

Draft Report

Garbage and Recycling

Government, Infrastructure and Public Services Working Group

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Special Board
Comprehensive Plan/Local Waterfront Revitalization Plan
Village of Cold Spring

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June 1, 2008

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(The†Village of Cold Spring has received N.Y. State Hudson River Valley Greenway and N.Y. Department of State grants.)

Scope of Report

This report describes the current arrangements for the collection and disposal of municipal solid waste (including recyclables), hazardous materials, and leaves and yard debris in the Village of Cold Spring, NY, with a brief discussion of the arrangements in adjacent municipalities. Recommendations for reducing costs, improving service, safety and the environment, and increasing village revenues, will be covered in separate reports.

Equipment and Staff

The Village of Cold Spring owns two garbage trucks, one purchased in 1994 for \$78,147, and the second, an International 7400 in 2002 for \$103,490. Each truck has a 25-cubic yard, 12.5 tons Gross Compacted Weight Capacity (GCWC) and a normal operating capacity of approximately 10 tons. According to Mayor Phillips, the older truck is due to be replaced in a year or two (2009 or 2010). The trucks are stored at the village garage at 49 Fair Street. They are used interchangeably for both recycling and regular garbage collection. Just over one full-time equivalent village employee out of a 3 1/2-person Highway Department collect both regular garbage and recycled material (one of the four employees is shared 50/50 with the Sewer Department). (See Addendum 3 for labor allocation estimates.)

Procedures and Schedules

The weekly collection cycle begins on Friday afternoon, when a three-person crew with the newer truck collects trash from Spring Brook Apartments (using a cable hoist on a small dumpster). The crew goes on to collect trash from several businesses in the village – Yanatelli's, Elmsco, and a handful of others, and then returns with the partially full load to the village garage on Fair Street. On Mondays in milder seasons, a three-person crew runs the partially full truck down Main Street as far as the river, collecting trash left over from busy weekends. The truck is again parked at the village lot on Fair Street.

The main collection of non-recyclable rubbish from the approximately 800 remaining village households¹ starts Tuesday between 2:00 am and 4:00 am when a crew of three takes the newer truck out for residential collection. No special containers are required, and collection is curbside. Collection is restricted to normal household waste, and excludes recyclables, construction debris and hazardous materials. These collections are for all private residences, including residences on private streets in the village. (However, the senior housing at Chestnut Ridge, with 64 units, and Forge Gate, with 68 units, and Haldane Elementary and Middle/High Schools all have separate contracts with Royal Carting and are not served by the village.) After the first collection, the crew returns to the village garage with the now-full truck, parks it, and switches to the second, older truck. Collection continues until the crew finishes between 7:30 am and 8:30 am. In this way, the roughly 16 tons per week of rubbish is handled by two trucks with 10-ton capacities. On Tuesday afternoon, a village employee drives the newer truck (now full) to Wheelabrator Westchester in Charles Point for dumping. (Wheelabrator operates what is known as a waste-to-energy facility, built in 1984 by Westchester County to cope with the closing of the Croton Point landfill in that county; ash from the burned rubbish is dumped in a landfill in Sprout Brook, NY.) The partially-full second truck is parked in the village garage all day and overnight Tuesday. On Wednesdays during milder weather, the truck tops off the load by collecting yard waste left bagged curbside by residents. This second load is driven to Charles Point when convenient.

Recycled material is collected in two rounds every Friday, with the first round (2-person crew) being a collection of paper, magazines and cardboard ("mixed residential" or "mixed resi" paper); the second round (using a three-person crew) is for glass, plastic and metal ("commingleds"). Several years ago, the village provided a small, un-lidded bin to each resident for recycling with the understanding that residents were responsible for replacing them if they were lost or damaged. Newspapers, magazines and catalogues are to be bundled or sacked. After collection, the recycled material is placed in two 30-cubic-yard open dumpsters owned by Royal Carting and located in the village garage. Mixed resi goes in one dumpster, commingleds go in a second.

It takes two weeks to fill the two 30-yard dumpsters. Royal Carting takes the filled dumpsters to a recycling facility in Newburgh, NY, owned by the Hudson Baylor Corporation. Hudson re-ships all commingleds it has received to a facility run by the quasi-governmental Dutchess County Resource Recovery Agency, located in Poughkeepsie. Hudson Baylor processes only the “mixed-resi” (for mixed residential) paper in their Newburgh facility. It is sorted to increase its value (newspaper – “ONP” --is significantly more valuable, for example, than old magazines and catalogs --“OMG”), and sold to brokers.

For several weeks in the fall, the village makes a special run to collect leaves left bagged curbside on Wednesdays. The leaves are then dumped at the end of Benedict Street, but Mayor Phillips stated that the site is filling up and will not be suitable within a few years. In addition, the village started a program in 2008 to collect Christmas trees late in January, mulch them, and make the mulch available to residents.

