

Bristol Recycling Committee Report
28 September 2007

The Bristol recycling committee met for the first time on 27 August 2007 with the following charter:

To review current transfer station facilities and recommend improvements to both facilities and programs that would result in increased recycling, additional revenue to the town and/or more efficient processes.

The Committee was also asked to provide a report with recommendations by late September or early October.

The Town of Bristol generated approximately 3474.52 tons of solid waste in 2006. Of the waste generated 88% was disposed of through incineration at a cost of \$ 130,879.60. Only 3.5% was recovered through recycling, however that 3.5% saved the town approximately \$5270 in disposal costs. The cost of solid waste management and disposal is going to increase in coming years. The current cost of disposal of non hazardous municipal waste is currently \$42.50 a ton (less transportation costs), and we already know that cost is likely to double in 2012 to almost \$100 a ton. Bristol has an opportunity to begin to offset that increase now by recovering or recycling some of our household waste. One national study found that 60% of municipal waste is recyclable; an effective recycling program could significantly reduce Bristol's solid waste disposal costs. However, as the saying goes if it sounds too good to be true it probably is. The average municipal recovery/recycling rate is more like 30-40%, and requires a long term investment in facilities and equipment.

The committee began by looking at what Bristol is doing now and what impact those efforts are having on the overall cost of solid waste disposal, the convenience for its citizens, and efficient use of manpower and resources. The transfer station and recycling is overseen by the Highway Superintendent. Bristol currently recycles scrap metal, cardboard, paper and glass. Aluminum is collected at the transfer station by the VFW who sells the aluminum and keeps the proceeds.

The committee visited the transfer station locations. The tour made it clear that the current configuration does not allow for the efficient use of the current space and that some changes would have to be made to make room for any additional recycling activities. The committee discussed the possibility of consolidating all transfer station activities to one location by expanding the use of the site adjacent to the compactor. This would require significant site work to level and terrace the approximately three acre site to accommodate the materials accumulation and processing that would be required by additional recycling. Some suggestions were made and a suggested layout was drawn up. (a copy of this is located on the Town Website on the Recycling Committee page) The committee also reviewed the *State of New Hampshire Transfer Station and Recycling*

Center Design and Operations Manual and discussed some of the ideas contained in it; however because of the short period of time the committee had the in depth analysis recommended by the manual was not done.

The committee visited two transfer stations. Dunbarton has a population similar to Bristol's year round population and does have some seasonal increase because of camps in the area. The actual year round population of Dunbarton is 2,600-2,700 and the transfer station is open 2 ½ days a week.

This transfer station has 2 compactors and 2 bailers although the manager is seeking to add a third. The transfer station employs 5 part time personnel and one full time employee. These employees are assigned to the transfer station only and do not perform duties for other town departments. The employees do all the sorting of recyclables. The transfer station has windows where the citizens bring their recyclables and the recyclable materials are dumped into a bin at the window and sorted by the attendants. While this is labor intensive the manager said that it increases the quality of the recycled material and that he gets more money for the higher graded materials. For example they actually sort aluminum into two different types, a higher and lower grade and receive a premium price for the higher grade aluminum when selling it.

This location has a scale that it purchased off the internet for \$1075.00 which has proved beneficial. It was discovered that the weights they were getting were off, in some cases by hundreds of pounds. All bales are now weighed before going on the truck to make sure that the town is getting credit/paid for the full weight of the recyclables being transported/sold.

The town opted to purchase it's own truck to transport recyclable materials and solid waste. The payments were the same amount that a monthly lease would have been and also about the same as the annual hauling costs and after four years it was paid for so the town now saves on the transportation costs now and can sell/haul their recyclables when the price is higher. The manager said that he needs a bigger building. He said that when they began the recycling operation the facilities were planned for what they were doing at that time and did not anticipate the increase in volume of recyclables nor did it anticipate the need to hold onto materials in order to take advantage of the price fluctuations of recyclables. He suggested that when planning a new facility it should be for the long term and should anticipate the need for storage and the increase in volume that results as more citizens recycle and the population increase. He said he could actually make more money for the town if he had more storage space and was able to time his selling with highs in the market. He uses the truck to haul compactor boxes, glass, trash, demo debris and metal. His yearly budget is \$209,000. and he made about 30-32K from sale of his recycling products last year. The town owns 4 boxes for the compactors.

