CARE
Grantee Final Report

Grantee: RCAP Solutions, Inc
Project location: Sullivan County, NH
Project title: Sullivan County, NH CARE
Grant period: [10/1/05 – 9/30/07
Project Manager: Patrick Pinkson-Burke
EPA Project Officer: Davina Wysin (10/1/05 through 7/31/06)/Kwabena Kyei-Aboagye (8/1/06 through end of grant period)

I. Your Partnership

Please describe your CARE partnership and explain how it operated. Please make sure that your description includes the following:

a. What environmental problems does your community face that brought people together? **Pollution from waste disposal and the incineration of waste**
b. How many individuals and their organizational affiliations were involved? **41.** Please review and add to the attached list and please add a contact name for each organization.

Organization	**Type of Organization (**non-profit, business, small business, industry, business organization, academic institution, local government, state government, federal government, consultant, individual, other)	**Contact Name(s)**
1. Antioch New England Institute	Non-profit	**Paul Markowitz**
2. USDA	Federal government	**William Konrad**
3. Town of Plainfield	Local government	Russell Kelley
4. Claremont Glassworks	Small business	**Keith and Allyson Raymond**
5. City of Claremont	Local government	City Councilor Debra Cutts, Mayor Scott Pope, Councilor Roger Formidoni
6. Northeast Resource Recovery Association	Non-profit	**Liz Bedard**
7. New Hampshire Legal Assistance	Non-profit	Ben Mortell
8. New Hampshire the Beautiful	Non-profit	**Marghie Seymour**
9. Town Of Littleton, NH	Local government	Tony Ilaqua
10. Claremont Technical College	Academic institution	**School secretary**
11. Claremont Sugar River Valley Technical School	Academic institution	**School Secretary**
12. Claremont Middle School	Academic institution/local government	**James Controis**
13. Gary's Tire and Auto	Small business	**Gary**

14. Casella Waste Management	Small business	**Mike Cianti**
15 Newport Sugar River Valley Technical School	Academic institution	**School Secretary**
16. Hubert's outdoor Clothing	Small business	**Guenter Hubert**
17. Town Of Newport	Local government	Peter Franklin
18. Town of Cornish	Local government	John Hammond
19. Sullivan County Commissioners	Local government	**Ethel Jarvis**
20. Upper Valley Lakes Sunapee Regional Planning Commission	Local government	**Christine Walker**
21. New Hampshire Legislature	State government	Senator Robert O'Dell, Representative Burton Williams, Representative John Cloutier, Representative James Phinizy, Representative Brenda Ferland, Representative Margaret Hassan
22. Town of Unity	Local government	Selectman Mary Gere, Alysun McMahon
23. Town of Acworth	Local government	Selectman John Tuthill
24. Town of Sunapee	Local government	Director of Public Works Tony Bergeron
25. Town of Lempster	Local government	Selectman Richard Fairweather
26. Town of Washington--	Local government	Public Works Director Ed Thayer
27. New Hampshire Department of Environmental Services	State government	Donald Maurer
28. Chittenden Regional Solid Waste District	Local government	**Tony Babagello**
29. Greater Upper Valley Regional Solid Waste Management District	Local government	**Fred Moody**
30. Claremont Community Access TV	Non-profit	**Keith Droll**
31. Newport Community Access TV	Non-profit	**Keith Droll**
32. New Hampshire Global Warming Campaign	Non-profit	**Jan Pendelberry**
33. Citizens Leading for Environmental Action and Responsibility (C.L.E.A.R.)	Non-profit	**Jackie Elliot**
34. Waste Cap--NH	Business association	**Barbara Berstein**
35. Town of Charlestown	Local government	Katie Lajoie
36. North Country Council (Regional Planning Commission in Northern NH)	Local government	Dan Woods
37. Town Of Goshen	Local government	Lilyan Wright

38. Working on Waste	Non-profit	Bill Gallagher
39. NH Dept. of Environmental Services	State government	Donald Maurer
40. Town of Walpole	Local government	Rick Cooper
41. Earl Bourdon Senior Center	Senior Housing and meeting space	The administrator

c. Did this project bring any new partners into your work? **Yes.** How did the new partners aid the partnership and project? **Partners brought different perspectives from business and personal aspects.**

d. What role did your organization play in this partnership**? One of the main coordinating partners.** What skills were most important from your organization to implement the project? **Organizational, and equipment**

e. Which partners were most active? **Antioch New England Institute and Working on Waste, Northeast Resource Recovery Association** How? **By obtaining grants, acting as facilitators, providing resources**

f. What resources and strengths did each organization bring to the project? **Working on Waste brought a $5,000 grant, Antioch brought in 2 USDA rural development grants totaling $138,000 and expertise from staff and students, NRRA brought resources and information, NH DES brought resources and research, the various schools provided meeting space, the community access TV provided coverage and publicity.**

g. What efforts did you make to ensure that the most vulnerable community members were included in the partnership**? Reached out to the senior community through the local senior citizen centers and community centers. Involved students through the schools.**

h. What role did your EPA Project Officer play in the partnership? **Assisted with negotiations with consortium partners, provided EPA brownfields funds for soil follow-up testing. Provided guidance as needed through-out project.**

i. What barriers did your partnership experience and how did you overcome them (distrust, unequal power, control over money, differing priorities, process for reaching consensus, etc.)? **The largest barrier was agreeing to work together. A long history of home rule and local distrust has created barriers preventing cooperation between communities and businesses. Each community wants to be the tail wagging the dog. We all agreed to find a common solution, then work out how to implement the program to everyone's satisfaction. The project is not yet completed so not all the problems have yet been addressed.**

j. How has this partnership improved relationships among those involved? **There was distrust having outside assistance from 2 groups—until it was discovered they both had volunteers living in the affected communities.** Please describe the working relationship that has improved the most and those that may still need work. **The City of Claremont, the Town of Newport and the local waste groups had a long history of**

antagonism; they eventually learned they had common problems and common solutions.

k. Has your organization engaged in a similar process to CARE in which you had a similar role? **Yes, working with small towns to solve common infrastructure problems (water, waste water and solid waste issues). Finding affordable solutions and the funds to implement.** Please describe briefly.

l. Is there anything else about your partnership that you would like to share? **We still have more work to complete this project, but we were turned down for a level 2 CARE grant. We now are searching for ways to continue this project and make it a reality.**

II. Your Project

Please describe your CARE project and provide copies of important materials that you developed.

Sullivan County, NH CARE

Background Information

Sullivan County is situated in southwest New Hampshire along the Vermont border nestled between the Connecticut River to the west and the Monadnok mountain ridge to the east. The County is comprised of 14 rural towns plus the City of Claremont (population 13,406)--the economic hub of the region. The remaining 14 towns have a combined population of just over 27,000. Sullivan County is among the poorer regions of New Hampshire with almost 9% of the population at or below the poverty level and a median household income of just under $41,000, while New Hampshire's median household income is $50,000 with 6.5% of the total population at or below the poverty rate.