Volumes

The charts in Addendum I show the garbage and recycled tonnage monthly for 2006 and 2007. The total Municipal Solid Waste (MSW) for 2006 was 1,025.6 tons, which increased slightly in 2007 to 1,071.8 tons. Of this, in 2007, 863 tons was rubbish, 125 tons were recycled as mixed residential paper and 83.7 tons were recycled as commingleds. At 3.2 lbs of MSW per capita per day, this is approximately 30% less garbage than the national average of 4.6 lbs²; at least some of the difference may be due to not counting the waste from Haldane. Cold Spring’s recycling rate of 19% is significantly lower than the national average of 32% (but comparable to recycling rates in New York City, as reported by The New York Times in a May 29, 2008 article). It’s worth noting that nationally, about one third of MSW is made up of paper, but only 11% of Cold Spring’s measured waste is made up of recycled paper. This may be changing. When the village began to recycle magazines and catalogues in 2007, recycled volumes increased by perhaps 2 to 3 tons per month, resulting in modest savings of \$500 - \$750/year. Also contributing to the increase, Haldane began delivering waste paper to the village dumpster in March 2008.

Revenue, Costs and Contracts (See Addendum 2 For Detail)

All costs for garbage and recycling are paid for out of the village’s general fund, with most revenues coming from property taxes, with the exception of a small grant of \$7,500 from Putnam County to offset the expense of cleaning up after special events.

The village pays \$77/ton to Wheelabrator Westchester for accepting trash (about \$66,500/year for the roughly 863 tons delivered to their facility) and has a contract that is renewable annually. The contract has been in place at least ten years.

The village pays Royal Carting approximately \$11,000 per year to rent the two dumpsters and deliver recyclable materials (at \$10/ton for paper, \$36/ton for commingleds) to Hudson Baylor in Newburgh (this works out to about \$54/ton). Hudson Baylor normally pays \$50/ton for mixed resi paper tendered to their Newburgh facility. This is set by Baylor at approximately \$75/ton off a published index for mixed-resi papers, currently about \$125/ton. (The index fluctuates: prices paid for mixed-resi papers tendered to the facility have ranged from \$15/ton to \$90/ton in the past year, according to Hudson Baylor. Individual agreements with carriers may also vary.)

Trucks (and Royal, assuming it pays standard rates) delivering commingleds pay Hudson Baylor \$25/ton to accept it. (This, according to Steve Hastings of Hudson Baylor, is to cover Baylor's cost to then re-ship the materials to Poughkeepsie). None of the revenue from the sale of paper to Hudson Baylor is shared with the Village. Notably, if costs are fully allocated (including labor costs for collection), each ton of recycled material costs the village significantly more than a ton of ordinary refuse (\$185/ton versus \$124/ton ordinary trash). Recycled waste costs more to process than ordinary waste in New York City, as well, and many other municipalities: the situation is not unique to the village.

The Poughkeepsie Resource Recovery Agency facility currently charges \$26.50/ton to handle commingled materials, a fee it will waive if the delivered load also includes mixed resi. This is of course because the value of recycled materials varies: while mixed resi commands a high resale price, according to Bill Calliciero of the Recovery Agency, they must pay \$60/ton to dispose of glass. (The New York State General Assembly is considering legislation to require deposits on all bottles: this could significantly boost the value of glass and plastic.) Calliciero said that Dutchess County is building a single-stream recycling system to allow carriers to deliver materials unsorted, reducing costs. The facility is behind schedule, but is expected to be completed in about a year.

Garbage Disposal at Adjacent Municipalities

Nelsonville has a three-year contract with Royal Carting for \$56,000 per year, for the 254 households (\$220/household versus \$191/household in Cold Spring). That covers garbage and recycled materials collection every Friday, and two pickups of discarded furniture and white goods per year, once in the spring and once in the fall. (The comparison is not strictly "apples-to-apples," because of the additional pickups in Nelsonville.) Nelsonville has no Highway Department from which to assign labor for sanitation work.

The Town of Philipstown holds a clean-up twice a year, making dumpsters at the Garrison or North Highlands Fire Houses available to all residents to dump furniture and household junk once in the spring and once in the fall. In addition, Philipstown permits all Town residents to drop off bundled papers (magazines, cardboard, newspaper), metals, plastic and glass on the second Saturday of every month from 7:30 am to 3:00 pm at a landfill on Lane Gate Road. The Town charges nothing for paper, plastics and glass, but does require a \$2 pass for cars and a \$5 pass for trucks with metal scrap. The materials are separated at the landfill and collected by different dealers. Hudson Baylor provides a trailer and canvas bins for paper, and arranges to pick this up. The Town is paid for at least some of the recyclables.

The village does not collect or accept hazardous waste, including computer screens, TVs and electronics. Twice a year Putnam County accepts hazardous materials and electronics from county residents upon prior appointment. With budget cutbacks, the county is exploring ways of shifting this work to the townships or villages.

