

FINAL REPORT OF THE KITTERY SOLID WASTE AND RECYCLING COMMITTEE (SWRC)

July 2011

BACKGROUND

The Kittery Town Council voted to form the Solid Waste and Recycling Committee (SWRC) for the purpose of providing its residents and businesses with solid waste and recycling services in the most cost effective and efficient manner. The committee consisted of eight members: two Town Councilors, the Public Works Department Commissioner, the Town Manager/designee and four citizens. The Town Council resolution forming the committee stated that it would be disbanded on June 30, 2011, unless renewed. This report assumes the SWRC will disband on schedule.

“Solid Waste and Recycling Committee Info Sheet”, was posted on the Town web site. It shows the membership of the committee; the initial schedule of meeting dates; and the scope of work the Town Council asked the committee to address.

The committee held scheduled monthly working meetings between March, 2010 and May, 2011. Additional meetings were held, as needed. Three presentations were made to the Town Council, two of which were at workshop sessions and the third at a regular council meeting. In addition, written reports were submitted to the council. .

The committee received presentations from Zero Waste, a supplier of pay-as-you throw (PAYT) bags, and from Eco-Maine, a municipal co-operative that provides waste-to-energy and single stream recycling services to its member towns. With the SWRC’s encouragement, the DPW Commissioner has met – and continues to meet -with her counterparts in adjacent towns (Elliot, North and South Berwick) to discuss regionalization issues and with Ameritech to discuss possible privatization of the town’s solid waste facility (SWF).

The SWRC does not see a need to extend its term beyond the original date of June 30, 2011.

CURRENT SITUATION

The SWRC’s scope of work included:

- Reviewing existing solid waste and recycling operations
- Determining any necessary design modifications and changes in operations such as adopting a single stream (recycling) process
- Regionalizing the facility
- Assessing operation of the facility as an enterprise fund.

1. Existing Solid Waste and Recycling Operations:

The Town's existing solid waste operations can be summarized as follows:

- ***Municipal solid waste (MSW) produced by households and business within the town:*** The residential and business component of this waste stream is either delivered to the Solid Waste Facility (SWF) by individual households or is collected by private haulers licensed by the town. MSW deliveries to the SWF are hauled to one or more designated landfills, with the town paying the transportation charges and the landfill tipping fees. Private haulers who collect residential MSW within the town either deliver it to the SWF facility, or haul it directly to the designated landfill(s); the town still bears transportation and tipping fees for this waste.

During the five-year period ending with fiscal 2009, the town generated an annual average of 2,720 tons of MSW costing an average of approximately \$229,000 for disposal. (Disposal is transportation and tipping fees.)

The SWRC concluded that the principal issue with the existing system for disposing of MSW is that there is no incentive for individuals or businesses to reduce the amount of waste they generate. The cost of operating the SWF and transporting MSW from the SWF to the landfill and the landfill tipping fees are paid from general tax revenues. Taxpayers bear these costs not in proportion to the amount of waste they generate, but in proportion to the value of the property they own. There is therefore no incentive for users to minimize the amount of MSW they deliver to the SWF.

In addition to the inequitable allocation of MSW costs noted above, the SWRC identified through input from community members and staff the following areas of concern:

1. Reported incidences of non-residents using the SWF.
2. Reported incidences of the facility being used to dispose of trash and recyclable material from businesses outside the Town of Kittery.
3. Reported concerns about solid waste from sources other than the Town of Kittery SWF being charged to the Town of Kittery when delivered to landfills.
4. Low to no enforcement at the SWF, allowing for illegal dumping of items such as recyclables (which a Town ordinance requires be segregated) and recoverables (on which fees are charged).
5. Limited education/communication at the SWF regarding correct disposal practices.

The above operational issues, plus the issue of providing an incentive to minimize the amount of MSW delivered to the SWF could be addressed by implementing a “pay-as-you-throw” (PAYT) system, whereby MSW would only be accepted if contained in a pre-paid bag with designated size and color characteristics. More than 7000 municipalities nationwide have PAYT systems. The first PAYT in Maine was started in Falmouth in 1989 and about 150 communities have followed since then.¹ Nearby towns using PAYT include North Berwick and South Berwick.

