,200   47,840     Ing BUD   24,835   28,579   33,78   3,204   3,284   4,137   4,155     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   49%   37%   34%   38%   36%   41%   47%     Ing BUD   40,000   47,800     Ing BUD   40,000     Ing BUD   40,000     Ing BUD   40,000     Ing BUD   40,000     Ing BUD   41,000     Ing BUD   41,000			nii L	Actual	County Tor	nages				Projections (*1)	ons (*1)	
lin County         (*2)         n/a         n/a         51,134         n/a         n/a         n/a         52,954 (*3)           ation (persons)         (*2)         n/a         n/a         n/a         n/a         n/a         52,954 (*3)           dring BUDI         (*4)         13,866         20,128         24,160         28,653         27,819         27,913         29,667           Materials:         (*5)         8,217         8,724         9,220         8,750         12,152         12,458           incinerator ash incinerator ash incinerator ash or Solors         1,002         234         278         3,325         1,543         135         5,715           Forms Waste and BUD rated         1,002         28,579         33,162         41,198         38,112         40,200         47,840           Forms Waste and BUD rated         1,213         2,115         2,196         3,204         3,284         4,137         4,155           Agreed         1,213         2,115         2,196         3,204         3,284         4,137         4,186           Agway sling BUD         49%         37%         34%         38%         41%         47%	A	1998	1999	2000	2001	2002	2003	2004	2002	2010	2015	2020
Generated (tons)         (*4)         13,866         20,128         24,160         28,653         27,819         27,913         29,667           Materials:         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)         (*5)	sons)	old!	n/a	51,134	n/a	n/a	n/a	52,954 (*3)	53,410	55,723	58,004	60,135
Materials:         (*5)         8,217         8,724         9,220         8,750         12,152         1           eum Contaminated ons)         1,002         234         278         3,325         1,543         135           Tons Waste and BUD rated         24,835         28,579         33,162         41,198         38,112         40,200           of Recyclables         1,213         2,115         2,196         3,204         3,284         4,137           aling Rates:         49%         37%         34%         38%         36%         41%	d (tons)		20,128	24,160	28,653	27,819	27,913	29,667	29,910	31,205	32,482	33,676
tate and BUD 24,835 28,579 33,162 41,198 38,112 40,200 4 1,213 2,115 2,196 3,204 3,284 4,137 38 49% 37% 34% 38% 36% 41%	Materials: incinerator ash	2 1E - 11	8,217	8,724	9,220	8,750	12,152	12,458		See note	See note (*6), below	
lables 1,213 2,115 2,196 3,204 3,284 4,137 38 49% 37% 34% 38% 36% 41%	Petroleum Contaminated Soil (tons)	1,002	234	278	3,325	1,543	135	5,715	- 1		nen -	
lables 1,213 2,115 2,196 3,204 3,284 4,137 2 <u>55.</u> 49% 37% 34% 38% 36% 41%	Total Tons Waste and BUD Generated	24,835	28,579	33,162	41,198	38,112	40,200	47,840		See note	See note (*6), below	
9 <u>85.</u> 49% 37% 34% 38% 41%	Tons of Recyclables Recovered	1,213		2,196	3,204	3,284	4,137	4,155	4,488	6,243	8,122	10,104
	Recycling Rates: Including BUD	49%	37%	34%	38%	36%	41%	47%	Rate is e	Rate is expected to remain in the range of 30-50%	remain in t -50%	ne range
Excluding BUD 9% 11% 9% 11% 12% 15% 14%	Excluding BUD	%6	11%	%6	11%	12%	15%	14%	15%	20%	25%	30%

NOTES:

n/a - not available

County's per capita waste generation rate of 0.56 tons/person/year, calculated for the year 2004, was held constant throughout the duration of the planning and Figures for 2003" (2005), the national per capita waste generation rate has remain relatively unchanged since 1990. Based upon this finding, Franklin period. Recycling rate projections (excluding BUD) were determined by calculating the average annual percent increase in recycling from 1998 to 2004, (\*1) Waste generation projections were calculated by determining the per capita waste generation rate for the most recent year (2004), and applying this rate to future projected populations. According to the USEPA's "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and applying this rate (approximately 1% per year) to future years.

2) Source: New York Statistical Information System (CISER, Cornell University), "NYsis County Population Projections By Sex and Age, 2000 - 2030", November 11, 2002. Accessed at: www.nysis.cornell.edu/data.html. Accessed on August 5, 2005.

\*3) 2004 County population estimated using trend in population from 2000 to 2005 (0.89% increase in persons per year)

(\*4) Includes reported in-county recycled materials, MSW and C&D.

(\*5) BUD Materials = Beneficial Use Determination materials used as alternative daily landfill cover at the CFSWMA regional landfill

(\*6) Since the generation of wood incinerator ash and petroleum contaminated soil is not directly dependent upon population, it is not possible to make reliable projections for the quantity of these materials generated in the future.

#### E. Recyclables Collection/Processing

The following recyclable materials are currently included in the Authority's recycling program:

- corrugated containers (OCC)
- commingled newspaper (ONP), magazines (OMG), boxboard, junk
   mail, office paper, and telephone books
- clear and colored glass containers
- natural and colored high density polyethylene (HDPE) and polyethylene terephthalate (PET) plastic bottles
- aluminum cans and foil products
- mixed scrap metal (ferrous and non-ferrous)
- waste tires; and
- lead acid batteries

The quantities of recyclable materials received at the Authority's facilities since 1998 are presented in table 1 along with projected recyclables quantities and recovery rates.

Recyclables are collected in Authority-owned containers at each transfer station. Upon the collection of sufficient quantities, recyclables are removed in bulk volumes and brought directly to appropriate markets, or removed from the transfer stations by either private contractors or Authority staff for further processing. Over the last several years, the Malone transfer station has been used as a small-scale Materials Recovery Facility (MRF), where recyclable materials are baled and stored until delivery to appropriate markets. This facility serves as the Authority's primary processing and warehousing facility for recyclable materials. Corrugated containers, HDPE, and PET are baled at the

Malone and Tupper Lake transfer stations. From there they are marketed via brokerage services. Glass is collected in roll-off containers and delivered to the Authority's landfill where it is crushed and used in the construction of landfill roads.

Other recycling services provided at the three main transfer stations include brush chipping, yard waste composting, and refrigerant recovery and appliance recycling. Wood chips and compost are provided free to the public.