Footnotes

Calculation of households served in Cold Spring:

Total households in Cold Spring	= 946
Less Forge Gate households (units)	- 68
Less Chestnut Ridge Sr. Housing (units)	- 64
Total households served estimate	814
Estimated number of people served	
Population,	2005
Less, estimated population, Forge Gate	100
Less, number of residents, Chestnut Ridge	64
Total population served estimate	1,841

Calculation of Per Capita Waste, Cold Spring

Total tons in 2007, 1,071.8
Population served = 1,841
Pounds per capita per year 1,164
Pounds per capita per day 3.

Addendum 1 – MSW Volumes in Cold Spring, NY, 2006 - 2007

Statistics on Garbage Collection in Cold Spring, 2006 - 2007

	Rubbish 06	Rubbish 07	Recycle 06	Recycle 07	Com 06	Com 07	Paper 06	Papers 07
jan	76.35	78.18	16.42	19.66	6.8	9.11	9.62	10.55
feb	59.05	52.95	13.31	13.09	5.51	6.6	7.8	6.49
mar	19.59	58.69	11.38	14.14	5.02	5.79	6.36	8.35
apr	56.51	68.64	16.88	11.53	6.82	4.32	10.06	7.21
may	84.79	88.34	14.01	22.16	6.06	9.33	7.95	12.83
jun	79.85	72.16	14.68	14.59	6.27	6.8	8.41	7.79
jul	71.09	82.24	14.8	17.38	6.48	6.72	8.32	10.66
aug	85.12	66.84	21.63	16.98	9.09	6.49	12.54	10.49
sep	73.78	64.05	13.95	16.73	6.07	6.16	7.88	10.57
oct	78.51	80.96	14.5	26.82	6.03	9.45	8.47	17.37
nov	91.61	73.85	15.95	13.45	6.12	4.59	9.83	8.86
dec	67.87	75.41	13.98	22.99	5.96	8.34	8.02	14.65
Avg. Monthly	70.3	71.9	15.1	17.5	6.4	7.0	8.8	10.5
total, year	844.1	862.3	181.5	209.5	76.2	83.7	105.3	125.8

Note: Mar 06 is inconsistent

Source: Cold Spring Village Office – Billing Records, 2006 – 2007

Addendum 2 - Cost Analysis, Garbage and Recycling in Cold Spring, NY

14-May-08

			Tot Est Alloc - cur	
Labor (hrs x rate)	2,368	\$25	\$59,200	
Depreci (Price/Life)	\$230,000	15	\$15,333	
Op Exp (Miles x rate)	3200	\$1	\$3,200	
	Total		\$77,733	

Wheelabrator	†	†	†	†	†
Wheelabrator rate/ton			\$77†	†	†
Annual Garbage Wt			863	\$66,451†	†
Lab/Dep/Op		53%	\$77,733	\$40,968†	†
Cost of Garbage	†	†	†		\$107,419†
Cost Per Ton of Garbage		†		\$124†	†
Royal Carting	†	†	†	†	†
Haulage @\$89.64 x 26			\$2,331†	†	†
Rent - dumpster	†		\$1,170†	†	†
Commingles @\$36/ton			\$2,988	\$6,489†	†
Annual Comm. Wt	†		83†	†	†
†	†	†	†	†	†
Haulage @\$89.64 x 26			\$2,331†	†	†
Rent - dumpster	†		\$1,170†	†	†
Paper @ \$10/ton	†		\$1,253	\$4,754†	†
Annual paper wt (tons)			125.3†	†	†
†	†	†	†	†	†
Lab/Dep/Op		35%	\$77,733	\$27,312†	†
Cost of Recycling, total		†	†		\$38,554†
Current Cost per ton recycle			\$185†	†	†
†	†	†	†	†	†
Yard Refuse & Events Clean up		†	†	†	†
Lab/Dep/Op		12%	\$77,733	\$9,454†	†
Est. Total Cost	†	†	†		\$9,454†
†	†		Est. Total MSW Disposal		\$155,427†

Addendum 3, Labor Allocations

Assumed Allocations of time, Collection labor

Assumed Baseline, weekly, for 80 hrs per 2 week period

Regular collection

Rubbish	# Empl.	# Hrs.	Rubbish	Recycle	Weekly	Annual
Mon	3	1.5	4.5	0		
Tue	3	4.5	13.5	0		
Wed	1	1.5	1.5	0		
Thu	0	0	0	0		
Fri	3	2	4.5	16		
totals			24	16	40	2,080

Seasonal

	# Empl.	# Hrs.	Leaves	Events	# Wks	
Wednesday	3	4	12		8	96
Satur (event)	3	8		24	8	192
						288

Total est Hrs 2,368

Allocation: Rubbish: 53% Recycle: 35% Yard/evt 12%