1. Environmental Risks and Impacts

Much of the pollution found in NH air and water is brought in by the prevailing winds from the west. In 2004, the NH Department of Environmental Services released a report entitled *Air Pollution Transport and How it Affects New Hampshire*. This new report describes the impact air pollution produced by out-of-state sources has on New Hampshire's businesses and public health-related costs, and compares some strategies being considered to address the problem. According to the report, direct health-related costs to New Hampshire from transported air pollution are estimated to exceed $1 billion per year based on health-related cost data obtained from independent studies. ***With much of the pollution being caused by out-of-state sources, it is even more imperative to examine and control local sources of pollution which contribute to local problems.***

Sullivan County New Hampshire is a rural county with little heavy industry. Historically, the main employment and industry included tanneries, paper mills, agriculture and foundries. There is currently one small paper mill located in Claremont, the tanneries have all closed, the foundries have become machine shops and the small family farms are primarily located along the Connecticut River. The pollution generated from these sources is closely monitored by NH Department of Environmental Services and the Agricultural Department. All hazardous materials are now tracked from cradle to grave through a manifest system. Modern farming techniques are utilized to minimize run-off from manure pits and farms.

Twelve (12) of 15 municipalities in Sullivan County are part of a bi-state (Vermont and New Hampshire) group of 29 towns which were under long-term contracts to supply trash to the solid waste incinerator in Claremont (the contract ended 30 June 2007). Historically, the district's long-term "put or pay contract" has impeded waste reduction and recycling activities by requiring payment for services even if waste is not delivered to the incinerator. Sullivan County residents have a huge incentive to recycle to reduce the quantities of waste being sent to the incinerator. However, unlike their counterparts in Vermont, New Hampshire municipalities receive little support and guidance from the state and have relied primarily on volunteer efforts to implement recycling programs.

The incinerator was an experimental model when constructed in 1986/87. It was the smallest waste-to-energy incinerator of its type ever built. It has never worked efficiently and the design was never used again. Due to its relatively small size (200 ton/day), it is not required to install all the most modern pollution reducing technologies used by the larger waste burners. However, the pollution controls now in place, collect hazardous metals from the fly ash (ash caught in the scrubbing process as it leaves the smoke stack). These toxic metals are buried in lined landfills. For the first 15 years of operation, all the fly ash and incinerator ash were buried in a lined landfill located adjacent to the Sugar River in Newport, NH. This landfill has now closed but has been targeted as a potential hazardous source of pollution to the City of Claremont's drinking water. Currently the ash is trucked to a landfill in Massachusetts. Additionally, for many years each rural town had their own unlined landfill. Most of these closed during the 1960's to 1980's. These all pose potential risks to the drinking water sources of small communities.

The incinerator, which is located in a small valley within the Connecticut River Valley, contributes significant quantities of air pollutants to neighboring communities. The top of the smokestack is at ground level next to homes, farms and daycare centers within a half mile of the facility. For example, from 1987-2002, the incinerator emitted into the air, water and soils of the Connecticut River Valley at least 67 tons of particulate matter, 2,600 tons of nitrous oxides, 650 tons of sulfur dioxide, and 3000 pounds of mercury.[1] Much of this is trapped in the valley finding its way into the farm lands, air and water in the region. Due to elevated mercury levels found in fresh water rivers and lakes, the NH Fish and Game Department has issued a warning recommending children and pregnant women not eat more than one serving of fish per month caught in the area.

A new paradigm in solid waste management is needed to reduce the volume of the existing waste stream and how it is processed. This new system will help eliminate and/or modify practices which presently create air and water pollution from waste burning and deposition in landfills. It is anticipated a comprehensive/integrated waste management system will reduce the volume of the waste stream and resulting pollution through education, reuse, recovery, recycling, composting and small business incubation. A key feature of the system will incorporate the concept of zero waste generation (a system which strives to reduce waste disposal to almost nothing), with educational activities geared to reduction or elimination of waste from households, industry and government. A systematic approach to waste management tends to reduce operating parameters (e.g. traffic, pollution, avoided costs).

On the basis of results from similar waste management systems, the Sullivan County solid waste management system will provide positive economic benefits and will positively impact the

[1] Based on a study by Working on Waste using data filed with Air Resources Division of the NH Department of Environmental Services—2003.

health and welfare of citizens of the community. In addition to local benefits, such a system will result in reduced emissions of green house gases which, according to the Kyoto protocol and scientific evidence, threaten to disrupt global weather patterns and ecosystems with possible devastating consequences.

2. Community Involvement/Collaborations/Partnerships:

Sullivan County has a highly motivated citizenry and elected officials who are ready to move forward with a sustainable resource management program for pollution prevention. In February 2004, representatives from Sullivan County communities joined together to form the Sullivan County Solid Waste Alternatives Committee (SCSWAC). The Committee is working to develop an environmentally safe and economically sound resource management and pollution reduction program for Sullivan County. The Committee includes public officials, recycling experts, business owners, educators, health care professionals, financial analysts, public administrators, environmental advocates, and other concerned citizens from Sullivan County and surrounding towns. **Since February 2004, the committee has sponsored four public forums to educate residents and solicit their ideas on how the region should reduce pollution and manage resources in the future. At the fourth forum held in November 2004, 70 residents joined together and identified a broad range of innovative approaches to resource management which focus on education, composting, toxics reduction and management, reuse, waste reduction, and recycling, among others.**

RCAP Solutions, one of the project partners, will work with a wide range of project partners to ensure project success. RCAP will form a project advisory committee composed of representatives from many of these organizations to provide guidance in project implementation. These institutions and organizations include:

- *Sullivan County Solid Waste Alternatives Committee (SCSWAC)*--a citizens group of over 35 people drawn from local governments, businesses, schools and institutions. They meet regularly to study alternative disposal options which are economical and environmentally safe. RCAP Solutions has worked closely with SCSWAC for the past 15 months working to establish a safe solid waste future. ***Prior to 2004 and the CARE grant, this group already examined the various types of pollution in the area and decided to focus on the pollution generated from the waste-to-energy incinerator. This decision was made because the pollution from the incinerator affects the air, water, and soils of the area. Additionally, the trucks needed to bring the waste and haul the ash to distant landfills have been found to contribute to air, water and land pollution through their diesel emissions and the leaking leachate from the trucks.***
- *Antioch New England Institute* (ANEI) ANEI is the nonprofit environmental and educational consulting organization of Antioch New England Graduate School. Since its inception in 1993, ANEI has provided a broad range of technical assistance to rural communities throughout New England, as well as overseas. ANEI works with local communities, regions, states, and other public or not-for-profit organizations to develop sustainable, citizen-based solutions. ANEI was recently awarded a US Department of Agriculture solid waste reduction grant to help Sullivan County to develop a recycling based waste management plan and to transition to a recycling, reuse based disposal economy. ANEI has extensive experience implementing resource conservation and waste

management projects. ANEI has worked with SCSWAC and RCAP to develop a fair and open waste disposal future.

- *Local representatives of the Sullivan County Regional Refuge Disposal District*, representatives of the 15 towns (12 from Sullivan County and three from other NH counties) including the City of Claremont who will advise ANEI on project activities. Several representatives are members of the SCSWAC as well.
- *Sullivan County Commissioners*--the county delegation will be invited to assist in coordinating the transition to a less polluting recycling and waste reduction-based management program. The Commission has supported the ongoing work of the SCSWAC in the past.
- *Northeast Resource Recovery Association* is the oldest recycling cooperative in the US and will provide market services and guidance for recyclable materials and technical assistance in setting up recycling programs to rural towns in the county. RCAP and NRRA have made presentations to the public at the SCSWAC forums in 2004.
- *Upper Valley Lake Sunapee Regional Planning Commission* will provide information on demographics, infrastructure, and transportation
- *NH Department of Environmental Services* is the environmental wing of the state government and will be a resource for information regarding the reduction of air, soil and water pollution. NHDES has been a source of information to all the groups.