At a council workshop in February, 2011 the SWRC presented ten options for improving the town’s solid waste system. One was a conventional PAYT system, whereby residents would purchase bags and a second was a so-called Hybrid PAYT system, whereby for a period of one year the town would provide bags to residents at no charge. The number of bags issued to each resident would be the same and would be based on the estimated average annual amount of residential MSW generated by a household.

Following the February presentation and at the council’s request the SWRC analyzed the issue of how to distribute bags to Kittery residents in an efficient and equitable manner. The goals were to minimize town employee staff time and resident inconvenience, while ensuring that all residents received the designated number of bags. The committee investigated working with the Vehicle Registration/Excise Tax list, property tax bills, Trash Decals and the voter registration list. None of these lists fully met the goals listed above. It should be emphasized that the issue of equitable distribution of bags is unique to the Hybrid PAYT option. Under a conventional PAYT system, residents would purchase the number of bags they actually need at the SWF, town offices and local retail stores. The SWRC does not recommend that the town implement a Hybrid PAYT system.

The committee does recommend a conventional PAYT system.

- **Recyclables:** The town requires by ordinance Title 8 chp 8.1 that specified materials – paper, cardboard, certain plastics, can and glass be segregated and separately deposited at the SWF. Glass is disposed of in a landfill on the SWF site; the other materials are sold to generate revenue which partially offsets the cost of operating the SWF and the transportation costs and landfill tipping fees associated with disposal of 1 MSW.

The SWRC expects Kittery’s recycling rate to increase in 2011 due to greatly improved signage at the SWF and DPW efforts.

¹ Jeff Clark, “Pros and Cons of Pay-Per-Bag Disposal,” Jeff Clark, *Maine Townsman*, February, 2011.

The town's recycling rate in MSW; (5 yr. Avg :16% of total MSW + MSW Recyclables tonnage) has two effects. It increases the cost of disposing of residential MSW by increasing the tonnage that has to be disposed of and it reduces the revenue obtained from the sale of recyclables.

The SWRC discussed whether it would be possible to increase the recycling rate by implementing an education program and/or a program of surveillance and enforcement – opening people's trash bags as they arrived at the SWF. While these measures would probably increase the recycling rate, they require additional staff to implement, thereby increasing the cost of operating the SWF. Surveillance/enforcement measures are also inherently confrontational.

The SWRC also considered whether a switch to single stream recycling would increase the recycling rate. This would allow residents to aggregate their recyclables rather than separate by material type as is now required. In theory, the added convenience would increase the recycling rate. This has not proven true in many communities. Those residents who currently do recycle do so very well which means that the quality of the recycled goods that we sell is high. High quality separated goods receive more money on the market than single stream.

It was concluded by the SWRC that as the town currently has a separation-based recycling system, the better approach would be to identify measureable non-confrontational means of increasing the volume of recyclables delivered to the SWF. Implementation of a PAYT system for MSW would create an incentive to increase the volume of recyclables delivered to the SWF while also reducing the volume of MSW.

- **Recoverables:** The SWF maintains a fee schedule for a range of materials, including yard waste, domestic appliances, demolition materials, household appliances, batteries, tires, mattresses and hazardous waste. These materials are either processed on site (eg, yard waste into compost) or are sold into the recycling markets (eg. appliances).

The main issue with the recoverables operation is that prior to a revised disposal fee schedule being enacted on July 1, 2010, the revenue from recoverables (fees plus the proceeds from recycled material sales) did not cover the cost of disposal. A new fee schedule was recommended by the SWRC and was implemented on July 1, 2010.

2. Design Modifications and Operational Changes:

The SWRC supports the recent design modifications and operational changes introduced by the DPW Commissioner, including relocation of the Freebie Barn, installation of surveillance cameras and informative signage.

The SWRC supports ongoing investigation of traffic control improvements and assessment of needs for traffic control at Route 236. We recommend the Town work with Eliot to request timing of lights.

3. Regionalizing the SWF

The SWRC determined that the SWF has more capacity than is currently being used to serve the needs of the Town's residents, particularly with respect to baling. The committee supports the recent successful efforts of the DPW Commissioner to attract fee-paying usage of this capacity by neighboring towns and urges that these efforts be continued and expanded as market conditions permit.

