

History of ecomaine and Waterboro

Once upon a time townspeople could take all of their trash to the Town Dump on Bennett Hill Road, downhill from the Transfer Station, and simply dump it. Forrest Abbott Sr. would push it over the edge of the pile using a pickup equipped with a snowplow, and then it would be burned. Now we do not burn trash at all, and do not actually even “dispose” of it in town. All of the trash that goes into our “hopper” is hauled to a facility called **ecomaine**.

Ecomaine is the name of the municipally owned non-profit regional waste facility where trash and recyclables brought to the Waterboro Transfer Station are hauled. From the time it was first built in 1976, until 2006, it was called Regional Waste Systems (RWS). In 2006, to reflect its ongoing commitment to environmental matters, the Board of directors voted to change the name from RWS to **ecomaine** with the tagline *the future of regional waste systems*.

The End of Dumps

RWS came into being at the end of an era when, during the late seventies, the Maine D.E.P. asked that all open burning dumps be closed and capped. As incentive, the state offered to pay 75% of the cost of capping the old dumps. Waterboro selectmen met with other towns to try to find a local solution for disposal of trash. Local towns considered setting up an incinerator of their own, or joining with other towns in using an incinerator in Hiram (which has since closed down). In 1980 Selectmen Daniel Willett, John Monteith, and Bob Fay, believing they really had no other choice, put an article on the Warrant for Town Meeting to create a local Transfer Station, and join RWS to a town meeting. Millard Genthner mounted objections, with the main concern being the length of a 20-year contract. The article passed. Waterboro, with 8 other towns (Portland, South Portland, Cape Elizabeth, Scarborough, Ogunquit, Limington, Lyman, and Hollis. Four of the original members were in Cumberland and five in York Counties) became the original *owners* of the non-profit landfill facility. A sunset clause was built in to dissolve the non-profit corporation in 2014, but that was repealed in 2006.

In Waterboro, back in 1980, to accommodate the mandate of the D.E.P. to stop open burning dumps, about five acres of land uphill from the old dump and on the left side at the top of Bennett Hill road were purchased from Clint Wakefield for the new Waterboro Transfer Station (TS). In 1982 the Waterboro Transfer Station opened, and Selectmen Bob Fay, John Monteith and Andrew W. (Bimmy)

Woodsome announced in the Town Report that Waterboro was no longer in violation of dump standards. By 1983 the old Town Dump had been capped, and the Environmental Protection Agency deemed the site to be free of soil and water contamination. Board chair John Monteith wrote in the Annual Town Report, “Seagulls disappear – also the glow in the sky over Waterboro is gone – closing the Town Dump in 1982 was expensive, and maintaining a transfer station in future years will be expensive, but the improvement in the environment and air quality for future years cannot be measured in dollars and cents.”

At the Transfer Station, household trash was hauled in and compacted while waiting to be trucked to RWS. Richmond Stevens of Wells, succeeded by his wife Hazel after his death, ran a company called Custom Transfer. He built and ran the operation of the Transfer Station and managed the shipping of trash to RWS. At RWS a landfill of about 160 acres had been lined to capture flowage from anything stored there. Loads of trash were brought to a baler and baled into 30 cubic feet “cubes” which were then stowed in “pods.” Rainwater that drained through the cubes was drained off into the Portland wastewater treatment system.

In becoming a member of RWS Waterboro chose to join eight other original towns in becoming co-owners of RWS. This began a very different type of relationship from that of the municipalities who continued to function as *customers* of such facilities. Waterboro was an *owner*, and as such, had and has an influence on decisions made there, in proportion to its percentage of the waste brought there to the total. The town also picked up its share of the debt to subsequently upgrade and expand the facilities. In the first years, because they were smaller towns, Waterboro and Hollis shared a vote on the Board of Directors. Soon Waterboro gained its own vote. After a few years, Frank Allen became the Waterboro Director, and also sat on the executive Board. Wendy Warren, who later moved to Bangor, where she manages that city’s MSW, replaced him. Current Director Willis Lord followed her.

A New Era: Waste to Energy

Waste treatment facilities are continually looking at public health and environmental science to further reduce the amounts of emissions through more efficient means, and this takes a continual upgrading of facilities. Due to changing environmental standards, significant debt was incurred in 1988 when the Waste-to-Energy (W2E) plant was built at RWS. This huge W2E facility operated in a giant building with tall stacks, seen clearly from the Turnpike between the old Exits 7 and 8. Its purpose was to reduce the amount of trash in the landfills, remove more

toxins from the waste disposal process, and to obtain revenue for the facility through the generation and sale of electricity. With each change in method of dealing with waste, both RWS and its member towns had to adapt their operations and this incurred debt as the science of waste management brought more precise knowledge about smaller and larger effects of toxic and other hazardous waste on the human and natural environments. Instead of 30 cubic foot bales of trash going into the landfill, the burned trash both generated electricity to be sold into the grid, and reduced the volume of material hauled to the landfill by 90%. At that point the landfill became a landfill/ashfill.

The growing awareness of human health and environmental hazards involved with waste management has required constant adaptation. The graphic above shows the changes that **ecomaine** has undergone since its inception. For example, the Maine Department of environmental protection mandated that mercury emissions must be less than 50 lbs. a year until January 2007. In 2004-5 the total amount of mercury released at **ecomaine** was 24 lb. and this was further reduced to 21 lb. in 2005-6. This has been accomplished through a process of injecting activated carbon into the gases coming out of the W2E process, and this adds a cost of \$150,000 to \$175,000 to the overall process a year. While this degree of compliance is admirable, every effort has to be made to continue to improve, as the DEP reduced the limit to 35 lb. As of January 2007, and will further reduce it to 25 lb. in 2010.