3. Alignment with CARE Strategies

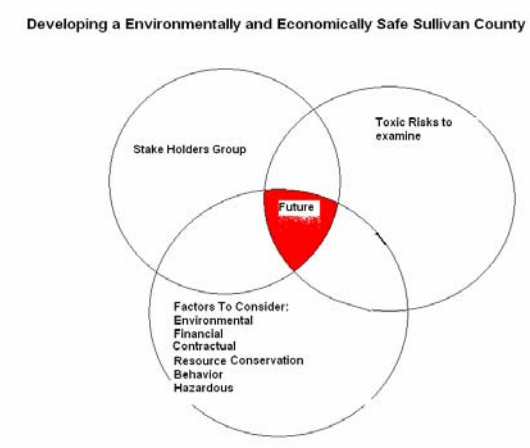
Empower Communities: Working with a cross section of citizens, town governments, regional planning commission, businesses and educational institutions will make everyone feel they have something at stake. The SCSWAC has adopted a strategy of openness in all of their activities. All meetings and discussions are publicized. Rather than being adversaries the various groups become partners in the process and solutions.

SCSWAC adopted the following guiding principals on March 30, 2004:

- ***The committee will investigate resource management options which value healthy ecosystems and promote environmental justice for all.***
- ***The committee will ensure openness in policy-making and research (all meetings are publicized and open).***
- ***The committee will seek widespread agreement on objectives and strategies.***
- ***The committee will ensure the objectives and strategies can be effectively evaluated and adjusted as needed.***

Examine and understand toxic risks from multiple sources in the community and set priorities for effective action to reduce risks: One of the goals of the partners has been to work together to examine all potential sources and solutions to environmental problems facing the area. The partners represent various stakeholders representing concerned citizens, businesses, local governments, educational institutions, and more. Prior to the CARE grant being funded, the partners examined all sources of potential pollution affecting the area and considered potential solutions using the following factors:

- Environmental
- Financial
- Resource Conservation
- Behavioral
- Toxicity



- Groups impacted
- Voluntary

Concepts which overlap became the areas of priority. Often different stakeholders have different agendas and concerns. By utilizing this model the opportunity of any one partner to dominate the process was minimized. The diagram above helps explain this concept.

Focus on action, use information and analysis to build consensus and help target the greatest risks: Working together to find common areas of risk assured the problem areas are a concern to all the participants. One method which used successfully listed all of the potential toxic risks from local and out-of-state sources. Stakeholders were given the option to choose which of the risks pose the greatest threat to their community--economically, environmentally, to health, over-all well being, etc. Each stakeholder rated the risk to themselves and their neighbors. The risks which had the greatest overall concerns became the risks targeted for solutions. See Picture below for example,

Focus on voluntary programs and approaches to find solutions and reduce risks: For the past twenty years, businesses, and residents of Sullivan County have had a contract requiring them to send all their waste to a waste-to-energy incinerator in Claremont. The cost of disposal has risen from around $12/ton before the start-up of the facility, to

$42/ton when it opened in 1987 to the current rate of $91/ton (2007). While the contract has now ended, all stakeholders would like to find voluntary disposal alternatives which do not contribute pollution, are economically and environmentally sound, and reduce the risk of living and playing in the area. The one thing heard over and over is everyone wants choices. Education will be a major factor in any choices being considered.

Mobilize local resources and build long-term community capacity to understand and address environmental risks: Education of the public through forums, media, and the schools will contribute to an informed public, businesses, and government. Knowledge is power and knowledge is key. **An important aspect to a successful program is education. So far this project has held ten educational public forums, broadcast much of the information on community access television, released several news releases, and held public meetings monthly.**

The development of efficient and economical solutions to the region's situation requires public education and involvement in the process. Because the members of our community are the source of our solid waste, individual citizens and businesses in Sullivan County should be involved in devising and supporting new solutions. Long term support for these solutions is now being developed by educational efforts and active personal commitment.

The residents and businesses of Sullivan County (including our children) need to clearly understand the reasoning behind the problems and the proposed solutions to ensure new behaviors necessary for success. Education programs are now providing information about solid waste pollution reduction including waste reduction, reuse, recycling, composting, hazardous waste, refuse disposal and zero waste concepts.

Economies of scale, shared expertise, and widespread public support also lend themselves to a long-term successful, voluntary regional strategy for managing solid waste generated in our area.

The potential benefits of collaboration with these stakeholders include:

- A publicly supported and improved decision making process for resource management in Sullivan County.
- Reduced disposal costs for residents and businesses through voluntary programs which will reduce quantities of pollutants and costs for all residents;
- Reduction in the use of products containing lead, mercury, and cadmium with a subsequent decrease in the release of these toxic pollutants to air and water;
- Increased number of jobs for the region;
- Model toxics reduction management plan for other counties in the United States;
- Increased education of general public and businesses that will build support and participation in voluntary toxics reduction.

4. Project Goals and Implementation Plan

The goals of this proposal include:

1. Develop long-term voluntary solutions and a toxics management plan to reduce toxic pollution in Sullivan County using public and community input.—Completed. A

comprehensive recycling-based waste/toxics reduction plan for Sullivan County—see attachment.

2. Educated the businesses, institutions, and citizenry of Sullivan County on the voluntary solutions, the purposes of the solutions, and how it will benefit them.—Initial phase completed.
3. Implemented five voluntary pilot programs and solutions to reduce toxic risks.—Completed. CARE paid for two projects in Claremont, NH—Curbside recycling pilot, and school recycling pilot.

RCAP Solutions and its partners met prior to this grant to study all potential local sources of toxic risk found in Sullivan County. Following the methodology previously described, the toxic risks which met the criterion developed by the partners have been targeted for reduction. The partners are working directly with the towns to implement the management plans devised to reduce the generation of toxic pollutants. Small pilot test projects were implemented to test the feasibility of voluntary programs to reduce targeted pollutants. These test programs are being used to demonstrate waste toxicity reduction in schools, towns, and homes across the county.

The partners will catalogue the process used for developing a model integrated toxic reduction program for other regions throughout the United States which are struggling with their own toxic risks. The partners will provide this information on its website.

5. Tracking and Measuring Environmental Results

RCAP Solutions will use the following indicators to track and measure success:

- Number of tons of waste diverted through recycling, and waste reduction.—*Final state report on waste generation and recycling is due in March 2008. Antidotal information shows recycling in some towns has increased by 40% or more.*
- Number of tons of special waste and hazardous wastes diverted to voluntary hazardous waste collections as a result of the project*;--Report from the Upper Valley Regional Planning Commission due in April 2008.*
- Number of students directly involved in waste reduction/recycling programs in schools*;--in pilot program 73% of students participated. 13 of the fifteen schools in the county now have school recycling clubs and programs.*
- Number of residents in the county who participate in public forums and share their concerns and preferences; and, *--394 residents participated in the forums and community access television provided over 17 hours of waste/toxics education to more than 9,000 homes in four towns.*
- Awareness level of residents about toxics management, waste reduction and recycling programs.*--unknown*