Recent improvements to the recycling program include updated signage at each of the transfer stations to clearly identify materials accepted for recycling, and the distribution of updated printed informational guides describing the current recycling program. These guides are provided to the public at each of the transfer stations.

The Authority also updated its household hazardous waste (HHW) guide and held a HHW collection day at the landfill in June of 2004. Approximately 13 tons of HHW were collected from the 128 persons who participated in the event.

# III. Implementation of Modifications to the Authority's Current Solid Waste Management System

- A. Options to Secure the Long-Term Viability of the Authority's Integrated

  Solid Waste System
  - 1) Legal uncertainty with respect to the power of municipal governments to direct the flow of waste to publicly owned solid waste management facilities has been reduced as a result of a federal court decision involving the Oneida-Herkimer Solid Waste Authority (an appeal of which was denied by the U.S. Supreme Court on January 7, 2002). Consequently, Franklin County and the Authority are contemplating updating and implementing its local law regarding the collection and disposal of solid waste within the county, either as currently written or as may be modified.
  - 2) With regard to MSW collection services, the Authority finds it necessary to reserve the right to provide collection services to county residents and businesses, in the event that other collection service providers fail to comply with the SWMP or Local Law as currently written or as may be modified. This will ensure uninterrupted service in the collection of MSW within the County, should such a situation arise.
  - 3) Another option to ensure the long-term viability of the Authority's integrated solid waste management system is to require the development or operation of any solid waste management facilities by others in the county (either private entities or municipalities) to be compatible with the Authority's SWMP. Such a requirement could limit or prevent the siphoning of revenues away from the integrated solid waste management system that the Authority has invested millions of

dollars to establish, and would help enhance the Authority's ability to provide for the reliable, environmentally sound means of solid waste disposal for its residents and businesses. The Authority's recycling program would also be protected from negative impact, as the funding for its operation comes from tipping fees generated at the Authority's regional landfill and transfer stations. For these reasons, this compatibility requirement is considered to be an integral component of the Authority's SWMP. Any disposal of MSW at a non-Authority solid waste management facility will be presumed to be incompatible with the Authority's SWMP, unless otherwise expressly determined in writing by the Authority.

4) As is described in the next section regarding the regional landfill, the Authority plans to apply for an increase in the landfill's annual tonnage limit. Such a tonnage increase will provide the Authority with the operational flexibility it needs to secure more waste and tipping fee revenues to strengthen the long-term financial viability of the Authority's integrated solid waste management system.

#### B. Regional Landfill

The Authority plans to submit an application for a NYSDEC Solid Waste Management Facility permit modification to increase the annual tonnage limit at the regional landfill to 125,000 tons per year (TPY) of MSW. No changes to the maximum amount of ADC material are proposed. The quantity of ADC material used at the landfill will remain at less than 45% of the municipal solid waste stream as determined by weight. The increased tonnage limit will provide the Authority with the operational flexibility it needs to secure enough waste and tipping fee revenues to strengthen the long term financial viability of its solid waste system.

- The Authority plans to evaluate the potential for expansion of the regional landfill beyond its current 20 acre footprint to provide for longer-term solid waste disposal for the residents and businesses within the county. One of the goals for future landfill expansion is to provide for the environmentally sound land disposal of wastes for the duration of the extended planning period which is proposed in this document (through the year 2020).
- 2) In planning for the proposed landfill expansion, it is anticipated that a minimum of 19 acres of new lined footprint will be sought. Future permitting and construction of this new lined acreage would provide at least eleven years of disposal capacity under the maximum proposed landfill utilization rate of 186,625 tons per year of material (this total includes waste, BUD materials, and soil, as indicated in appendix A), thereby providing sufficient disposal capacity through the end of the extended planning period (2020) even if this maximum landfill usage rate were to commence immediately. Additional acreage will be needed for ancillary facilities (such as site access roads, leachate conveyance and/or storage, and stormwater management) and to provide a buffer between the active landfill disposal area and neighboring properties. The specific amount of additional acreage needed beyond the liner acreage will depend on the parcel's configuration and its proximity to the Authority's existing landfill infrastructure.
- 3) Future options for the development of long-term landfill disposal capacity in the vicinity of the current site will be examined, with the initial assessments primarily relating to an identification of locations that appear to have favorable hydrogeologic conditions (i.e., locations with the potential for relatively thick, low permeability soils) that

concomitantly avoid impacts to wetland areas to the maximum extent practicable. Existing maps and documents will be reviewed to identify areas for further investigation. On-site walkovers will be undertaken where feasible to assess wetland conditions, and preliminary subsurface investigations will be conducted to confirm the presence of relatively low permeability soils at sufficient thicknesses to warrant continued evaluation as potential sites for future landfill development.

- 4) Following an initial evaluation of the suitability of alternative landfill development locations, the most suitable location will become the subject of further study and investigations including the development of permit application design documents and environmental analysis documents prepared in accordance with the requirements of the State Environmental Quality Review Act (SEQRA). Final design and bidding documents will be prepared once the SEQRA and permit review processes have been completed and the necessary permits and approvals have been granted. Construction of the new landfill disposal capacity would commence following the issuance of public bidding documents and the award of landfill construction contracts to the lowest responsible bidder for each contract.
- 5) The estimated time frame for having new landfill disposal capacity permitted and constructed is presented in table 3. Due to the potential technical and regulatory issues associated with permitting new landfill disposal capacity, there can be a wide range of opinions regarding how long it will take to permit and construct new landfill disposal capacity. Regardless of what may be deemed a reasonable time frame for permitting and building new landfill disposal capacity, the Authority has a contingency plan (i.e., to export wastes) that will be implemented in the event that new landfill disposal capacity is not available when the

currently permitted disposal capacity is fully utilized. Please see Section I-G (Contingency Plan), above, for more information regarding the Authority's contingency plan.

## C. <u>Transfer Stations</u>

No changes are currently proposed for the Authority's three main transfer stations.

Other than potentially contracting for long distance waste hauling services, in the event that waste exportation is implemented it is currently anticipated that no other significant changes would need to be made at the Authority's transfer stations to accomplish waste exportation on a contingency basis. This is based on the Authority's experience circa 1999 when it utilized its transfer stations to export wastes for a few months when its landfill was out of service as a result of a fire.