The Next Effort: Recycling

In 1990, recycling was added to the operation, and the building formerly used for baling trash for the landfill at RWS was transformed to bale plastics, paper, cardboard, and tin cans. The **ecomaine** recycling facility was and still is the largest in Maine. Though much of the recycling tonnage would have been valuable fuel for the waste-to-energy plant, the owner-communities and management of **ecomaine** were committed to making recycling their first priority

Towns Finances and ecomaine

As was stated above, Waterboro is not a customer of **ecomaine**, but an owner, now along with 20 other municipalities. Financially, the member towns support the facility in two ways: 1. By the payment of gate or tipping fees, and 2. By assessments. The gate fee paid by member towns has varied over time, and at the current time is \$88 per ton. As trucks pull up to the gate they are weighed, then they go into the Waste to energy (W2E) facility, tip their load, and get weighed again on the way out. The municipality is charged \$88 per ton dumped. Other

revenue comes to **ecomaine** from the electricity generated, and from sales of recycled goods.

Should Waterboro Pull out of ecomaine?

Some who are critical of the costs involved in being part of **ecomaine** want the town to pull out of it. The member towns have contracts in place beyond 2014, and are bound contractually and ethically to deliver their trash to **ecomaine**. Like the others, the town of Waterboro is locked into the current trash management system. The question is one of cutting costs under the current system. If the town can increase its recycling of materials that have financial value, they can be sold rather than burned, thus reducing the shortfalls on which assessments are based. **ecomaine** needs more trash, especially in winter, when amounts are lowest in the year. If Waterboro and other member/owner towns can increase recycling, and **ecomaine** can find more communities to supply trash to burn, this will be of the greatest financial benefit to Waterboro and other member municipalities. Currently 20-year contracts have been signed between **ecomaine** and the city of Saco, which will greatly increase the amount of trash as fuel. The town of Standish is the first of six Associate Member Communities to sign a 20-year contract, and the towns of Baldwin, Parsonsfield, Hiram, Porter, Naples, are in the process of deciding whether they will do the same.

Should we Sell Cardboard Directly?

Some in town want to separate out the paper and cardboard and sell it directly to bring the profit straight to the Transfer Station account to offset its expenses. There are two reasons this would not accomplish what these people desire – first, income generated at the TS does not come back into the TS account, but because of the town budgeting system, goes directly into the town's General Fund. Second, and most important, the town is an owner of **ecomaine**. Any waste, especially income-generating waste like paper and cardboard, that is diverted away from **ecomaine**, reduces its revenues, while its expenses remain. The difference between the revenues and expenses is called its *shortfall*, which owner towns must absorb in the form of *assessments*. This second way that member towns support **ecomaine** financially is shared according to the percentage of total municipal solid waste that each municipality sends to **ecomaine**. Over the past five years, Waterboro's percentage of the total waste has averaged 3.76%, resulting in an assessment this current year of \$70 per ton. Therefore, the total that Waterboro pays to **ecomaine**, taking in both tipping fees and assessments is \$156 a ton.

After Willis Lord became the Waterboro member of **ecomaine's** Board, he complained that this fee structure benefits the large cities and towns near **ecomaine**, because they have very low mileage in their hauling their MSW, while Waterboro has a 44-mile round-trip. The management agreed to pay Waterboro 1/3 the market value for the paper and cardboard (the most profitable recyclables) delivered to the facility, and this payment goes into the Waterboro General Fund.

Problems When Trash is Diverted from ecomaine

The ecomaine waste-to-energy plant incinerates about 175,000 tons of trash a year and, from that process, produces enough steam to generate 100,000 -110,000 megawatts of electricity annually –enough to serve all the homes in both South Portland and Gorham. The revenue from the sale of electric power in 2006 was \$5.2 million. The fuel **ecomaine** uses to generate this electricity is our MSW. When **ecomaine** does not receive enough MSW to keep its burners fed, **ecomaine** must either shut down, or find alternative sources of MSW. **ecomaine** then is forced into the spot market to find more trash, and this is a competitive market, so **ecomaine** is forced to charge less per ton to get the needed trash. Thus, when member towns do not send all their trash to **ecomaine**, such as when businesses in the town pay commercial haulers who take the trash to other facilities, both **ecomaine** and the town are hurt financially, with **ecomaine** having to profit less by seeking the spot market, and Waterboro paying more in its assessment because of a larger shortfall. This diversion is able to happen because Waterboro does not have a permitting ordinance at this time that requires all trash hauled in the town to be taken to **ecomaine**. The Transfer Station and Recycling Committee is working with area businesses to try to remedy this situation.

Conclusion: Trash is More than Personal

Long gone are the days when a plow blade pushed our trash over the edge to be burned. Waterboro is now part owner of a regional solid waste facility, and that facility, and therefore Waterboro, has to respond to increasing understanding of the human health and environmental effects of how our trash is managed. In the privacy of our homes and businesses, each of us can affect how much it costs to dispose of our trash. Each of us can affect how clean the emissions are at facilities with even the most state of the art technology. By taking a moment to reflect on each item we no longer have a use for, and choosing its next destination with thought – whether the recycle bin, the trash bag, or the hazardous waste shed at the Transfer Station – we can each make a difference.