Please make sure that your description includes the following:

a. How did you go about identifying toxic risks and setting priorities (e.g., methods you used, data sources you used)? **See the description above—this was done prior to the CARE grant using a method devised by Antioch New England Institute and used in Europe and Asia.** What were the top risks identified and why? **Pollution from the waste incinerator and from the trucks hauling garbage to and ash from the**

incinerator. Please provide us with your risk ranking and your priorities for action. Feel free to just attach an existing summary or final report if you have already created one. **See above**

b. What process did your community partnership use to reach formal agreement on what toxic risks to tackle first? **Public Forum with group participation**
c. How did you inform the broader community of the results of the risk ranking and priority setting? **Public forums, news releases, and community television.**
d. How far did you get in planning your toxic reduction strategies?--**finished**
e. To what degree did your project raise awareness and build support for action?— **Economic feasibility study completed (using funds from USDA and towns).**
f. How did you build momentum over the course of your project? **Public education and local government official education. Held meeting with the selectmen and other officials to gain their support.** Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? **Yes, additional grants from USDA and the Haymarket fund and supporting funds from towns.** What was acquired? **–to date an additional $157,000 in support from other sources.**
g. What technical resources (e.g., data sources, modeling or mapping tools, programs, or approaches) were important to support local decisions? Where did you turn for help? **Antioch New England Institute provided much of the additional information needed—through outside contracts for economic analysis and feasibility.**

You mentioned the following in your quarterly progress reports:

- *Public forum, television broadcast of forum, press, Healthy Homes; Healthy Schools; NH Pb Reduction Program (NH Dept Health and Human Services), Brownfields, Local public television--Broadcast new and old meetings—9,000 potential homes receive either Claremont or Newport CATV*
- *A modified version of the "Road Map" and "Pace."*

h. What were the significant *outputs* of your project (meetings held, materials developed, people trained, etc.)?

The following is a laundry list of many of the activities and milestones you mentioned in your quarterly progress reports. My list here is meant to be exhaustive but in your response to the above question, please hone in on the most critical outputs of your project work. ***Which were the key actions/outputs of your project work (what was critical to achieving your outcome goals?).*** *Please include that information here in place of this list I've included.*

- *Project manager has begun work on a new detailed work plan to be reviewed with the project officer. (Was this work plan a critical element of your work?—**yes it helped provide direction to the project**)*
- *Prepared a draft recycling resolution to be presented to all towns. (Attached)*
- *Formed a collaborative with Antioch New England Institute (ANEI), EPA, and RCAP Solutions. ANEI has received a 100 K one year solid waste grant from USDA Rural Development to study and devise a solid waste plan for Sullivan County. In order to make sure we aren't duplicating our efforts, we decided to combine our resources with RCAP Solutions working with the CARE budget and ANEI working with the USDA budget. RCAP's primary goal is going to be reducing the toxics in the waste coming from Sullivan County. This will be part of a larger integrated solid waste plan being developed jointly.*

- *Along with ANEI small grants from both CARE and USDA were awarded to local communities to try waste reduction techniques such as electronic collections, curbside pick-up, and pollution prevention. Awarded small pilot grants to 9 different communities to test and evaluate some methods of waste reduction.*
- *The project manager attended a four day EPA training in Denver—11/14-17/05*
- *A list of businesses in Sullivan County has been obtained and volunteers are surveying them to determine what if any recycling and waste reduction is occurring (no grant funds are being used).*
- *25 (out 32) local doctors at the Valley Regional Hospital in Claremont presented a petition to Wheelabrator, stating that the facility represented an unacceptable health risk to the public in Claremont and Sullivan County.*
- *Developed feasibility study for new system (completed by Antioch under a USDA contract with assistance by RCAP Solutions).*
- *Sold and distributed 102 compost bins to residents in Sullivan County*
- *Using Brownfields funds, tested four farm land soils in order to compare to tests done in 1986.*
- *Received results from soil samples. Found alarming increases in Dioxins and Furans in the soils tested. Increases were as much as 200 to 300 times higher than the original tests in 1986. This at least shows that environmental levels of dioxins seem to be increasing in our soils from all sources. Perhaps it is time for the Federal government to look at levels of dioxins found in the local environment across the country. Dioxins are having cumulative impacts on us all, what are those impacts and what are the health impacts?*
- *Preliminary Economic Evaluation of various pollution reduction and waste management methods completed. Recommendations to build a central Material Recovery Facility, use large scale composting, encourage local reuse facilities and to use out-of-state disposal facilities show the county could save as much as $1,000,000 per year over the current waste management methods.*
- *Began work on a recycling-based waste management plan for Sullivan County.*
- *Held Steering committee meeting on 10/03 to develop a plan for the presentation of the recycling-based waste management plan to the county.*
- *Met with City officials in Claremont on 10/02/06 to present cost findings from economic evaluation.*
- *Attended National CARE training in Seattle—11/13-11/7*
- *Met with the Selectmen from the Town of Unity to discuss pollution reduction with the closing of their landfill.*
- *Prepared a hazardous materials recommendation for reducing waste in the homes and businesses. This will be included in the County Solid Waste plan being prepared by Antioch.*
- *A Recycling Based Management Action Plan for Sullivan County.*

In the general category of outreach and education:

- *Northeast Resource Recovery Association met with the small transfer stations in each community in Sullivan County and provided them with an outline of how they can reduce their cost of operations, reduce pollution/disposal, and new opportunities which they can offer their residents.*
- *A public Forum was held on 12/6/05 to talk about 50% recycling rates. It was attended by about 40 people and recorded and televised as well.*
- *The Public Forum on Pay-as-you-throw was attended by 40 people, broadcast live on television and re-broadcast a minimum of 24 times to a potential audience of 12,000. Pay-*

as-you-throw programs have been shown to increase recycling and decrease disposal, helping to reduce potential toxins in the environment.

- *Video of Chittenden solid waste tour shown more than 24 times on local assess TV to potentially 15,000 residents in 5700 homes.*
- *Information about the collaborative was presented at 12 of the town and school meetings in March.*
- *Held recycling street fair on June 3 in Claremont.*
- *Presented CARE information at Northeast Resource Recovery Association 25th annual conference in June.*
- *Articles in two local papers about grants and their purposes.*
- *A bus tour to a northern VT solid waste district was held (sponsored by CARE and RCAP Solutions). This was attended by 26 local citizens and officials. The tour included a mixed recycling separation facility (single stream MRF), a hazardous materials collection facility, a latex paint reclamation facility, a moving hazardous materials collection vehicle (the Rover), a small integrated drop-off facility collecting all types of waste and materials, a large scale commercial compost operation, and a building reclamation store. The tour was filmed and a DVD was made in order to show others and to broadcast on local community access television. (when copies of the DVD are available, one will be sent to EPA CARE headquarters).*
- *Held public meetings to discuss draft solid waste plan development on 12/12/06 and again on 1/23/07.*
- *With Antioch New England Institute held "pay-as-you-throw" discussion at Claremont Senior Center on 4/24/07,*
- *Press release on potential savings from new paradigm for waste disposal,*
- *Wrote article about local hazardous waste collection activities scheduled for the warmer months,*
- *Volunteers from the Northeast Resource Recovery Association, the Claremont School District and students prepared a series of video tapes demonstrating waste reduction in the schools.*
- *Held County-wide presentation of draft plan at Sullivan County Commissioners meeting on 2/27/07.*

i. What were your project's most significant *outcomes* (changes in knowledge, behavior, and practice, e.g., reached consensus on priority toxics, number and type of partners you were aiming to bring to the table and were successful at bringing to the table, "early win" environmental results from cleanups, collections, etc.)—**Knowledge of the problems associated with the incineration of waste—air, water, and ground pollution and health affects—increased with municipal officials and some of the citizens of the county. Local county , municipal, city and regional planning groups are now more active in working on finding voluntary solutions to these problems. Even though the grant has finished, there are still on-going meetings of the various groups to find an affordable solution to reduce the risks and pollution.**

Please consider this in tandem with your response to question II.h. above. What outcomes did you achieve as a result of the critical elements/outputs of your project work?

j. What specific reductions in environmental risks, if any, did your project achieve? – **Public awareness and a plan to implement if funding and support is found.**

k. Were there differences between your original plan and what actually occurred in your project? **It was difficult to get measurable results.** Did you achieve your objectives? Please explain. What objectives were not met and why? **With the support of the partners, and the additional funding form other sources, this project has completed all that was planned, plus began to work towards the eventual implementation of portions of the plan.**

l. What other resources (not already covered in your discussion of your partnership above) did your project mobilize, both financial and in kind?

