

**A RESOLUTION RECEIVING THE STATUS REPORT FROM THE ORANGE
COUNTY SOLID WASTE ADVISORY BOARD REPRESENTATIVES**

Resolution 83/2002-03

WHEREAS, the Town of Carrboro has two representatives to the Orange County Solid Waste Advisory Board (SWAB), and

WHEREAS, the SWAB through its representatives has solicited input from the Carrboro Board of Aldermen while in the process of developing financing alternative recommendations for the solid waste management program.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen:

1. That the Aldermen have received the report on the SWAB activities.
2. That the County Commission is urged to allow ample time for input from citizens and their respective elected boards during deliberations.
3. That the upcoming SWAB report to the Orange County Board of Commissioners and pertinent supporting material be provided to the Board of Aldermen.
4. That the Aldermen schedule a future work session, after which formal recommendations will be submitted by the Aldermen to the County Board.

This is the 14th day of January in the year 2003.

Memorandum

To: Board of Orange County Commissioners

From: Solid Waste Advisory Board
Jan Sassaman, Chair

Subject: Update of the SWAB's Examination of the Solid Waste Management Plan and Future Solid Waste Management Financing Alternatives

Date: August 9, 2002

The SWAB is to prepare a report to the Board of Orange County Commissioners (BOCC) on our recommendations regarding the solid waste management plan, overall Solid Waste Management Department Financing and on potential mechanisms that might be employed to finance implementation of that plan and other management needs. This memo clarifies some of the issues to be considered over the next several months in developing the decisions we need to make to provide those recommendations.

Our ultimate task is to determine whether we support the current version of the plan as prepared by staff or some other plan, and then recommend how to fund it or the alternatives, as part of the County's overall solid waste system. Staff has provided certain background information attached to this memo to aid our decision-making and discussions.

Issues to be considered:**What are the assumptions underlying the plan as prepared by staff?**

There will be a materials recovery facility (MRF) or other enhanced recycling processing capability to handle the increased volume and types of recyclables. A MRF or other enhanced recycling processing capability is currently scheduled according to the draft ten year financial plan to come on line in July 2006. Expanded curbside recycling would be universal the year the MRF opens. Universal commercial recycling would be phased in following the development of the MRF. Pay-as-you-throw and/or mandatory recycling would follow complete implementation of expanded collection programs. Waste reduction education and outreach would be increased thought the period. Commercial food waste collection would double in tonnage by 2010.

Reserves for equipment to implement the plan and contingency funds equal to two months fund revenue are included in the currently constructed ten-year projection and should be maintained as part of an overall sound fiscal policy for the Solid Waste Management Department.

What is the array of services to be provided over time?

Staff has prepared information, previously distributed, showing in which year each of the services provided as part of the plan are to be implemented. If the SWAB endorses this plan and the timetable proposed, then success of the plan would be evaluated primarily in terms of increases in the waste reduction percentage compared to the 61% goal. The ten-year financial plan envisioned reaching the 61% goal in 2010-11.

The ten-year plan cost summary is attached on a program-by-program basis. In a future piece of work we will provide the funding and the percent waste reduction projected in that year. Only over the course of implementation is it accurate to evaluate total percentage of additional reduction to total funds expended.

What are the implications of implementing the plan?

There are cost implications as described above. There are also political implications, including flow control to ensure income from waste disposal, and potential involvement of UNC, the Towns, the County, and private haulers to ensure their waste management policies are in accord with those needed to implement the plan. How funds are to be raised to finance the plan is critical to the plan's success. The key implication of implementing the plan is that we will reduce waste landfilled and increase progress towards the waste reduction goal.

How can we maintain ongoing programs for disposal of MSW and C&D?

The existing lined landfill for MSW is projected to last until 2009, after which time a transfer station will be built to ship waste from Orange County to an out-of-county landfill. Funding for design and construction of the transfer station is to be determined but is integral to future solid waste disposal needs. The landfill will be closed but post-closure environmental maintenance and monitoring of the site, at a significant cost, is required for at least thirty years. The construction and demolition waste landfill scheduled to be acquired and constructed this fiscal year is projected to be in use for 14 to 20 years at projected rates of use, including recycling of up to 30% of incoming material, mostly wood and metal. Funds for the C&D facility are included in the current budget.

How can the plan be financed?

Tipping fees alone will be insufficient to finance all the proposed recycling programs. The scheduled August 1 work session of the SWAB will include a presentation from the Environmental Finance Center at UNC on the options available to Orange County for financing the plan. Options to be presented and described at that meeting will include, but not be limited to, property taxes, district taxes, availability fees, billing each government for all the services provided to its jurisdiction, and use fees. A key task of

the SWAB will be to determine which mix of fees and taxes and at what magnitude are to be used to finance the plan.

Under current conditions tipping fees finance 90% of the departmental budget, including recycling. As recycling tonnage increases, tipping fees from waste decline, thus the tip fee must be raised, further reducing tonnage. Ultimately this type of system would collapse fiscally; thus additional stable funding sources must be sought if the plan is to be implemented. It is probable that even the current level of recycling could not be supported, long-term, without a significant funding source other than tipping fees. Thus alternate financing should be considered as part of any future solid waste management scenario.

