

THE HERE AND NOW

“Ya gots to work with what you gots to work with.”

---Stevie Wonder

HOW MUCH WASTE DO WE GENERATE?

In 1993 and again in 2001, citizens in our District overwhelmingly opposed the siting of a landfill within our region. This is not an uncommon response to the question of “Where will the waste we produce end up?” Would you, for instance, want your next door neighbor to be a landfill? Most likely, you wouldn’t. So the answer to the question of how much waste we generate is “too much.” No matter what the number may be, or how it compares to national or state averages for material generated, reused, diverted and landfilled, if it has to be landfilled, it’s too much.

The discouraging part of this situation is that many citizens take action *only* when a landfill is proposed for their community. And, then they direct their disapproval toward the proposers. Action at this point in time is reactionary, not preventative. It becomes desperate, costly and risky since there is a chance that the action will not bring the desired results. It is also typical that these responses motivate only that portion of the community or region that will experience the most dramatic effects of the proposed development, despite the fact that the entire population is collectively responsible for creating the need. During the most recent situation in which a private proposer suggested a landfill be located in Barre Town, only residents from that community and the adjacent city of Barre turned out to express their opinions despite repeated invitations to the elected officials of all our member communities and their citizenry.

To address this the CVSWMD seeks to re-focus the efforts of its residents towards a pro-active, permanent solution to our waste management issues. With the introduction of this Plan we begin the process of seeking to change this mindset and its accompanying behavior. Over the next 10 years – the life of this Plan – we intend to move towards and embrace a “zero waste” philosophy. That is, we set as our goal the task of changing people’s view of waste from one of unwanted leftovers, to that of conscious consideration for the resources that go into the production of materials and the resources that are wasted when materials are leftover and discarded.

As we talk about where we are at this time in our region, it is important to frame the view within this new context in order to begin the shift in perspective. For this reason, readers may well find the following to be somewhat different from the typical “status report” on waste generation and management.

Since the CVSWMD has not undertaken a generation survey in our communities, we do not know for certain what our *actual* generation rate is. We do know however, that 37,731 tons of garbage were landfilled from our cities and towns between July 1, 1999 and June 30, 2000, after all efforts to reduce waste, reuse items and divert materials for other beneficial uses through redemption, recycling, and composting. This is sufficient for us to begin contemplating the issue of wasted resources that the tons disposed of represent.

Let’s postpone a discussion of the natural resources decimated and land polluted in the production of this material that might have been useful but in the end is landfilled. Let’s also choose to postpone consideration of the natural resources that might be culled from this large volume of discards and used for a new purpose to save natural resources and protect human health and the planet. Instead, let’s start by being self-serving and narrow minded and look to our pocketbooks, both personal and collective, for we are a culture of people for whom “the bottom line” speaks clearly.

At a cost of between \$62.20 and \$81.60 per ton for disposal, the waste we place into garbage bags and throw away represents an estimated \$2,347,000 to \$3,080,000. This is a staggering amount of money for a region in which the average annual wage is less than \$30,000, and the average annual town budget is slightly more than \$1.5

million. To put it another way, collectively, we pay between \$2 and \$3 million dollars each year to put what we waste into a hole in the ground. Does it make much sense to clip coupons each week in order to put better or more food on your table when you are throwing this much money away? Of course not! But, because most people pay between \$2.00 and \$3.00 per bag of trash, the impact on our individual wallets is not felt in a significant way. True to human nature, it then becomes easy to refrain from the effort we might otherwise exert to change this situation, given all the other pressures placed upon our time.

Given that the cost of resource depletion, habitat destruction, environmental pollution, diminishment of biodiversity, and human health effects are not included in the cost scenario described above, the true cost of disposal is considerably greater than we've represented. This takes the situation from that of being simply incredibly wasteful to that of being non-sensible. In both instances, the effects are self-defeating. While we count our pennies in order to improve the quality of our lives, each time we throw an item in the trash, we are undermining our financial well-being as well as threatening our ability to continue to live the lives we have.

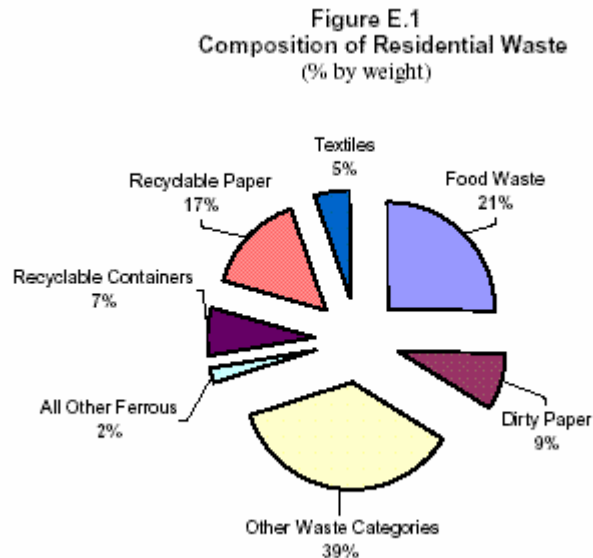
In response to this, the CVSWMD proposes that we collectively begin the process of changing our perspective to that of a sensible, practical approach that conserves all of our resources -natural and man-made (financial) - for the greater good of the region today and through many generations beyond our life span. To do this, we need to begin by looking at what is in our trash, what we do with it, who handles it and where it ends up. Then we need to look at all these parts of the waste system and begin to see them for the resources used, the potential that can be achieved and that which is currently wasted.