Organization	Support you received	
	Financial (amount)	Other
Claremont Community TV		Copying and showing of forum on TV, Recording equipment/ meeting space, Showed tour 24 times
Newport Community TV		Broadcast meetings, Showed tour 20 times
Antioch New England Institute	ANEI received a $100,000 grant from USDA and a second grant for 38,000	Economist, student assistance
Claremont Sugar river technical school		Meeting space
Claremont Technical College		Meeting Space
NH Legislative Committee		Study to look at material recovery facility in Sullivan County
Newport Middle School		Meeting Space
Newport Sugar River Tech. School		Meeting space
Claremont Middle School		Meeting space, recycling study, recycling video
Newport Opera House		Meeting Space
Claremont Senior Center		Meeting Space
Northeast Resource Recovery Association		Provided overview of waste management practices in Sullivan Co., Provided space at 25th annual conference to showcase CARE project
Working on Waste	$5,000 seed grant from Haymarket foundation	support
City of Claremont	$7,500	For feasibility study
Town of Newport	$3,000	For Feasibility study
Sullivan County	$2,500	For Feasibility study

III. Reflection

a. How likely is it that the progress achieved could have been made without your CARE partnership? **Not likely at all**
b. What do you consider your project's greatest achievement? **Gathering all the participants to work on a common goal.**
c. What was your greatest challenge and how did you deal with it? **With all the players, it was difficult to decide who was in charge—the reason a collaborative was formed was we could assign certain rolls to the various players.**
d. What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives? **Nothing**
e. How might you have been more strategic in designing or implementing your project?
f. If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how? **A logic model was not used.**
g. To what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful? **Other than talking at the conferences, there was no communication with others.**
h. Did media coverage play a role in your project? **Yes, several stories appeared in the press through-out the duration of the project. Additionally, local community access television broadcast several of the meetings, a tour to a zero waste facility in Vermont (sent in an earlier report), and interviews with key persons.** If so, please explain.
i. In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)? **Follow-up soil testing, their presence at meetings to answer questions, their willingness to chase information.**
j. What role did your Project Officer and other EPA staff play in your work? **Their efforts helped us form the initial coalition, and their efforts made it possible for us to do follow-up soil testing to measure levels of pollution in the surrounding soils.** What would you have liked more of or less of?
k. To what extent do you think that this project increased the capacity of your organization? **Minimally** Your partnership? **Greatly** Your community? Please provide examples. **This project expanded the knowledge of many local government officials. When they saw the efforts and number of groups working together and the openness of the process, they felt safe to participate. When their ideas were welcome they began to take a more active interest in the project and the outcomes.**
l. Did your project produce any new "community leaders?" **Not really, although some community leaders became more active in this area than they had before the collaborative was formed.** Please describe.
m. What advice would you offer to other communities undertaking similar work? **Openness, forming broad and diverse coalitions, inclusiveness, and regular meetings. Expect participation to ebb and flow.**

You mentioned the following in one of your progress reports:
Collaborative partners sometimes proceed without partner's knowledge. Better communications key.

IV. What Next?

a. Will members of your partnership continue to work on these issues? **Yes, the collaboration continues with other groups taking more leadership.**
b. How will this work be sustained? **Local support, although funds are still be sought from other areas (including county tax).**
c. If neither your organization nor the members of the partnership plan to continue the work, please describe why. **N/A**
d. Please describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding.—**See above**

V. Feedback and Follow up

a. Please share any thoughts you have about what EPA could do to improve the CARE program. **The EPA partners are a very good concept, except that they too are often stretched too thin.**
b. We want to keep in touch and learn about the work that you do after your grant with CARE. Would it be okay for someone from the headquarters CARE team to contact you in the future to talk about how your work is progressing? **Yes--**Are there others we should contact instead of or in addition to you? If so, please provide their contact information.
c. Would you be willing to be interviewed for a more in depth case study? **Yes**

The budget was expended in total.

The attachment on the e-mail is a summary of the document in PDF Format produced by the collaborative and published by Antioch New England Institute. I will send the entire document by mail on a CD.

The waste reduction resolution being submitted before all the towns in Sullivan County: Accepted by 10 of the 12 communities in Sullivan County.

A Resolution Supporting 50% Recycling and Waste Reduction by the Year 2012 in the Town of _____, Sullivan County, NH

Resolution No.

WHEREAS, the placement of materials in waste disposal facilities, such as landfills and incinerators, can potentially cause damage to human health, wastes natural resources, and wrongly transfers liabilities to future generations; and,

WHEREAS, consumers and/or taxpayers are currently forced to assume the high financial cost of collecting and disposing of waste, and,

WHEREAS, hazardous and toxic wastes from households and business cause contamination of the natural environment and should be disposed of properly,

WHEREAS, tax subsidies for waste and virgin materials send the wrong economic signals to both consumers and producers; and,

WHEREAS, much of the material that enters the waste stream are resources that can be reused, recycled, or incorporated in the manufacture of new products;

WHEREAS, a resource-based economy will create and sustain more productive and meaningful jobs than a waste-based economy; and,

WHEREAS, producers should design products to ensure that they can be safely recycled back into the marketplace or nature; and,

WHEREAS, the Town of _____ desires to participate in the national and statewide effort to promote recycling through purchase and use of products made with recycled materials; and,

WHEREAS, Antioch New England Institute has prepared a comprehensive, "Recycling-Based Waste Management Action Plan for the Communities of Sullivan County, NH" that outlines how Sullivan County communities can shift their waste management practices primarily from disposal to a recycling-based management system.

NOW, THEREFORE, BE IT RESOLVED by the Selectboard of the Town of _____**:**

1) That the Selectboard hereby supports and encourages the development and implementation of practices and policies within the Town and Sullivan County which are designed to achieve a 50% waste diversion goal by the year 2012 through increased recycling, waste reduction, composting, proper management of household hazardous waste, and other measures.

2) The Selectboard urges the County Commission and County Delegation to the State Legislature to work to fund a county-wide integrated waste management system which emphasizes recycling, composting, and waste reduction over disposal.

3) The Selectboard urges private haulers, businesses, and residents to work jointly to develop a cost-effective and environmentally-sound waste management system resulting in a secure future and cleaner environment.

The foregoing resolution having been submitted to a vote by the Selectboard, received the following vote and was duly adopted this __ day of ___ , 20__.

