Recycling Report A Summary of the benefits of recycling for Candia

This report summarizes the benefits of recycling and also provides specific information on the savings achieved with our recycling efforts.

Most people understand that there are major environmental benefits to recycling, which include resource conservation, energy conservation, and a decrease in water and air pollution, all of which come about from reusing products, rather than making them from raw materials.

While many of us appreciate the great value of recycling from the environmental standpoint, this report focuses on the economic side of the recycling story- something that can make sense to all of us.

Without recycling everything must be sent to a landfill, which is very expensive. Landfills require much oversight to control pollution, and it is also important to note that landfill space is very limited locally, and it is extremely unlikely that new landfills will ever be opened in NH. If we do run out of landfill space, waste material would have to be shipped much further away, at much higher cost.

To put recycling into proper perspective, the *avoided costs* of not sending material to a landfill are even more important than the revenue received for each recycled category due to the high cost of landfilling.

The calculations on the following pages have been carefully and accurately put together to get the bottom line for our baled recyclables. Costs were calculated on the high side, so the numbers reflect the minimum return.

All recycled categories inside the building are compacted using a "baler". Compacting recyclables into "bales" is the key to our successful recycling program. The baler is a vital piece of equipment for the following reasons:

- 1) Baled materials save a huge amount storage space. If we did not bale, we would need a much larger building to store all the recycled materials. Note that the compaction rate of a baler can go as high as 20:1, so without the baler we would need substantially more space for storage. (Recyclables *must* be stored inside)
- 2) Baled materials can be easily weighed on site, which enables us to get accurate weights on the material. This avoids having to send trucks to a commercial scale somewhere, and also ensures we receive the proper revenue.
- 3) Loading baled material for storage and for shipping is much quicker and easier than loading loose material.
- 4) Transportation costs are much lower with baled material due to the fact that baling dramatically reduces the number of trips required.
- 5) We get a premium price for our recyclables because recycling processors far prefer baled materials. (In many cases *twice* the price)

The following revenue/cost analysis is based on current commodity rates and uses the total quantities for each commodity for 2017. The cost of labor, weighing and storing bales is included in the calculations.

Aluminum- pays \$1206 per ton

Cost to process each bale is approx. \$20 including moving bale to storage
No charge for transportation
For aluminum, there are 3 bales per ton so the total cost per ton to process is \$60
Net revenue is \$1146 per ton
Avoided landfill cost: \$92 per ton
Net gain to the town- \$1238 per ton

Taking into account all factors, the net benefit to the town was \$9978 for the quantity processed in 2017.

Tin cans- pays \$140 per ton

Cost to process each bale is \$20,

No charge for transportation

There are 1.4 bales of tin cans to a ton

Total cost per ton to process \$28

Net revenue \$112 per ton

Avoided landfill cost: \$92 per ton

Net gain to the town \$204 per ton

The net benefit to the town was \$2544 for the quantity processed in 2017.

Cardboard- pays \$123 per ton
Cost to process each bale is \$20
No charge for transportation
There are 1.4 bales of cardboard per ton
Total cost per ton to process is \$28
Net revenue \$95 per ton
Avoided landfill cost: \$92 per ton
Net gain: \$187 per ton

The net benefit to the town was \$12,018 for the quantity processed in 2017.

Mixed Paper- pays \$34 per ton Cost to process each bale \$20 No charge for transportation There are 1.5 bales per ton Cost per ton to process \$30 Net revenue \$4 per ton Avoided landfill cost: \$92 per ton

Net gain: \$96 per ton

The net benefit to the town was \$8104 for the quantity processed in 2017.

Plastic- pays \$55 per ton Cost to process each bale \$20 No charge for transportation There are 1.6 bales per ton Cost per ton to process \$32 Net revenue \$23 per ton Avoided cost: \$92

Net gain: \$115 per ton

The net benefit to the town was \$2804 for the quantity processed in 2017.

Glass- there is a cost of \$30 per ton Cost to move glass to storage- \$8 per ton Transportation cost- \$20 per ton Avoided landfill cost: \$92 per ton Net gain: \$34 per ton

The net benefit to the town was \$3706 for the quantity processed in 2017.

Summary of baled materials:

The numbers above take into account the revenue received less the cost to process. Those numbers are then deducted from the avoided landfill costs to show the net gain. Recycling these categories benefited the town by a minimum of \$39,154 in 2017.

Note that this does not include revenue received by other recycling categories, such as scrap metal, car batteries, appliances, etc.

The benefits of recycling are huge. Even if we don't make substantial revenue on some of the recyclable categories, the savings of avoiding land filling items is huge, and saves the town a lot of money, not to mention all of the environmental advantages of recycling.

Attachment from Candia Selectmen's Meeting on 4/23/2018

Donna Becker

From:

Mark Laliberte [mark.laliberte@gmail.com]

Sent:

Monday, April 23, 2018 9:33 AM

To: Subject: Donna Becker Fwd: Crowley woods

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

From: **Dick Trask** < <u>DTrask@chesternh.org</u>>

Date: Fri, Apr 20, 2018 at 6:17 PM

Subject: Crowley woods

To: "mlaliberte@candianh.org" <mlaliberte@candianh.org>

Mark

I am reaching out to you to inform you that the town of Chester is putting forward a warrant article atour May 10th Town meeting to buy Crowley woods development. In the article there is a bond for one million five hundred thousand dollars. The total price is Two Million dollars. If the town of Candia has interest in helping with such a purchase to protect the taxpayers of Candia and conservation land please reach out to me.

Regards

Dick Trask Chairman Board of Selectman Town of Chester 603-887-4979

Chester Selectmen Approve Bond Article for Land Purchase

Tri-Town Times: Posted on April 19, 2018 by Penny Williams

CHESTER – During their Thursday night meeting, on April 12, Chester Selectmen provided some details about a proposed land purchase that had surfaced during a Budget Committee meeting earlier in the week.