WHERE DO OUR WASTES AND RECYCLABLES GO? HOW DO THEY GET THERE?

To understand where all the different items in our waste stream end up, we should first look at what those items may be.

DSM Environmental Services, Inc. conducted research and authored a report entitled the *Vermont Waste Composition Study* in June 2002 for the Vermont Department of Environmental Conservation Solid Waste Program. They sorted through and weighed

components of residential garbage in order to determine the composition of this waste *after* typical reduction and diversion activities of the generators. The following chart offers a graphic glance at what they found.



Disposal Services. Who handles these materials and all the others found in the average garbage can? In Central Vermont we have a sizable group of residents who prefer to self-haul their garbage and recyclables to community based drop-offs. Twenty-three drop locations are businesses and a few (eight) are operated by member municipalities and/or the District. Each of these drop-offs are identified in the Facilities Chapter of this Plan.

For residents who prefer the convenience of collection at their home, or for businesses and institutions who require on-site collection, there are a wide variety of collectors available for hire. The District licenses anyone collecting more than 100 pounds of waste monthly, and who charges for their services. District hauler and licensing requirements and regulations are contained in the ordinances identified and described in the Enforcement Chapter of this Plan. In fiscal year 2003, the District licensed 39 haulers and this list is contained in the Facilities Chapter of this document.

An important consideration in looking at the hauling resources in the context of this Plan is to understand that haulers currently make their money by filling their trucks

with material going to landfill. The hauler who takes an active role in diminishing or eliminating garbage is not a very savvy businessperson. To be successful at their chosen occupation, they *must* be at odds with a zero waste mentality – at least on the surface. It will be the District's responsibility to carefully consider this matter when proposing new initiatives and to encourage a dialogue with the hauling community. While it should be expected that garbage haulers will oppose dramatic changes to their livelihood, it is not impossible for today's garbage haulers to become tomorrow's transporters of organic materials, recyclables and reusable items.

Disposal Facilities. Where does the approximately 40,000 tons of garbage generated annually from the Central Vermont Solid Waste Management District end up? Nearly 73% is buried in Coventry, Vermont in a landfill owned by Waste USA, and 25% ends up in Moretown's WSI Landfill (formerly known as Palisades.) The remaining small percentage (2%) is delivered to Bethlehem, New Hampshire. Coventry's current operating permit has 6.5 years remaining, ending in 2009; WSI has 4 years, to 2007, and is expected to seek authorization for opening another cell prior to expiration of their current permit.

Given the distance to all end facilities other than Moretown, portions of the region's trash are dumped and packed into trailers for greater cost efficiency at the transfer stations operated by Casella Waste Management. One is located in Hardwick, and the other in East Montpelier.

As the District envisions and enacts sustainable programs to diminish the region's waste generation, the tonnage landfilled will drop. This can effectively extend the life span of the disposal facilities. However, these facilities have the option to avail themselves of garbage from other sources in order to maintain their monthly, annual and overall revenue projections. Unlike the hauling community (who will most likely find our zero waste approach undesirable), it is possible that the landfills will simply look elsewhere for their income.

Transfer stations may respond differently, and will probably pose some interesting considerations for the District. When creating a new infrastructure for solid waste management, questions will certainly come up about transport, economies of scale,

and markets for materials. Will the District need transfer station facilities where materials can be temporarily stored and compacted or transferred to larger vehicles? Or, will most of our endeavors be able to be created around a regional footprint that offers us a much more sustainable and environmentally sound model? Because we are entering uncharted waters, it is difficult to predict. Presently, the best we can state is that it is clearly the District's preference to create or affect sustainable programs and an infrastructure that supports regional autonomy and sustainability.

Recycling. Each licensed hauler collecting garbage must also offer collection of the CVSWMD Mandatory Recyclables which currently include: newspaper, clear glass, #2 plastic (excepting wide mouthed items) and tin and aluminum cans for residents, and these same items plus corrugated cardboard and white paper for businesses. The range of mandatory items is determined by the board of supervisors, and may change at any point in time via a duly warned board vote.

Currently, many of the drop-off locations and haulers collect a wider range of items, thereby increasing the region's total diversion rate. Because of this private initiative, the board has refrained from "obligating" these businesses to standardize their practices by including other items in the mandate. Nevertheless, the board intends to discuss this matter during the early years of this Plan. Currently, the following list of recyclables is collected at drop-offs that are operated, underwritten in some part, or otherwise supported by District resources. For a chart indicating each facility and what it accepts, please refer to the listing in the Facilities Chapter of this document.