Copy of Press release sent:

PRESS RELEASE -- FOR IMMEDIATE RELEASE

CONTACT: Paul Markowitz (802) 229-6307,
Antioch New England Institute
40 Avon St., Keene, NH 03431 or
Patrick Pinkson-Burke (603) 542-8055
RCAP Solutions, Inc.
137 Maple Ave., Claremont, NH 03743

Date: 3/26/07

Sullivan County Towns Will Save
Hundreds of Thousands of Dollars in Waste Disposal Costs

Claremont, NH – Sullivan County towns will be able to reduce their disposal costs by $390,000 over the next year based upon new price quotations from disposal facilities throughout northern New England, according to an analysis conducted by Antioch New England Institute (ANEI) - the nonprofit consulting and community outreach arm of Antioch University New England and RCAP Solutions—with assistance from EPA CARE. Currently, 12 of 15 Sullivan County communities send an estimated 23,000 tons/year to the Wheelabrator Claremont waste incinerator. With the contract between waste incinerator company and Sullivan County towns set to expire in July 2007, Wheelabrator had proposed a $92/ton tipping fee at their facility.

In February 2007, ANEI sent a request-for-proposal on behalf of ten Sullivan County communities to waste disposal facilities in New Hampshire, Vermont, and New York asking about the availability and cost for waste disposal. The letter of inquiry was sent on behalf of the following Sullivan County communities: Acworth, Charlestown, City of Claremont, Cornish, Croydon, Goshen, Lempster, Newport, Unity, and Washington. The lowest cost option is the Seneca Meadows landfill in

New York at an estimated $74.50/ton when hauling costs and transfer station costs are included. The Wheelabrator Claremont waste incineration facility proposed a new rate of $75/ton for a one-year contract – a $17/ton reduction from their previous quotation. Further, Wheelabrator Claremont is willing to take waste without a guaranteed annual tonnage provision. Other competitive bids were the AVRRDD/Mt. Carberry Landfill in Berlin at $75.50/ton and Northeast Waste Services landfills in Moretown, Vermont and South Hadley, MA at $77.50/ton (see Attachment A: Waste Disposal Options for Sullivan County, NH below for more details).

"These bids have simply brought market forces to bear in Sullivan County," said James Gruber, ANEI Executive Director. "Sullivan County towns now have plenty of short-term options available to them to reduce their waste disposal costs. Towns can save even more money by increasing the amount they recycle."

Several of the disposal options would require the construction of a new central transfer station in the Claremont/Newport area, including the landfills offered by Northeast Waste Services, AVRRDD/Mt. Carberry, Franklin County, and Seneca Meadows. This transfer station would have the capacity to collect and consolidate solid waste from town transfer stations and waste collection trucks and economically send the waste for long distance disposal.

The request for proposal was conducted under a project that ANEI is conducting with funding from the U.S. Department of Agriculture. Under the project, ANEI, in partnership with the Waste Action Collaborative of Sullivan County – a group of citizens concerned about solid waste and RCAP Solutions-- has prepared a *Recycling-Based Waste Management Action Plan for Sullivan County, NH* that is designed to help Sullivan County residents realign waste management priorities toward a recycling-based and resource conservation based economy. The Action Plan emphasizes reducing the volume and toxicity of waste through recycling, waste reduction, reuse, composting, proper management of household hazardous waste, and effective management of residuals. Copies of the Action Plan can be obtained by contacting Ellen Keech at ellen_keech@antiochne.edu or by calling 603-283-2105.

--End--

Waste Disposal Options for Sullivan County Towns
(all figures in cost/ton)

Disposal Facility	Disposal Costs	Hauling costs[2]	Transfer station costs[3]	Total[4]
Franklin County NY Solid Waste Management Authority, Constable, NY (solid waste landfill)	$41-44[5]	$46	$7.50	$94.50-97.50
Wheelabrator Claremont Facility, Claremont, NH (solid waste incineration facility)	$75	Not applicable	Not applicable	$75
Northeast Waste Services, Moretown, VT or South Hadley, MA (solid waste landfills)	$55	$15	$7.50	$77.50
Gobins Disposal/Casella Waste Management Co., Newport, NH (solid waste transfer station)	Unavailable	Unavailable	Unavailable	$87[6]
Seneca Meadows Co., Inc. Waterloo, NY (solid waste landfill)	$32	$35[7]	$7.50	$74.50
AVRRDD- Mt. Carberry Landfill, Milan, NH (solid waste landfill)	$48	$30[8]	$7.50	$75.50

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[2] Hauling costs are from a central transfer station to the disposal sites.
[3] Disposal options for Northeast Waste Services, Mt. Carberry, Franklin County, and Seneca Meadows assume the construction of a new central transfer station in Claremont for long haul. Estimated cost/ton is based on 20 year payback of capital cost plus annual operating cost.
[4] Analysis does not include town-level collection costs, i.e. cost to operate drop-off facility or curbside collection services. Analysis also does not include cost to haul waste from town transfer stations/full packer trucks to central transfer station or incinerator/disposal facility.
[5] Depends on volume of waste delivered.
[6] Casella Waste Management provided one lump sum total cost for disposal, hauling, and transfer costs.
[7] Seneca Meadows includes a fuel surcharge provision, as well.
[8] Cost to haul waste from central transfer station to out-of-county disposal facility is estimated to be $2.20-$2.40 per mile for transfer trailers.

Recycling-Based Waste Management Action Plan

for the Communities of Sullivan County, New Hampshire

SUMMARY DOCUMENT

This "Recycling-Based Waste Management Action Plan" is designed to help Sullivan County residents realign waste-management priorities toward a recycling-based and resource conservation-based economy[1].

Currently, Sullivan County towns recycle only 13 percent of their waste—far below the State of New Hampshire recycling goal of 40 percent and far below recycling levels achieved by numerous New Hampshire towns.

Further, Sullivan County residents pay among the highest tipping fees in New Hampshire and across the nation at $91/ton, while tipping fees at some landfills in New Hampshire the region are less than half that amount. Combined with the relatively low median household income, Sullivan County residents pay a disproportionate share of their income for waste disposal.

Sullivan County residents can achieve a 50 percent recycling rate through a broad range of new programs designed to reduce both the volume and toxicity of waste through recycling, waste reduction, reuse, composting, proper management of household hazardous waste, and effective management of residuals.

This Action Plan is the culmination of efforts by dozens of local residents to move Sullivan County toward a more recycling-based economy. All decisions on waste management systems have been guided by a public Steering Committee under the framework of the Waste Action Collaborative of Sullivan County (WACSC). Towns included within the scope of this action plan are: Acworth, Charlestown, City of Claremont, Cornish, Croydon, Goshen, Grantham, Langdon, Lempster, Newport, Plainfield, Springfield, Sunapee, Unity, and Washington.

This Action Plan has been prepared by Antioch New England Institute (ANEI), the community outreach arm of Antioch University New England, with funding from the U.S. Department of Agriculture.

Sullivan County residents have enormous potential for shifting their waste management practices away from incineration and landfilling and toward waste reduction and recycling.

Prepared by
Antioch New England Institute
Keene, NH
January 2007

Where We Are Now

Sullivan County towns can reduce their current annual waste disposal bill by more than $1,000,000 by increasing recycling levels to 50 percent

Waste Generation, Diversion, and Composition

ANEI estimates that Sullivan County towns generated an estimated 30,972 tons of municipal solid waste in 2005. Of this amount, approximately 27,080 tons were discarded in either waste incinerators or landfills, while an estimated 3,892 tons were recycled. This means that Sullivan County towns recycled only an estimated 13 percent of their waste in 2005—far below the year 2000 recycling goal of 40 percent set by New Hampshire State Legislature.