## D. Recycling Program

The Authority recognizes that additional collection equipment, materials handling and processing equipment, and facility upgrades will continue to be needed into the future to provide long term stability to Franklin County's recycling program. Renovations to the transfer station located in the Village of Malone are planned for the winter of 2005/2006 to improve materials collection, handling, and processing. These improvements will facilitate the smooth flow of materials through the facility and help to optimize labor efficiency. The need for similar recycling equipment and facility upgrades at the Lake Clear transfer station will be evaluated in 2006. The same evaluation will be conducted at the Tupper Lake facility in 2007.

- 2) The list of recyclable materials collected through the Authority's recycling program will be expanded in the future as markets allow for the cost-effective recycling of additional materials. The Authority's limited financial resources do not currently permit the reinstatement of the recycling coordinator position which has been vacant since 1996. This hinders its ability to aggressively pursue improvements to the current recycling program. However, Authority staff continue to evaluate recyclable materials markets whenever possible. The results of these evaluations will be reported in the Authority's CRA updates which are required to be submitted to the NYSDEC every 3 years, in accordance with the Authority's current Part 360 Permit to operate the regional landfill.
- 3) The Authority plans to periodically evaluate the potential for composting selected organic wastes generated from residential and commercial sources. This would be an expansion of the Authority's composting program, which currently undertakes yard waste composting.
- 4) With its limited staff and budget resources, it is extremely difficult for the Authority to track the quantities of recyclable materials that are generated within the County but that are not recycled at Authority operated facilities. The means to track these figures currently exists within the reporting requirements section of the County of Franklin Solid Waste Management Authority Source Separation and Disposal Regulations. However, compliance with these local regulations is spotty at best.

As Franklin County and the Authority are contemplating updating and implementing the local law regarding the collection and disposal of solid waste within the county, either as currently written or as may be modified, greater emphasis will be placed upon tracking these recycling numbers.

## E. Disposal of Out-of County Waste at Authority Facilities

The Authority historically and currently has accepted out-of-County wastes from Essex County and/or other sources, in accordance with the provisions of its 1992 Local Law. The acceptance of out-of-County waste is hereby explicitly incorporated into the Authority's long-term solid waste management plan.

In pursuing waste from out-of-County sources, however, the Authority fully intends to work cooperatively with other solid waste management planning units and will take all reasonable measures to help ensure that such waste importation will not adversely impact other planning units' DEC-approved solid waste management plans.

## F. Planning Period Extension

The expiration date for the Authority's currently approved SWMP is less than five years away. Over the last 15 years of the planning period, no significant changes have occurred in the method of managing the solid waste generated in Franklin County, and no significant changes are anticipated in the near future. Since the Authority's solid waste management facility permits are tied into its possession of an approved SWMP, the Authority is applying for an extension to their SWMP planning period at this time to ensure that the operation of the Authority's solid waste management facilities continues without interruption. The Authority proposes that the SWMP planning period be extended for a 10-year period, through the year 2020.

## G. Costs of Solid Waste Management System

The Authority's integrated solid waste management system is financed through user fees which are collected as tipping fees at the regional landfill and the three transfer stations. The tipping fees are established so that generated revenues will cover the cost of the entire collection, disposal, and recycling system. These fees are uniform at all Authority-owned solid waste facilities. Charges for the drop-off of recyclable materials are waived to encourage the maximum amount of recycling within the County.

As of the date of this report, a tipping fee of \$ 85 per ton (for loads over one ton) is charged for MSW generated within the county and \$ 75 per ton is charged for waste generated from outside the county. The tipping fee for C&D debris is currently \$ 70 per ton. Lower fees are charged for larger volume haulers.

The Authority monitors its financial health on an on-going basis. Such efforts have led to re-financings in recent years to help limit or lower costs to system users. In spite of such efforts, however, the Authority remains saddled with debt service costs that comprise more than one-third of the Authority's annual solid waste system expenses.

## H. Revised Implementation Schedule

The proposed schedule for implementation of the modifications to the CFSWMP, other than the long-term landfill expansion, is presented in table 2. See table 3 for the proposed schedule for implementation of the long-term landfill expansion.

## Table 2 Revised Implementation Schedule for the County of Franklin Solid Waste Management Authority's Modified Solid Waste Management Plan (\*1)

	Task		Timeframe
1.	Consider implementing updates to Local Law relating to the collection and disposal of solid waste in Franklin County.		Last Quarter 2005 and First Quarter 2006
2.	Submit permit application to NYSDEC for increase in tonnage at regional landfill.  Begin landfilling additional tonnages following DEC approval.	'n	Fall 2005 for permit application.
3.	Renovations to the small MRF at the Malone transfer station.		Winter 2005/2006
4.	Evaluate markets and feasibility of adding to list of mandatory source separated recyclable materials.	6,-15	On-going thru 2020
5.	Evaluate need for equipment and facility upgrades at transfer stations.		On-going thru 2020
6.	Prepare Comprehensive Recycling Analysis (CRA) Update and submit to NYSDEC (*2)	1 19	Next update due by 8/1/07. Subsequent updates due every three years thereafter thru 2020.
7.	Evaluate the potential for composting selected organic wastes from residential/commercial waste stream, and implement if deemed feasible.	. 1151	Start third quarter 2006. Re-evaluate select organic waste composting every three years, prior to periodic CRA updates, thru 2020.

Note: (\*1) See table 3 for the long-term landfill expansion implementation schedule.

(\*2) In accordance with Part 360 permit for operation of the regional landfill

(effective January 2005 - January 2015)

		-Term Landfill Expansion Management Authority
Long-Term Landfill Expansion	Timeframe	Use of Currently Permitted Landfill
Preliminary evaluations and identification of potentially suitable areas are completed	December 2006	Ture of 2 is 3 i
Hydrogeologic and environmental investigations required for permit level design and SEQRA analyses are completed	October 2007	
40	December 2007	Advertise for bids for construction of Cell 4
	April 2008	Start construction of Cell 4
1 <sup>st</sup> two rounds of quarterly groundwater monitoring tests are completed	June 2008	e a a a a a a a a a a a a a a a a a a a
SEQRA and permit application documents are submitted to DEC	July 2008	THE THE RESERVE OF TH
Issuance of completeness notice for DEC permit application documents	October 2008	an deadiff reg 197 to
At manageral A	December 2008	Cell 4 construction certification report approved by DEC
End of public comment period on DEC permit application documents	January 2009	Start disposing of waste in Cell 4
Third and fourth rounds of groundwater monitoring tests are completed	March 2009	porterior and a services
DEC issues required permits, assuming no adjudicatory hearing is held*	January 2010	
Advertise for bids for construction of Cell 5	December 2010	Half of Cell 4's disposal capacity is utilized. Begin contingency preparations for exporting wastes.
	March 2011	Request proposals from out-of-County disposal facilities for interim disposal services (include request for long distance hauling services)