Opportunity for further regionalization is made possible by the implementation of a PAYT system for MSW which would also allow the SWF to accept MSW from non-residents who purchased the Town's pre-paid bags.

4. Operation of the SWF as an Enterprise Fund

The enterprise fund form of operation would involve establishing a self-supporting revenue stream for the Town's solid waste operations, thereby eliminating the need for the average annual appropriation of approximately \$500,000 that is paid from property tax revenues. Solid waste operations would thus be funded in the same manner as the Town's water supply and sewer systems.

The SWRC concluded that in order to transfer the Town's solid waste operations to an enterprise fund, it would first be necessary to implement a PAYT system for MSW.

RECOMMENDATIONS:

- 1. Create incentives to reduce the volume of MSW and to increase the volume of recyclables delivered to the SWF by implementing a PAYT system of trash metering.**
 - a. Set the cost of the PAYT bags to cover the cost of running the facility.
 - b. Remove the "residents only" rule from the SWF, allowing any person who wishes to dispose of MSW in pre-paid bags, deposit recyclables, pay for recoverables services or purchase materials, to do so. This would allow the town to increase revenues by providing service on a regional basis.
- 2. Operate the SWF as an Enterprise Fund.** The PAYT system of trash metering provides the opportunity (as with the sewer and water departments) to link usage

to payment. It is entirely feasible to operate the facility without any tax appropriation, if the above recommendations are adopted.

3. **Continue annual review of the SWF Recoverables** service to ensure that pricing covers disposal without exceeding or coming short.
4. **Require all town departments, especially the schools, to contract their recycleable materials through the SWF** to maximize recycling benefits to the town. The Town should designate that an equal % of the profits realized from recycleables delivered to the facility and sold; will be returned to Town Dept or School as revenue.
5. **Expand current efforts to educate** residents, town employees and area businesses on the financial benefits of recycling.
6. **Encourage Private-Public partnerships** at the SWF to increase revenue from out side sources. Note that current DPW has identified and implemented several areas already.
7. **Ensure that an audit of trash flow and charges be completed within 1 year.** This audit is to determine if trash removal charges to the Town of Kittery by contracted haulers are accurate and equal to the amount of trash removed from the SWF. (Note: Scales would resolve this issue; see #8)
8. **Approve funding to install scales and investigate other capital improvements** over the next CIP cycle. Scales would allow the Town to verify total MSW passing through the facility. Currently there is no method of verifying total MSW tonnage charged to the Town of Kittery.
9. **Other capital and recommendations for safety improvements: Bailers-** The bailer should be replaced, ASAP, with a Bailer/Shredder with a two-ram system. This would allow the DPW to expand revenue through bailing of plastics. It should be noted that the current bailer has been modified by the manufacturer for plastics bailing however, it is the opinion of members of the committee that for safety reasons there should always be two people in the bailer building when bailing is been done. This represents a labor cost increase that can be removed with the appropriate specific bailer being purchased by the Town.
10. **Adopt a financial flow control** for cash transactions at the SWF through numbered receipts pages. (Currently the recoverables area; future might include PAYT bags.)
11. **Direct the Town Manager to (again) contact the State DOT again regarding the Route 236 traffic control.** Ask for lights to be timed North and South of the facility access road to provide gaps in traffic.

12. **Charge a successor to the SWRC to evaluate the feasibility of an Eco-Maine style program** of municipalities joining together in a regional cooperative based on waste-to-energy. This will require funding to retain professional advisors.
13. **Investigate and encourage Community Composting** at the Solid Waste Facility. Currently a program has started with restaurants in the Portsmouth area, owners of the business were not yet ready to take on Municipal clients.
14. **Administrative History:** The SWRC submitted multiple reports detailing research and financial considerations of the SWRC throughout the 18 month process. It is our recommendation that these items be made available through the Town of Kittery website to all town members by Sept 1, 2011. This would include all reports submitted to the Town Council From January 2010, thru June 2011, separated out from Town Council meetings and specifically available under the SWRC link on the website. It is also our recommendation that the posting of this information be announced through the town email alerts. The purpose is to make available the research as well as to create a historic file so that the next group to review the SWF will have “something” to start from, as we started from scratch with no history and with new staff.

Submitted by

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And Councilor Gary Beers.*

Input by:

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