This recycling level is also far below the recycling levels achieved by several New Hampshire towns, including Peterborough at 78 percent, Troy at 54 percent, and Dublin at 49 percent.

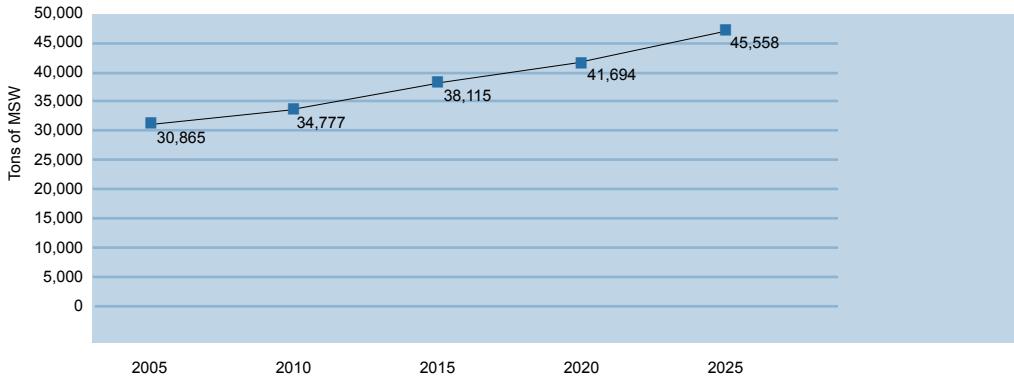
Actually, several Sullivan County towns have achieved respectable recycling levels over 30 percent, including Unity, Washington, Sunapee, and Acworth. Low recycling levels in the population centers of Claremont and Newport, however, bring down the average recycling rate for the County.

Over the next 20 years, waste generation is expected to increase from the current 30,874 tons to a projected 45,513 tons in 2025 as Sullivan County's population and per capita waste generation are expected to increase (see Figure 1 below). Based upon current waste management programs, the vast majority of this waste will end up in landfills or incinerators if Sullivan County does not take aggressive action to implement recycling and other waste diversion programs.

According to a study conducted by the Pennsylvania Department of Environmental Protection , paper and organic materials such as food and yard waste compose more than 50 percent of the waste stream. Overall, ANEI estimates that close to two-thirds of this waste could potentially be recycled or composted, while the U.S. Environmental Protection Agency puts this figure closer to 75 percent.

Figure 1

Projections of Municipal Solid Waste for Sullivan County, NH



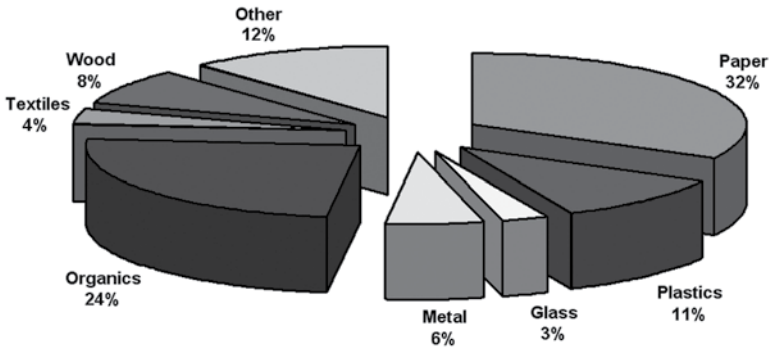


Figure 2

Composition of Municipal Solid Waste
(% by weight)

Current Waste Management System

Overall, ANEI estimates that close to two-thirds of the muncipal solid waste in Sullivan County could potentially be recycled or composted, while the U.S. Environmental Protection Agency puts this figure closer to 75 percent.

Twelve of fifteen municipalities in Sullivan County are part of the New Hampshire Vermont Solid Waste Project—a bi-state group of 29 towns that are under long-term contract to supply trash to the Wheelabrator Claremont waste incinerator. These towns are Acworth, Claremont, Cornish, Croydon, Goshen, Grantham, Landgon, Lempster, Newport, Plainfield, Sunapee, and Springfield.

The three remaining towns in Sullivan County make their own arrangements for waste disposal; Unity has its own landfill, while Washington and Charlestown send their waste to the landfill in Berlin, NH.

Sullivan County is a mixture of rural and urban communities. Residents and businesses have the option of disposing of their solid waste through drop-off facilities or through curbside collection. All Sullivan County residents have the ability to self-haul their solid waste to a local waste transfer station and their recyclable materials at a local recycling center with a total of 12 transfer stations/recycling centers in the County. These transfer stations/recycling centers require individuals and businesses to transport their own waste to the facility. There is no clear information about what percentage of waste is collected at drop-off transfer stations versus curbside waste collection.

Most of the residents in smaller, rural communities take their solid waste to local transfer stations, while residents in the larger communities, such as Claremont and Newport, are served principally by private waste haulers. The Town of Plainfield has the only curbside recycling collection program in Sullivan County which is contracted through the town.

Where We Need to Go

Why Recycle?

Why shouldn't Sullivan County continue its current practices of disposing of an estimated 87 percent of its waste in incinerators and landfills? There are several compelling reasons for diverting waste from disposal through increased waste reduction, reuse, and recycling.

Recycling:

Saves money. Households can save money by reusing materials and products and by practicing smart shopping habits that reduce waste.

Saves natural resources. Reusing discarded products and using recycled materials to make new products reduces the use of virgin materials, which often involves harvesting trees and mining the earth.

Reduces environmental problems that come from landfills and incinerators. Landfills and waste incinerators contribute to air and water pollution.

Saves energy and prevents pollution. Tremendous energy savings come from using recycled instead of virgin materials in manufacturing. Almost all manufacturing processes use water and release wastewater and air emissions into the environment.

Creates jobs. Recycling is an increasingly important part of our economy. For example, one Massachusetts study estimated that more than three percent of the Massachusetts workforce worked in recycling related fields.

Toward Zero Waste

The Action Plan is based upon the concept of "Zero Waste" wherein all waste is viewed as a potential resource and that efficient use of our natural resources is the direction we should be headed. It requires that we maximize our existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The success of Zero Waste requires that we redefine the concept of "waste" in our society. In the past, waste was considered a natural by-product of our culture. Now, more and more people are recognizing that proper resource management, not waste management, is at the heart of reducing waste sent to landfills.

In December 2005, the Steering Committee for the Waste Action Collaborative of Sullivan County (WACSC) adopted a resolution that Sullivan County should move toward achieving 50 percent recycling within five years or sooner.

In 2005, Sullivan County residents could have reduced their disposal bills by more than $1,000,000 if they had achieved a 50 percent recycling rate—a reduction of an additional 11,650 tons of waste. Shifting from a waste-oriented economy to a recycling-oriented economy will require significant changes in personal behavior, investments in appropriate infrastructure, and large-scale public awareness and education programs.

The proposed recycling and waste management system described herein is based upon the waste management hierarchy of waste reduction, reuse, and recycling as the highest priorities.

ANEI conducted an economic analysis of alternative systems to determine the most cost-effective approaches to achieving the 50 percent recycling goal. The recycling analysis identifies how much of each waste material could be diverted from disposal, and includes a set of programs for managing various wastes.

What is Zero Waste?