	Table 3 - Cont	tinued
	edule for Long	g-Term Landfill Expansion
		Management Authority
Long-Term	Timeframe	Use of Currently
Landfill Expansion		Permitted Landfill
Start construction of Cell 5**	April 2011	
	December 2011	Sign contract(s) for disposal of waste at out-of-County disposal facilities (including contract for long distance hauling services, if necessary)
Cell 5 construction certification report approved by DEC	June 2012	
Start disposing of select waste in Cell 5	September 2012	
	December 2012	Finish disposing of waste in currently permitted landfill***
	January 2013	Begin exporting wastes on a contingency basis if long-term landfill expansion is not yet available. Continue waste exportation until landfill expansion is completed.
Advertise for bids for construction of Cell 6	December 2015	
Start construction of Cell 6	April 2016	
Cell 6 construction certification report approved by DEC	December 2016	
Start disposing of waste in Cell 6	January 2017	
Design, build and dispose of waste in future landfill liner extensions per approved permit for long-term landfill expansion	2020 and beyond	
Finish disposing of waste in long-term landfill expansion	Beyond 2020	

\* Add 1-2 years to the date for issuance of DEC permits if an adjudicatory hearing is held.

area

<sup>\*\*</sup> Add 1-2 years to the date for start of Cell 5 construction if Article 78 litigation is filed to challenge the validity of the issued permits.

<sup>\*\*\*</sup> Assumes an average annual usage rate of ~100,000 tons of waste, BUD and soil materials. This date for finishing disposal in Cell 4 could change by up to 4 years in either direction, depending on actual landfill usage rates.

## IV. State Environmental Quality Review (SEQR) Determination

A SEQRA review for this SWMP modification was undertaken and a Negative Declaration dated September 30, 2005 was made by the Authority, acting in its capacity as SEQRA Lead Agency. All required SEQRA documents will be maintained in a file at the Authority's office.

## V. Public Participation/Notification to Neighboring Jurisdictions

The Authority will hold a public information meeting to gather public input on the proposed SWMP modifications. In addition, all neighboring counties and Canadian municipalities will be sent a copy of the draft SWMP modification.

## VI. Plans for SWMP Modification Distribution

All holders of the original SWMP will be sent a complete copy of the final SWMP modification. Instructions to insert this modification into the original SWMP binder will be included in the submittal. The SWMP modification will be three-hole punched to facilitate its incorporation into the original document.

## VII. Resolution Adopting the SWMP Modification

The Board of Directors of the County of Franklin Solid Waste Management
Authority will be responsible for consideration and enactment of a resolution to adopt
this SWMP modification. A copy of this resolution will be forwarded to the NYSDEC
subsequent to its adoption by the Authority.

## VIII. References Cited

(NYSDEC, 2001)

"Technical Administrative Guidance Memorandum (TAGM SW-96-08 Review of Local Solid Waste Management Plans)", New York State Department of Environmental Conservation, May 3, 2001.

(NYSDEC, undated)

New York State Solid Waste Management Plan, 1999-2000 Update, New York State Department of Environmental Conservation, no date provided. Electronic version accessed at: http://www.dec.state.ny.us/website/dshm/prgmngnt/2kupdte.pdf

(Press Release, 1998)

"Governor, Essex County: Plan Will Close Last Adirondack Landfill", Office of the Governor, August 18, 1998. Electronic Version accessed at: http://www.state.ny.us/governor/press/aug18 98.htm

(Barton & Loguidice, P.C., 2003)

County of Franklin Solid Waste Management Authority Regional Landfill, Landfill Gas Collection System Analysis, Barton & Loguidice, P.C., July, 2003.

(NYSDEC, 2003)

"DEC Policy DSHM-SW-03015 Extending the Term of a Local Solid Waste Management Plan (LSWMP) Planning Period", New York State Department of Environmental Conservation, October 8, 2003.

Appendix A

Landfill Site Life Projections

## County of Franklin Solid Waste Management Authority

## REMAINING SITE LIFE ESTIMATE

REMAINING AIRSPACE: 812,500 CY
TYPICAL DENSITY: 1,800 lbs/CY
REMAINING TONNAGE CAPACITY: 731,250 TONS

ANNUAL	TONNAGE	TONNAGE	REMAINING LIFE
TONNAGE	w/ 45% BUD	w/ SOIL & BUD	w/ SOIL & BUD
43,500	63,075	64,946	11.3
55,000	79,750	82,115	8.9
65,000	94,250	97,045	7.5
75,000	108,750	111,975	6.5
85,000	123,250	126,905	5.8
95,000	137,750	141,835	5.2
105,000	152,250	156,765	4.7
115,000	166,750	171,695	4.3
125,000	181,250	186,625	3.9

## Notes:

- 1. Remaining airspace and typical density provide by CFSWMA.
- Remaining airspace is for full build-out as currently permitted, including Cell
  4 which has not yet been built, per on-site survey conducted during the week
  of July 11, 2005.
- 45% of the MSW tonnage BUD is based on limit set in Revised O&M Manual. BUD materials are used as cover material during site operations.
- 4. Cover soil quantity is estimated at 4.3% of the MSW tonnage as calculated in the Revised O&M Manual. Cover soils are only used on the outer slopes of the landfill with BUD being used predominately as daily and interior waste slope intermedate cover.