We believe that overall, management of the solid waste system (except waste collections) is best viewed as an integrated system wherein the alternate financing measures are to be used to make up the overall system 'deficit' rather than target the alternate financing of each individual program to provide the total cost of that program. A simple approach provides one tax or fee levied on all members of the system, i.e. all county residents and businesses and other institutions to pay for all services equally. A more sophisticated approach might be to provide funds from the sector that benefits directly from the services. In that scenario, certain program costs, such as administration, would be considered universal, but other costs, such as urban curbside recycling would be ascribed to only that sector.

Cc: Carrboro Board of Aldermen
Chapel Hill Town Council
Hillsborough Town Board

Attachments (3): draft ten year cost projections
table of how waste is now collected in Orange County
waste delivered from each jurisdiction to the landfill

Projected Tonnages Landfilled & Revenues by Jurisdiction 2001-2010 (Does not include privately hauled tonnage, or UNC)

The table below was requested by the SWAB in order to assess the magnitude of the contribution from each local government's waste tipping fees to the overall Solid Waste Management Department budget. The revenues should be compared with the total revenues received at the landfill for both MSW and C&D in any given year to determine the contribution, but keep in mind that this analysis is based on a total tonnage that is 8% lower than that originally shown in the 10 year projections which were prepared well before the end of the 2001-02 fiscal year. In this analysis, tipping fees were increased annually beginning in 2003-04 according to the schedule shown in the 10 year projections.

Jurisdiction	Carrboro (2)		Chapel Hill		Hillsborough		Orange Co.	
	Tons	Revenue	Tons	Revenue	Tons	Revenue	Tons	Revenue
Year								
2001-02 (1)	7,413	\$ 332,645	20,546	\$ 935,567	4,953	\$ 222,800	12,763	\$ 606,728
2002-03	7,423	\$ 333,671	20,557	\$ 924,988	3,961	\$ 222,997	12,586	\$ 560,831
2003-04	7,484	\$ 365,964	20,745	\$ 932,865	5,001	\$ 224,897	12,700	\$ 567,756
2004-05	7,521	\$ 382,715	20,849	\$ 1,060,013	5,026	\$ 255,543	12,773	\$ 632,550
2005-06	7,627	\$ 403,358	21,142	\$ 1,118,230	5,092	\$ 269,581	12,927	\$ 671,954
2006-07	7,169	\$ 393,397	19,872	\$ 1,090,322	4,791	\$ 262,855	12,271	\$ 659,696
2007-08	6,930	\$ 400,919	19,208	\$ 1,111,370	4,631	\$ 267,932	11,954	\$ 677,783
2008-09	6,545	\$ 391,449	18,141	\$ 1,085,107	4,374	\$ 261,602	11,570	\$ 662,577
2009-10	6,548	\$ 391,608	18,149	\$ 1,085,527	4,376	\$ 261,704	11,419	\$ 665,395

NOTES:

- (1). The tonnages shown in 2001-02 are based on those delivered to the landfill from the local government jurisdictions. They are lower than the tonnages shown in the ten year plan because the ten year plan tonnages were projected earlier in the year. The difference is less than 8% and will not affect the overall approach suggested in the plan, although it will affect revenues.
- The Town of Carrboro's projected population in year 10 of this analysis is 19,405. The Town Planning Department projects a 2010 population of 23,917. The governing figure for population projections is the Office of State Planning's ten year projection for Orange County of 140,287, thus any population added to Carrboro would be subtracted from the overall, yielding no net change, county-wide, therefore no net change in the projected tonnages generated.
- The County-wide waste reduction rate per capita, based on the projected tonnages landfilled in 2010 compared to the base year of 1991-92 is 58%. We believe that by adding additional materials to the recycling effort or ascribing a higher effectiveness to the planned recycling programs' diversion, we could reach or approach the 61% goal in this time period using the programs scheduled.

Solid Waste Collection Methods in Orange County Prepared for SWAB June 2002

Jurisdiction	Carrboro	Chapel Hill	Hillsborough	Unincorporated Orange County	(east) Mebane
Type of Waste					
Residential	Town, weekly, roll carts, tax-supported	Town, weekly roll carts, tax - supported	Town weekly roll carts, tax -supported. (90% are fully automated)	Privately contracted, or self haul to tax -supported Solid Waste Convenience Centers (SWCC)	Town, twice-a-week, curbside, own can(s) (max 30 gal.). Flat service fee included on water bill.
Multifamily	Town, twice-a-week, dumpsters, tax-supported, considering change	Town weekly, dumpster first dump is tax-supported, (extra collections for fee)* Some are collected with residential i.e. <6 units?	Town weekly or twice a week in dumpsters, changing from tax-supported to franchise w/ fee paid to hauler. Waste directed to OC landfill	Private	Private, dumpsters
Commercial	Town, twice a week, dumpsters. Tax-supported considering change in 2002-03	Town weekly, dumpster first is tax-supported with extra collections for fee. *Some small businesses collected with residential.	Town weekly or semi-weekly, dumpsters. Tax-supported, changing to franchise w/ fee paid to hauler	Private	Existing small business, 30g cans only. Flat service fee like residential. Dumpsters are privately contracted.
C&D.	Private	Private	Private	Private	Private
Hazardous	Private for commercial/ Public for residents (collection days)	Private for commercial/ Public for residents (collection days)	Private for commercial/ Public for residents (collection days)	Private for commercial/ Public for residents (collection days)	Private. Mebane residents in Orange County can use Orange HHW program?
Bulky goods	Public, variable fees on call	Public, \$15 fee up to three items, on call	Public, tax-supported, no fee	Private, SWCCs or landfill (free)	Public, tax-supported, no fee, on call
Yard Waste	Public, tax-supported for residential, fee for service over 15 minute loading time	Public, tax-supported for residential; fee for renting rollofs	Public, tax-supported, no fee	Private, self-haul to SWCCs	Biweekly, regular collection
Compactors	Private	Private but 2 downtown are serviced by private under contract to town	Private, but will be controlled by pending franchise agreement	Private	None in town