- Aims to eliminate rather than "manage" waste.
- Is a whole system approach that aims for a massive change in the way materials flow through society—resulting in no waste.
- Is both an end of pipe solution which encourages waste diversion through recycling and resource recovery, and a guiding design philosophy for eliminating waste at source and at all points down the supply chain.
- Offers new tools and new ways of thinking so that normal, everyday activities contribute to the answer rather than the problem.
- Redesigns the current, one-way industrial system into a circular system modeled on nature's successful strategies.
- Helps communities achieve a local economy that operates efficiently, sustains good jobs, and provides a measure of self-sufficiency.
- Maximizes recycling, minimizes waste, reduces consumption, and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace.
- Is a powerful concept that enables us to challenge old ways of thinking and inspires new attitudes and behavior.

Proposed Waste Management System

The Action Plan proposes the following new programs and facilities for Sullivan County:

Waste reduction

- Undertake an extensive public education and outreach program to educate residents and businesses on how to reduce waste at the source and to expand opportunities for reuse.

Recyclable materials

- Maintain the existing network of transfer stations and recycling centers in Sullivan County.
- Institute curbside recycling in areas that are currently served by curbside waste collection, particularly Claremont, Newport, and Charlestown.
- Construct a new, centrally located materials recovery facility (MRF) in the County.

Organic materials

- Provide incentives and technical support for backyard composting.
- Construct a new aerated windrow composting facility to compost yard and food waste.
- Initiate pilot curbside food waste collection programs for restaurants and schools in Claremont and Newport.
- Provide seasonal curbside collection of yard wastes.

Construction and demolition debris

- Promote onsite source separation programs for new construction and renovations.
- Promote deconstruction programs for building demolition.
- Support the establishment of a new business or non-profit organization to sell reused building materials.

Household hazardous waste and universal wastes

- Promote widespread public education programs to encourage alternatives and proper disposal.
- Establish a new permanent household hazardous waste (HHW) facility and a roving vehicle to serve the outlying/rural areas.

Residual material

- Construct a new centralized transfer facility with the ability to consolidate waste materials for long-haul, out-of-county disposal.
- Contract with an out-of-county disposal facility to accept residual materials from Sullivan County towns.

How We Can Get There

Policy Recommendations

Sullivan County residents can achieve a 50 percent recycling rate through a broad range of new programs designed to reduce both the volume and toxicity of waste through recycling, waste reduction, reuse, composting, proper management of household hazardous waste, and effective management of residuals.

Sullivan County towns will need to implement a range of policy initiatives, make investments, and stimulate behavioral change among its citizens to achieve a 50 percent recycling rate within the next five years. ANEI proposes the following recommendations to move Sullivan County down this path, as detailed below.

Local governments should declare waste reduction and recycling as waste management priorities. Both the general public and the private sector need to know that local government officials are serious in their intent and commitment to making a recycling a reality in Sullivan County.

Make recycling convenient by instituting curbside recycling collection. Studies nationwide have shown that convenience is one of the most important factors in getting people to recycle. Sullivan County towns can significantly increase recycling by ensuring that all residents that are currently served by curbside waste collection also receive curbside collection of recyclable materials.

Provide economic incentives for residents and businesses to recycle. Most residents in Sullivan County have very little incentive to recycle or reduce their waste because their disposal costs are paid through property taxes or as a flat fee. Communities throughout New Hampshire and the U.S. have found that a "pay-as-you-throw (PAYT)" program provides customers with powerful, equitable incentives to reduce their waste, e.g., the less you generate, the less you pay.

Develop the necessary infrastructure. Sullivan County needs new infrastructure if it is going to increase recycling. These facilities include a new MRF, windrow composting facility, HHW collection facility, transfer station for consolidating waste, and a reused building supply center.

Undertake wide scale public education efforts. Public education is the underpinning of any successful recycling program. These educational efforts should be diverse, widespread, and ongoing.

Eliminate economic disincentives: Towns should not be financially penalized for reducing their waste through recycling. Any new waste disposal contracts should not contain guaranteed annual tonnage (GAT) provisions.

Work in partnership with the private sector. It is likely that the private sector will play a significant role in a new recycled-based waste management system. Local governments should work closely with the private sector to share their vision on waste management for the county and how the private sector can play a role in achieving that vision.

Consider job creation impacts of recycling. On a per-ton basis, sorting and processing recyclables alone sustain ten times more jobs than landfilling or incineration. Towns should consider the job creation impacts of recycling and waste reduction efforts when implementing a new recycling-based waste management system.

Explore range of options to pay for the system. While recycling can save businesses and residences money, it also costs money. In terms of capital requirements for any new facilities, such as the MRF, towns will need to evaluate a range of options for raising capital, including bonding, state appropriations, and private sector financing.

Establish new organizational structure for addressing solid waste. ANEI firmly believes that a new organizational structure is needed for addressing solid waste issues on a regional basis within Sullivan County, especially given the history of the Sullivan County Regional Refuse Disposal District. Sullivan County towns can benefit by coordinating their efforts to achieve economies of scale and realize cost-effective options for managing waste.

Consider issue of flow control and associated risks for municipal investments in solid waste. Any new infrastructure investments, such as a new MRF, could potentially be operating in a market economy wherein private haulers would be free to decide where they are going to take their materials. Any proposal to publicly-fund a new recycling facility should take this risk into consideration.

Conclusion

This Recycling-Based Waste Management Action Plan has been prepared to lay the foundation for building long-term sustainability for waste reduction and recycling programs in Sullivan County. With this Action Plan as a starting point, ANEI is hopeful that Sullivan County can be a model of how to transition from waste management practices that emphasize disposal/incineration to one that emphasizes reducing both the volume and toxicity of waste.

Footnotes

1 For a full copy of the "Recycling-Based Waste Management Action Plan for the Communities of Sullivan County," contact Antioch New England Institute at 603-283-2105 or email at ellen_keech@antiochne.edu.

2 "Recycling and Waste Generation Tonnages," August 2006. New Hampshire Department of Environmental Services, Concord, NH. www.des.state.nh.us.

3 Based upon an estimated annual increase in population of 1.2%. From projections provided by New Hampshire Office of Energy and Planning www.nh.gov/oep/programs/DataCenter/Population/PopulationProjections. Also, assumes increase in per capita waste generation of 1% annually.

4 Composition of Municipal Solid Waste, April 2003. Pennsylvania Department of Environmental Protection, Harrisburg, PA.

5 Other includes textiles, unpainted wood, painted wood, carpet, drywall, other construction and demolition debris, electronics, household hazardous waste, and other waste.

6 N.C. Division of Pollution Prevention and Environmental Assistance (DPPEA), http://www.owr.ehnr.state.nc.us/recycleguys/why.asp

7 "Fact Sheet, "The Massachusetts Recycling Economy." Massachusetts Department of Environmental Protection

8 Excerpted from The End of Waste: Zero Waste by 2020; Zero Waste New Zealand Trust. www.zerowaste.co.nz

About
Antioch New England Institute

Antioch New England Institute (ANEI) is a nonprofit consulting and community outreach arm of Antioch University New England. ANEI promotes a vibrant and sustainable environment, economy, and society by encouraging informed civic engagement.

Antioch University New England (ANE) is one of five campuses of Antioch University. Established in 1964, ANE is an innovative institution offering scholarly, practice-oriented graduate study in environmental studies, organization and management, education, and applied and clinical psychology.

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