## Appendix B

Cost Comparison Between Future Waste Exportation and In-County Landfilling

## County of Franklin Solid Waste Management Authority <u>Summary Comparison Between In-County Landfilling and Waste</u> <u>Exportation</u>

Year	Cost of Landfilling at 43,500 Tons/Year (\$/Ton)	Cost of Landfilling/ Waste Exporting for Landfill Closure Scenario* at 43,500 Tons/Year (\$/Ton)	Cost of Landfilling at 125,000 Tons/Year (\$/Ton)	Cost of Landfilling/ Waste Exporting for Landfill Closure Scenario* at 125,000 Tons/Year (\$/Ton)
2006	\$91	\$91	\$32	\$32
2007	\$99	\$99	\$37	\$40
2008	\$101	\$101	\$40	\$46
2009	\$103	\$103	\$49	\$59
2010	\$109	\$109	\$52	\$104 - \$116
2011	\$116	\$116	\$53	\$107 - \$120
2012	\$118	\$118	\$59	\$111 - \$124
2013	\$120	\$120	\$58	\$115 - \$129
2014	\$123	\$123	\$58	\$118 - \$133
2015	\$124	\$124	\$59	\$122- \$138
2016	\$109	\$111	\$47	\$127 - \$143
2017	\$105	\$131 - \$148	\$44	\$131 - \$148
2018	\$116	\$135 - \$153	\$45	\$135 - \$153
2019	\$119	\$140 - \$158	\$37	\$140 - \$158
2020	\$121	\$144 - \$164	\$39	\$144 - \$164

Note: In-county landfill costs shown above do <u>not</u> factor in revenues received from BUD materials. Cost estimating details are shown on the following pages in Appendix B.

<sup>\*</sup> Tonnage per year for the waste export scenario refers to the tonnage of MSW accepted per year at the currently permitted landfill until Cell 4 reaches capacity.

<sup>\*\*</sup> The range of costs for waste export is based on costs to haul and pay for the disposal of in-county waste from the three existing waste transfer stations to the Schuyler Falls Landfill, the Development Authority of the North Country Solid Waste Management Facility, or the Wheelabrator Hudson Falls waste-to-energy facility. Waste exportation is assumed to begin in 2017 at the lower tonnage level and in the year 2010 at the higher tonnage level.

## Landfill Construction Cost Estimates and Debt Service Schedule

		43,50	43,500 Tons/Year - Landfill	Landfill Expo	l Expansion	125,	125,000 Tons/Year - Landfill Expansion	- Landfill Ex	pansion	125,	125,000 Tons/Year - Landfill Closure*	r - Landfill C	osure*
Construction Item	2006 Cost	Construction Year	Projected Cost**	Financing Period (Years)	Annual Debt Service Payment	Construction Year	Projected Cost**	Financing Period (Years)	Annual Debt Service Payment	Construction	Projected Cost**	Financing Period (Years)	Annual Debt Service Payment
Cell 4 Construction	\$2,700,000	2010	\$3,000,000	7	(\$477,896.11)	2007	\$2,800,000	5	(\$607,905.73)	2007	\$2,800,000	8	(\$986,081.06)
Cell 2 Closure	\$900,000	2007	\$900,000	6	(\$316,954.63)	1	1	1		***	***	***	
Cell 3 Closure	\$790,000	2011	\$900,000	2	(\$195,398.27)	ı	3	!	***		7.644		1
Cell 4 Closure	\$1,000,000	2018	\$1,400,000	4	(\$374,838.21)	1	1	-	:		***	:	
Cell 2/3 Closure	\$1,295,000	-	1	1		2008	\$1,370,000	2	(\$293,097.40)	2008	\$1,370,000	2	(\$703,480.47)
Cell 3/4 Closure	\$1,395,000	1			*	2010	\$1,600,000	7	(\$254,877,93)	2010	\$1,600,000	-	(\$1,542,000,00)
Landfill Expansion w/ Cell 5	\$8,250,000	2016	\$11,090,000	14	(\$938,731.12)	2009	\$9,000,000	10	(\$1,044,333.84)	2009			1
Cell 6 Construction	\$4,150,000	****			-	2012	\$5,000,000	4	(\$1,338,707.90)	2012			ŀ
Cell 7 Construction	\$4,150,000			1	1	2016	\$5,600,000	4	(\$1,445,804.53)	2016	***		1
Cell 8 Construction	\$4,150,000	***		1	***	2020	\$6,300,000	4	(\$1,579,675,33)				1

<sup>\*</sup> Financing periods were adjusted for the landfill closure scenario to ensure that all debt repayment associated with landfill operations is paid in full prior to landfill closure. This ensures that costs associated with in-county landfill operations are not factored into costs associated with waste exporatation. \*\* Projected construction costs are based on a 3% annual increase in construction costs.

## Landfill and Transfer Station Operating Costs, Per 2006 Budget

ltem	Total Cost*	Tonnage	\$/Ton of Waste Through Stations	\$/Ton of Waste Landfilled @ 43,500 Tons/Yr	\$/Ton of Waste Landfilled @ 125,000 Tons/Yr
Transfer Stations					
Transfer Haul Costs	\$364,079	20,835	\$17.47	\$8.37	\$2.91
Malone O&M Lake Clear O&M Tupper Lake O&M	\$177,494 \$159,640 \$140,341	8,572 7,565 4,698	\$20.71 \$21.10 \$29.87		
Station O&M Costs (exclu-	uding haul)		\$22.92	\$10.98	\$3.82
Operations Payroll/O&M Host Community Environmental Monitoring Leachate/Gas Maintenance  Administrative Payroll/O&M	\$393,454 \$35,000 \$34,870 \$95,560				
Insurance	\$95,504				
Deposits to Funds** Closure/Post Closure Fund Equipment Fund	\$156,550 \$25,000				
Eqipment Fund Payments	\$150,000		***		
Total	\$1,252,627				
Landfill Cost per Ton at 43,	500 Tons/Year		\$28.80		
Landfill Cost per Ton at 125	,000 Tons/Year		\$10.02		

<sup>\*</sup>Costs are based on the current budget for 2006.

<sup>\*\*</sup> The 2006 budget's \$400,000 deposit to the Cell Construction Fund is not included in these O&M costs for landfilling because the debt service used in this cost analysis was calculated assuming that the Authority will borrow 100% of the money required for construction.