Recyclables accepted at District supported facilities are as follows: newspaper, magazines, mixed office paper, boxboard, cardboard, glass containers (clear, green and brown), plastic (#1 and #2 jugs only), cans (tin and aluminum), foil & pie plates. Some of these same facilities take used motor oil, anti-freeze, scrap metal and appliances, tires and bagged trash.

DSM Environmental Services, Inc. (mentioned as authors of the earlier waste composition report) also conducted a test to determine the composition and rate of diversion occurring in the state on average. Their conclusions, which have a 10% margin of error plus or minus on total tonnage, results in an estimated 30%

diversion rate, statewide. This calculation follows the United States Environmental Protection Agency protocol for diversion rate studies. However, unlike the EPA, DSM, with State approval, included estimates for backyard composting and reuse. Inclusion of these estimates is, in part, responsible for the larger than usual margin of error on this calculation.

The following chart taken from the DSM report shows the breakdown of materials diversion by category.

Fig. 8

TABLE ES-1
ESTIMATED DIVERSION BY MATERIAL TYPE
AND DIVERSION ACTIVITY, 2001
SUMMARY OF SURVEYS CONDUCTED

MATERIAL	Recycling Facilities (tons)	Reuse Facilities/Programs (tons)	Organics Composting (tons)	Soft Drink and Beer Distributors (tons)	Scrap Metal Facilities (tons)	Economic Recycling (tons)	TOTAL (tons)	% OF TOTAL (%)
PAPER	51,730	137	41	386	0	33,495	85,788	47%
CONTAINERS	15,501	19	0	13,260	0	117	28,897	16%
SCRAP METAL	0	159	0	0	34,830	251	35,240	19%
ORGANICS	0	0	29,626	0	0	0	29,626	16%
MISC.	830	2,167	0	0	0	14	3,011	2%
TOTAL:	68,061	2,482	29,667	13,646	34,830	33,877	182,562	
% of TOTAL:	37%	1%	16%	7%	19%	19%		

(1) "Containers" diverted by "Soft Drink and Beer Distributors" include 3737 tons processed by "Recycling Facilities" but not included in their total for this summary table.

(2) Numbers may not add due to rounding.

Interestingly, there appears to be a slight downturn in recycling. Tonnage is down here in Vermont, as well as elsewhere in the nation. A part of this is due to packaging changes. Lightweighting of metal cans and plastic containers, switch from glass bottles to plastic, use of film wrap and re-sealable packaging in place of boxboard and corrugated packages all contribute to the changing composition of the materials being diverted. There is growing concern, however, that people's interest in recycling is waning. It may be that as communities diminish education and

advertising that once created the perception that this activity was of considerable value, citizen's commitment to this endeavor drops from lack of reinforcement.

Given the CVSWMD's commitment to a zero waste philosophy, it will be critical for us to maintain a high diversion rate for these household items while building opportunities for reuse and diversion of other, less commonplace materials. It is timely, then, that the District is about to embark upon an upgrade of its recycling services. Our plans include a 3-5 year program to re-structure our drop-off facilities beginning in late 2002. This plan is a cornerstone to keeping recycling in the forefront of our resident's minds, and provides us an opportunity to reinforce the value of this type of individual diversion effort. Specific details of this programmatic change appear in the Recycling Chapter of this document.

The District decision to open and operate full-service recycling drop-offs may be seen as being in conflict with our "non-compete" statements found elsewhere in this document and re-stated in this chapter. The important difference lies in our goals. Unlike similar, private initiatives, it is not our primary intent to make money from accepting bagged trash or other items. Our goals include:

- Providing a convenient opportunity for significant diversion of materials from the residential waste stream;
- Establishment of a local site where both active and passive solid waste, resource conservation and environmental education can be delivered to a residential audience in order to keep diversion motivation high; and,
- To create and maintain effective and convenient opportunities for the diversion of materials that may not be regularly handled by the private sector.

MAJOR INFLUENCES AND KEY ISSUES GOING FORWARD

As the District begins to emphasize resource conservation in lieu of waste generation, a shift will occur in the waste management infrastructure to allow different components of the waste stream to be handled differently. The CVSWMD has always believed in the ingenuity and independence of the private sector business community. We prefer to see ourselves as catalysts, allowing the industriousness of local individuals to come to the forefront. In instances where there needs to be some encouragement, we may choose to provide incentives or initiatives to assist these new businesses to develop. Consistent with our *Guiding Principles*, we are

reluctant to enter the marketplace and provide competitive services; although if we believe there is a critical need for a particular service, we will. We expect that “old familiars” will change their “spots” in order to remain competitive or to increase their revenues, and that we will see new entrepreneurs throw their hats into the ring. Likely, this will be both “the best of times and the worst of times” as change is rarely accomplished without some discomfort.

The chapters that follow in this Plan focus on individual portions of the waste stream identified in the data presented above. In each of these chapters, plans, issues and challenges relating to the transition from our being part of the United State’s wasteful society to that of establishing our region as a sustainable community that values and preserves its resources will be explained.