Conservation Commission Chairman, Chuck Myette, presented the parcel to selectmen, that he and others recommend the taxpayers should purchase. The parcel is known as Crowley Woods development and encompasses 183 acres. There is currently a subdivision plan under discussion to develop 60 single-family lots each with a three to four-bedroom home. To reach the parcel, it is necessary to go into Candia and then back into Chester.

Myette said the proposal is for a \$1.5 million, 10-year bond. The total price for the parcel purchase is \$2,000,000, \$500,000 would be coming from the Conservation Land Trust Fund.

The proposed article, reviewed and approved by the town's attorney, reads: "Shall the Town of Chester vote to raise and appropriate the sum of two million dollars (\$2,000,000) for the acquisition of approximately 183 acres of land known as Tax Map 011 Lot 030 (the property formerly known as Crowley Woods), and to further authorize the issuance of one million, five hundred thousand dollars (\$1,500,000) of bonds or notes in accordance with the provisions of the Municipal Finance Act (RSA Chapter 33), and to authorize the Selectmen to issue and negotiate the bonds or notes and determine the rates of interest thereon, and to authorize the withdrawal of five hundred thousand dollars (\$500,000) from the Conservation Fund to offset a portion of said appropriation, and to authorize the Selectmen to accept any funds from public and private sources, as they may become available, and to take any other action necessary to carry out this vote, and further, to raise and appropriate the additional sum of twenty two thousand, one hundred eighty three dollars (\$22,183) for the first year payment of the bond? This article must pass by a 2/3 majority ballot vote."

This article will be added to the Warrant as Article 8, meaning all the articles after Article 8, the Operating Budget, will be moved up by one number. The Operating Budget article will now be Article 9 and so forth through the entire Warrant.

This last-minute bond warrant article addition came about because the owner only just suggested a sale of the parcel. Myette, and Selectman Jeremy Owens who are on the Strategic Lands Committee and Planning Coordinator Andrew Hadik jumped on the idea, calling it an "opportunity" and worked out a cost avoidance model that shows the 10-year bond cost will reach the breakeven point by the seventh year and that the overall savings to the taxpayers in year eight of the bond would be \$400,000 and by year 12 it would be half a million dollars whereas the development cost burden to taxpayers will remain forever and continue to increase.

Myette also stated that Chester has no direct access to the parcel, so the impact of the subdivision development on the narrow, rural roads would be severe and especially at several specific intersections. He continued by saying, the impact on water would be dramatic and the increased demands on Town service resources would be great and the influx of students, calculated by using a 0.87 students-per-dwelling built, would increase school enrollments and costs.

The development cost impact was calculated and Myette and said the tax burden would be greater than the taxes collected after a few years. The cost avoidance model was calculated showing how the taxpayers would actually save money in the long run by the purchase of the property, which is the overriding reason for suggesting the purchase.

Selectman Jack Cannon responded that he had talked with a number of residents, and not one was in favor of the purchase. He also had real reservations about reducing the current \$700,000 Conservation Land Purchase Fund down to \$200,000.

Selectman Cass Buckley said that while the actual pay back for purchasing, rather than allowing the parcel to be developed is unknown, there are a lot of variables, but adding 60 homes is going to cost more than the cost of purchasing the land. He said the purchase would pay for itself over time. When an opportunity like this presents itself the Town should go for it.

Chair Dick Trask raised the question of what the town would use the land for. Without a planned use for the parcel he had concerns about it.

Uses suggested at the meeting were for a cemetery, ball fields, open space, wells for water, trail system, or a telecommunication tower, but there were no plans in place at this point.

Owens said from a strategic point of view this parcel stood out for the town to purchase. It is an opportunity now but if we wait ten years to purchase strategic parcels he said, there won't be any left, they will all be developed.

Myette also mentioned that the Conservation Commission has several parcels in the works to either purchase or get easements for, but there are only a few 100-plus acre parcels left. He said his committee has contacted every department and asked for their strategic plan for future needs and has received not a single plan.

The "last minute" idea brought fourth put a real time constraint on the article. The Budget Committee must hold a public hearing on it and there must be a public hearing at the Selectmen's meeting. All of which needs to take place prior to or by April 19.

Rhonda Lamphere, speaking as a resident, asked if anyone had looked at whether this cost avoidance model could be justified by looking at the sub-division that was put in on the Fremont line some 30 years ago had worked out. She added her concern is the location of the parcel is so far from the center of town this will limit possible uses.

Buckley made a motion to move the article forward so the residents of Chester would have the opportunity to say yes or no to the proposal. The Board voted three to one in favor, with Trask voting against moving the article to the Warrant.

Article 8 - Crowley Woods Bond

Shall the Town of Chester vote to raise and appropriate the sum of two million dollars (\$2,000,000) for the acquisition of approximately 183 acres of land known as Tax Map 011 Lot 030 (the property formerly known as Crowley Woods), and to further authorize the issuance of one million, five hundred thousand dollars (\$1,500,000) of bonds or notes in accordance with the provisions of the Municipal Finance Act (RSA Chapter 33), and to authorize the Selectmen to issue and negotiate the bonds or notes and determine the rates of interest thereon, and to authorize the withdrawal of five hundred thousand dollars (\$500,000) from the Conservation Fund to offset a portion of said appropriation, and to authorize the Selectmen to accept any funds from public and private sources, as they may become available, and to take any other action necessary to carry out this vote, and further, to raise and appropriate the additional sum of twenty two thousand, one hundred eighty three dollars (\$22,183) for the first-year payment of the bond?

This article must pass by a 2/3 majority ballot vote. Tax Impact: \$0.04