## Transfer Haul Cost Estimates for Waste Exportation (2006 \$)

## Schuyler Falls

Transfer Station	Waste	Trip Length (miles, one- way)	Cost per Mile (from equation below)	Cost per Trip	Tons per Trip	Cost Per Year	Cost per Ton
Lake Clear	7,565	54	\$5.28	\$285.17	22	\$98,059.11	\$12.96
Tupper Lake	4,698	71	\$4.99	\$354.06	22	\$75,608.50	\$16.09
Malone	8,572	53	\$5.30	\$280.80	22	\$109,411.68	\$12.76
			*	Weigh	nted Averag	e Cost/Ton	\$13.59

## DANC

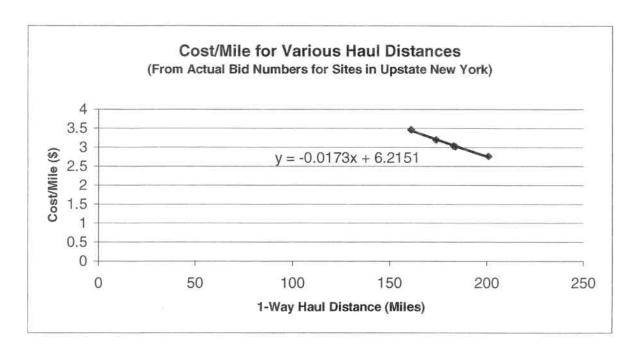
Transfer Station	Waste	Trip Length (miles, one- way)	Cost per Mile (from equation below)	Cost per Trip	Tons per Trip	Cost Per Year	Cost per Ton
Lake Clear	7,565	123	\$4.09	\$502.73	22	\$172,869.05	\$22.85
Tupper Lake	4,698	104	\$4.42	\$459.25	22	\$98,071.52	\$20.88
Malone	8,572	125	\$4.05	\$506.58	22	\$197,380.04	\$23.03
				Weigh	nted Averag	e Cost/Ton	\$22.48

## Hudson Falls

Transfer Station	Waste	Trip Length (miles, one- way)	Cost per Mile (from equation below)	Cost per Trip	Tons per Trip	Cost Per Year	Cost per Ton
Lake Clear	7,565	112	\$4.28	\$479.08	22	\$164,738.19	\$21.78
Tupper Lake	4,698	123	\$4.09	\$502.73	22	\$107,354.77	\$22.85
Malone	8,572	181	\$3.08	\$558.17	22	\$217,482.47	\$25.37
				Weigh	nted Averag	e Cost/Ton	\$23.50

y = -0.0173x + 6.2151

where: x = 1-Way Haul Distance, and y = Cost/Mile



# COST ANALYSIS - LANDFILL EXPANSION @ 43,500 TONS MSW/YEAR TO IN-COUNTY LANDFILL

PORT ER TON COST PER TON OF E (@5% WASTE	\$90.61	\$99.07	3 \$100.99	\$103.03	7 \$109.43	\$116.12	.2 \$118.33	8 \$120.44	\$122.74	\$123.65	\$108.61	\$104.64	3 \$115.88	8 \$118.60	7 \$121.42
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	8.37	8.79	9.23	69.6	10.17	10.68	11.22	11.78	12.37	12.98	13.63	14.31	15.03	15.78	16.57
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	10.98	11.31	11.64	11.99	12.35	12.72	13.11	13.50	13.90	14.32	14.75	23.89	24.61	25.34	26.11
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	28.80	29.66	30.55	31.47	32.41	33.38	34.38	35.42	36.48	37.57	38.70	39.86	41.06	42.29	43.56
DOLLARS OF DEBT PER TON OF WASTE <sup>2</sup>	42.47	49.32	49.56	49.88	54.49	59.33	59.62	59.75	59.99	58.77	41.53	26.57	35.19	35.19	35.19
DEBT REPAYMENT <sup>1</sup>	1,847,510	2,145,311	2,156,046	2,169,729	2,370,234	2,580,845	2,593,671	2,598,945	2,609,544	2,556,544	1,806,546	1,155,840	1,530,679	1,530,679	1,530,679
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

<sup>1.</sup> Debt Repayment based on debt service at a 2.8% interest rate for the following items: 2007 - Cell 2 Closure, 2010 -2010 - Cell 4 Construction, 2011 - Cell 3 Closure, 2016 - Permitting of expansion area and 8 acre cell construction.

<sup>2018 -</sup> Cell 4 Closure.

<sup>2.</sup> Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

over the total current waste stream (43,500 TPY). This represents the waste transfer costs per ton of waste landfilled, not 3. Transfer station costs represent the total O&M and transport costs per year at the existing transfer stations divided the transfer costs per ton of waste handled at the transfer stations.

# COST ANALYSIS - LANDFILL EXPANSION @ 125,000 TONS MSW/YEAR TO IN-COUNTY LANDFILL

40															
COST PER TON OF WASTE	\$31.53	\$36.80	\$39.82	\$48.88	\$51.86	\$52.62	\$59.24	\$57.63	\$58.43	\$58.75	\$46,69	\$44.06	\$44.89	\$37.38	\$39.34
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	2.91	3.06	3.21	3.37	3.54	3.72	3.90	4.10	4,30	4.52	4.74	4.98	5.23	5.49	5.77
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	3,82	3.93	4.05	4.17	4.30	4.43	4.56	4.70	4.84	4.98	5.13	5.29	5,45	5.61	5.78
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	10.02	10.32	10.63	10.95	11.28	11.62	11.97	12.32	12.69	13.08	13.47	13.87	14.29	14.72	15.16
DOLLARS OF DEBT PER TON OF WASTE	14.78	19.49	21.92	30.38	32.74	32.86	38.81	36.51	36.59	36.17	23.34	19.92	19.92	11.57	12.64
DEBT	1,847,510	2,436,262	2,740,094	3,798,111	4,092,553	4,107,766	4,851,394	4,563,571	4,574,170	4,521,170	2,917,826	2,490,138	2,490,138	1,445,805	1,579,675
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

<sup>1.</sup> Debt Repayment based on debt service at a 2.8% interest rate for the following items: 2007 - Cell 4 Construction,

<sup>2008 -</sup> Cell 2/3 Cap, 2009 - Permitting of expansion area and 8 acre cell construction, 2010 - Cell 3/4 Cap,

<sup>2012 -</sup> Cell Construction, 2016 - Cell Construction, 2020 - Cell Construction

<sup>2.</sup> Cost per ton of waste is based on 125,000 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

<sup>3.</sup> Transfer station costs represent the total O&M and transport costs per year at the existing transfer stations divided over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not the transfer costs per ton of waste handled at the transfer stations.