Dunbarton allows residents to leave usable items for others to take, in some cases where there is a cost for disposal the resident will pay the fee and if the item is taken by another resident the fee is refunded. The manager at the transfer station works with the managers of nearby transfer stations to maximize profits and to reduce waste going to the

incinerator. For example Dunbarton takes their glass to the Weare transfer station where it is stockpiled and then once a year it is crushed to be used as aggregate. They also combine recyclables with other towns (Wear and New Boston in particular) so that they can combine amounts to make a full load and sell those when the price for that particular commodity is higher.

Dunbarton recycles everything including electric motors and Freon, along with the more common recyclables. They also have a vendor who brings a box for electronics and picks it up when it is full; the town is not charged for this service.

The committee also visited the transfer station in Weare. The transfer station in Weare is open 5 days a week and has 2 full time and one part time employee. They have three balers and recycle two different types of plastic; the third baler is used for cardboard. Their annual budget is \$350,000.00 and they made about \$140,000 - \$150,000 in recycling last year. They have a large storage shed to hold materials. They do not own a truck but do have equipment that allows them to move boxes on site when they are full. They own all of the trailers they use. Their site is large at 25 acres and is also used for sand and salt storage.

Wear only sorts the plastics. Citizens are responsible for sorting glass and metals which are dumped into a concrete bunker as opposed to a movable container. This method requires the extra step of picking the material up and putting in a transportable container.

Weare also has a scale and charges for disposal of some items by the pound. Weare allows large items to be thrown into the compactor; while we were there we saw a sofa being thrown into the compactor. While recycling is mandatory in Weare there are very few measures in place to ensure that recyclable materials are not included in household garbage.

Weare also had a “resale” hut where they allowed people to leave articles that were still usable, although it did not allow items to be left in the resale hut that would require a disposal fee (televisions, air conditioners for instance).

CONCLUSIONS

1. The current transfer station facilities and staff are not adequate for their current operations and will not support additional recycling efforts.

Anyone who has visited the current transfer station on a Saturday morning knows the current configuration is not sufficient to meet peak demand. Additionally, there is not space available to expand and allow the additional recycling that will be necessary to offset solid waste disposal cost increases. The success of the transfer stations we visited was largely the result of the presence of a fulltime manager whose sole focus was the solid waste management program.

The current configuration of two separate sites (one location at the top of the hill one at the bottom) requires increased man power and does not facilitate separation of materials that would allow for increased recovery of recyclable materials.

2. Maintaining the status quo with respect to recycling will result in a substantial increase to solid waste disposal costs in the coming years.
3. Long range planning, analysis and investment will be required to optimize recycling in an economic manner.

RECOMMENDATIONS

1. Amend the charter of a/the committee to allow for additional study and analysis of the way ahead for Bristol in reducing it's solid waste disposal costs. Two areas that did not receive a lot of attention because of the limited time they were "pay as you throw" and "single stream" recycling. The new charter should include:

Long range planning

Commodities to recycle

Handling of future wastes – Trex, Hardy Board and compact florescent bulbs

Staffing

Facilities

Public Education

Funding Recommendations/Proposals

Funding Strategies

Funding Source

2. Publish a request for quote for a "design build" of a recycling center at the current location of the compactor. One of the things the committee heard repeatedly from both Wear and Dunbarton were the importance of proper planning. Both facilities either grew up from the old dump or were created "ad hoc" as money became available, neither started with a plan that took into account long range growth, and consequently both had felt that their current operations were negatively impacted by things that could have been easily anticipated or corrected in the planning process. The design of a transfer station/recycling center, especially on a piece of property as small as that currently available is going to have to anticipate future uses and take advantage of every usable foot of space. It is the committee's recommendation that in the long run starting with a professional evaluation and design will best serve the town.
3. Look into no cost recycling of electronic equipment by contacting Dunbarton.

This report is being submitted as a final report. It provides the recommendations of the committee according to the initial charter. It is, however, the consensus of the committee that proper study and the best possible recommendations will require significantly more time and effort. There are a number of issues that were beyond the charter of the current committee that need to be analyzed to make the best possible choices and decisions with respect to what would be best for the town and its taxpayers. The committee is willing to devote that time and energy.

Respectfully submitted,
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