## COST ANALYSIS - NO LANDFILL EXPANSION @43,500 TONS MSW/YEAR TO IN-COUNTY LANDFILL HAUL FRANKLIN COUNTY WASTE TO SCHUYLER FALLS LANDFILL STARTING IN 2017

COST PER TON OF WASTE	\$90.61	\$99.07	\$100.99	\$103.03	\$109.43	\$116.12	\$118.33	\$120.44	\$122.74	\$123.65	\$110.78	\$130.75	\$135.13	\$139.68	\$144.38
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	8.37	8.79	9.23	9.69	10.17	10.68	11.22	11.78	12.37	12.98	13.63	23.24	24.40	25.62	26.90
OUTSIDE DISPOSAL TIPPING FEES (@3% INFLATION)	**			-	*	-	***	***				75.79	78.06	80.40	82.81
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	10.98	11.31	11.64	11.99	12.35	12.72	13.11	13.50	13.90	14.32	14.75	31.72	32.67	33.65	34.66
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	28.80	29.66	30.55	31.47	32.41	33.38	34.38	35.42	36.48	37.57	38.70		4	***	1
DOLLARS OF DEBT PER TON OF WASTE	42.47	49.32	49.56	49.88	54.49	59.33	59.62	59.75	69.99	58.77	43.69	1		1	1
DEBT REPAYMENT	1,847,510	2,145,311	2,156,046	2,169,729	2,370,234	2,580,845	2,593,671	2,598,945	2,609,544	2,556,544	1,900,706				
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

<sup>1.</sup> Debt Repayment based on debt service at a 2.8% interest rate for the following items: 2007 - Cell 2 Closure,

<sup>2010 -</sup> Cell 4 Construction, 2011 - Cell 3 Closure, 2016 - Cell 4 Closure.

<sup>2.</sup> Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

<sup>3.</sup> Transfer station costs for years 2006-2016 represent the total O&M and transport costs per year at the existing transfer stations divided over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not the transfer costs per ton of waste handled at the transfer stations.

<sup>4.</sup> Transfer station O&M and trucking costs for years 2017-2020 represent a cost per ton of waste accepted because each ton of waste accepted will have to be handled at the transfer station and trucked to its final destination.

## COST ANALYSIS - NO LANDFILL EXPANSION @ 43,500 TONS MSW/YEAR HAUL FRANKLIN COUNTY WASTE TO DANC LANDFILL STARTING IN 2017

COST PER TON OF WASTE	\$90,61	\$99.07	\$100.99	\$103.03	\$109.43	\$116.12	\$118.33	\$120.44	\$122.74	\$123.65	\$110.78	\$126.92	\$131.50	\$136.25	\$141.18
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	8.37	8.79	9.23	69.6	10.17	10.68	11.22	11.78	12.37	12.98	13.63	38.44	40.37	42.38	44.50
OUTSIDE DISPOSAL TIPPING FEES (@3% INFLATION)	1	1	1		*	Alta Ha	ı	1				56.75	58.46	60.21	62.02
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	10.98	11.31	11.64	11.99	12.35	12.72	13.11	13.50	13.90	14.32	14.75	31.72	32.67	33,65	34.66
O&M COSTS PER STATION O&M TON OF WASTE COSTS PER TON (@3 % INFLATION) OF WASTE (@ 3% INFLATION) <sup>3</sup>	28.80	29.66	30.55	31.47	32,41	33.38	34.38	35.42	36.48	37.57	38.70	***			ı
DOLLARS OF DEBT PER TON OF WASTE	42.47	49.32	49.56	49.88	54.49	59.33	59.62	59.75	59.99	58.77	43.69	and the second			F
DEBT	1,847,510	2,145,311	2,156,046	2,169,729	2,370,234	2,580,845	2,593,671	2,598,945	2,609,544	2,556,544	1,900,706				
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

<sup>1.</sup> Debt Repayment based on debt service at a 2.8% interest rate for the following items: 2007 - Cell 2 Closure,

3. Transfer station costs for years 2006-2016 represent the total O&M and transport costs per year at the existing transfer stations divided

over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not

<sup>2010 -</sup> Cell 4 Construction, 2011 - Cell 3 Closure, 2016 - Cell 4 Closure.

<sup>2.</sup> Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

the transfer costs per ton of waste handled at the transfer stations.

<sup>4.</sup> Transfer station O&M and trucking costs for years 2017-2020 represent a cost per ton of waste accepted because each ton of waste accepted will have to be handled at the transfer station and trucked to its final destination.

# COST ANALYSIS - NO LANDFILL EXPANSION @ 43,500 TONS MSW/YEAR HAUL FRANKLIN COUNTY WASTE TO HUDSON FALLS INCINERATOR STARTING IN 2017

COST PER TON OF WASTE	\$90.61	\$99.07	\$100.99	\$103.03	\$109.43	\$116.12	\$118.33	\$120.44	\$122.74	\$123.65	\$110.78	\$147.70	\$152.93	\$158.37	\$164.00
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	8.37	8.79	9.23	9.69	10.17	10.68	11.22	11.78	12.37	12.98	13.63	40.19	42.20	44.31	46.52
OUTSIDE DISPOSAL TIPPING FEES (@3% INFLATION)	• 0. • 0.				2220	1	i.				-	75.79	78.06	80.40	82.81
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	10.98	11,31	11.64	11.99	12.35	12.72	13.11	13.50	13.90	14.32	14.75	31.72	32.67	33.65	34.66
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	28.80	29.66	30.55	31.47	32.41	33.38	34.38	35.42	36.48	37.57	38.70	1			# 1 m
DOLLARS OF DEBT PER TON OF WASTE	42.47	49.32	49.56	49,88	54.49	59.33	59.62	59.75	66.69	58.77	43.69				
DEBT	1,847,510	2,145,311	2,156,046	2,169,729	2,370,234	2,580,845	2,593,671	2,598,945	2,609,544	2,556,544	1,900,706				
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

<sup>1.</sup> Debt Repayment based on debt service at a 2.8% interest rate for the following Items: 2007 - Cell 2 Closure,

<sup>2010 -</sup> Cell 4 Construction, 2011 - Cell 3 Closure, 2016 - Cell 4 Closure.

<sup>2.</sup> Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

<sup>3.</sup> Transfer station costs for years 2006-2016 represent the total O&M and transport costs per year at the existing transfer stations divided over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not the transfer costs per ton of waste handled at the transfer stations.

<sup>4.</sup> Transfer station O&M and trucking costs for years 2017-2020 represent a cost per ton of waste accepted because each ton of waste accepted will have to be handled at the transfer station and trucked to its final destination.

## COST ANALYSIS - NO LANDFILL EXPANSION @ 125,000 TONS MSW/YEAR HAUL FRANKLIN COUNTY WASTE TO SCHUYLER FALLS LANDFILL STARTING IN 2010

COST PER TON OF WASTE	\$31.53	\$39.98	\$46.19	\$58.79	\$103.93	\$107.38	\$110.95	\$114.64	\$118.46	\$122.42	\$126.51	\$130.75	\$135.13	\$139.68	\$144,38
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	2.91	3.06	3.21	3.37	16.51	17.34	18.21	19.12	20.07	21.08	22.13	23.24	24.40	25.62	26.90
OUTSIDE DISPOSAL TIPPING FEES (@3% INFLATION)		1		-	61.62	63.47	65.37	67.34	69.36	71.44	73.58	75.79	78.06	80.40	82.81
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	3.82	3.93	4.05	4.17	25.79	26.57	27.36	28.18	29.03	29.90	30.80	31.72	32.67	33.65	34.66
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	10.02	10.32	10.63	10.95	-		;		***		-	1			-
DOLLARS OF DEBT PER TON OF WASTE	14.78	22.67	28.30	40.30		575	-		***			1		-	
DEBT REPAYMENT	1,847,510	2,833,591	3,537,072	5,037,072											
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

<sup>1.</sup> Debt Repayment based on debt service at a 2.8% interest rate for the following items: 2007 - Cell 4 Construction,

2008 - Cell 2/3 Cap, 2009 - Cell 3/4 Cap,

<sup>2.</sup> Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

<sup>3.</sup> Transfer station costs for years 2006-2009 represent the total O&M and transport costs per year at the existing transfer stations divided over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not the transfer costs per ton of waste handled at the transfer stations.

<sup>4.</sup> Transfer station O&M and trucking costs for years 2010-2020 represent a cost per ton of waste accepted because each ton of waste accepted will have to be handled at the transfer station and trucked to its final destination.

## COST ANALYSIS - NO LANDFILL EXPANSION @ 125,000 TONS MSW/YEAR HAUL FRANKLIN COUNTY WASTE TO DANC LANDFILL STARTING IN 2010

COST PER TON OF WASTE	\$31.53	\$39.98	\$46.19	\$58.79	\$99.26	\$102.79	\$106.44	\$110.24	\$114.18	\$118.27	\$122.51	\$126.92	\$131.50	\$136.25	\$141.18
TRANSPORT COSTS PER TON OF WASTE (@5% INFLATION) <sup>3</sup>	2.91	3.06	3.21	3.37	27.32	28.69	30.12	31.63	33.21	34.87	36.61	38,44	40.37	42.38	44.50
OUTSIDE DISPOSAL TIPPING FEES (@3% INFLATION)		1			46.15	47.53	48.96	50.42	51.94	53.50	55.10	56.75	58.46	60.21	62.02
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	3.82	3.93	4.05	4.17	25.79	26.57	27.36	28.18	29.03	29.90	30.80	31.72	32.67	33,65	34.66
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	10.02	10.32	10.63	10.95	1	1	1	•	1			1	-	1	**
DOLLARS OF DEBT PER TON OF WASTE	14.78	22.67	28.30	40.30	1	1	-	-	1	-	1	1	1	1	1
DEBT REPAYMENT	1,847,510	2,833,591	3,537,072	5,037,072											
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

1. Debt Repayment based on debt service at a 2.8% interest rate for the following Items: 2007 - Cell 4 Construction,

2008 - Cell 2/3 Cap, 2009 - Cell 3/4 Cap,

2. Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill. 3. Transfer station costs for years 2006-2009 represent the total O&M and transport costs per year at the existing transfer stations divided

over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not the transfer costs per ton of waste handled at the transfer stations. 4. Transfer station O&M and trucking costs for years 2010-2020 represent a cost per ton of waste accepted because each ton of waste accepted will have to be handled at the transfer station and trucked to its final destination.

# COST ANALYSIS - NO LANDFILL EXPANSION @ 125,000 TONS MSW/YEAR HAUL FRANKLIN COUNTY WASTE TO HUDSON FALLS INCINERATOR STARTING IN 2010

THANSPORT COSTS PER TON OF OF WASTE (@5% MASTE INFLATION) <sup>3</sup>	2.91 \$31.53	3.06 \$39.98	3.21 \$46.19	3.37 \$58.79	28.56 \$115.98	29.99 \$120.03	31.49 \$124.23	33.06 \$128.58	34.72 \$133.10	36.45 \$137.79	38.28 \$142.65	40.19 \$147.70	42.20 \$152.93	44.31 \$158.37	46 52
OUTSIDE TRADISPOSAL COST TIPPING FEES OF W (@3% INFLATION)	ı	1	1	-	61.62	63.47	65.37	67.34	69.36	71.44	73.58	75.79	78.06	80.40	82.81
TRANSFER STATION O&M COSTS PER TON OF WASTE (@ 3% INFLATION) <sup>3</sup>	3.82	3.93	4.05	4.17	25.79	26.57	27.36	28.18	29.03	29.90	30.80	31.72	32.67	33.65	34.66
O&M COSTS PER TON OF WASTE (@ 3% INFLATION)	10.02	10.32	10.63	10.95	***	924	1	1	**	-	1	1	ì		1
DOLLARS OF DEBT PER TON OF WASTE	14.78	22.67	28.30	40.30	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	***	345	***	***	1	# # # # # # # # # # # # # # # # # # #	1	1		1
DEBT REPAYMENT	1,847,510	2,833,591	3,537,072	5,037,072											
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

Debt Repayment based on debt service at a 2.8% interest rate for the following Items: 2007 - Cell 4 Construction, 2008 - Cell 2/3 Cap, 2009 - Cell 3/4 Cap,

<sup>2.</sup> Cost per ton of waste is based on 43,500 tons of MSW per year and does not include any ADC or BUD material used in the landfill.

<sup>3.</sup> Transfer station costs for years 2006-2009 represent the total O&M and transport costs per year at the existing transfer stations divided over the total waste stream (125,000 TPY). This represents the waste transfer costs per ton of waste landfilled, not the transfer costs per ton of waste handled at the transfer stations.

<sup>4.</sup> Transfer station O&M and trucking costs for years 2010-2020 represent a cost per ton of waste accepted because each ton of waste accepted will have to be handled at the transfer station and trucked to its final destination.