MEMORANDUM

TO: Solid Waste Advisory Board

FROM: Gayle Wilson, Solid Waste Management Director

SUBJECT: Current and Future Projected Recycling Services

DATE: December 12, 2002

At the November SWAB meeting a member requested a summary of the commercial recycling service we now provide and what we plan to provide in the future with implementation of the plan. The summary of all current recycling services is shown in Table 1 below included as a reference tool. Future services are shown in Table 2 with a narrative note pertaining to the general approach to providing widespread commercial/institutional general recycling service.

General commercial/institutional recycling service details have not yet been specified. If the solid waste management plan implementation is endorsed by the Board of Orange County Commissioners or if staff is given direction by the Board to provide commercial recycling details, we will be able to devote significant staff time to this effort. Until that point in the process, we will rely on a generalized description of an approach to providing these services, while being more specific in the details for expansion of those services we are more familiar with.

Table 1 Current Recycling Services by Orange County Solid Waste Department

Type	Units Served	Tons Collected in 2001-02	Contract or In-House	Comments
Commercial Food Waste	20 from 15 sites	752	Contract	Plan to add grocery store chain in 2002-03
Commercial Cans & Bottles	100 from ~65 sites	463	In-house	Add as possible, also collect plastic bottles
Urban Curbside	16,400	3,302	Contract	Weekly collection. Add about 400 units per year. Universal service
Rural Curbside	9,200	1,056	Contract	Bi-weekly collection. Add 300 Units/year. Over 40% of units served
Multi Family	14,500 (from 210 sites)	919	Contract converting to in-house	Will convert in January 2003. Projected \$100,000/year savings. Over 90% units served
Drop Off sites	11	4,892	Adding new site at Meadowmont this year	Wal Mart site in Hillsborough may be eliminated 02/03/, decision pending. Planning to add Southern Village site 04-05
Hazardous wastes: oil, oil filters, batteries, HHW,	Seven public, six drop-off sites plus monthly	129	Combined contract and in-house	Permanent electronics collection January 2003, HHW expands to 4 days/week. Feb 2003. Anti-freeze begins at drop off sites spring 2003

computers	HHW			
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Future Program Implementation

Full program implementation takes place over the next seven years, culminating in 2010-11 with a program of universal recycling service in all sectors - residential, multifamily and commercial/institutional. Materials processing will take place at a centralized facility. Recycling collection of C&D waste is private. Some is processed publicly at the Orange County landfill; we anticipate the majority to be privately processed.

Residential recycling will be similar to the current system, except using two bins instead of one. Multifamily recycling will remain similar to its current method, using carts at dumpster sites at apartment complexes. The biggest change is scheduled for the commercial/institutional sector. Recycling service in this sector is now limited to glass, cans and plastics picked up separately in roll carts for about 100 businesses and food waste picked up in carts or dumpsters, depending on volume, from another twenty. Government office recycling is collected from Carrboro, Chapel Hill and Orange County offices in carts.

Future general commercial/institutional recycling will vary greatly depending upon customer needs. Our projections for tonnage diversion, service needs and budget for upcoming program expansions are broadly drawn using the following assumptions:

Commercial general programs are phased in over a three year period beginning 2007-08 with an assumed 25% penetration into this sector and the purchase of the first of four trucks and a series of rollcarts. In the following year, we expect an additional 50% penetration and in 2009-10 complete delivery of recycling services to the commercial/institutional sector. Collection details are to be determined as the programs are developed. It is likely there will be some combination of dumpster, roll cart and curbside type service. It is possible that the current service for recycling corrugated cardboard will be integrated into the mix of general commercial/institutional recycling services. The key assumption is that recycling services will be provided to all commercial/institutional establishments, except the University.

Table 2 Recycling Services by Orange County Solid Waste Department Projected for FY 2010-211

Type	Units Served	Tons Collected in 2010-11	Projected as Contract or In-House	Comments
Commercial Food Waste	40 to 50 range	1,600	Contract	Double from current level. Est. to divert 28% of possible commercial food waste
Commercial Cans & Bottles	150 -200 range	688	In-house	Route will be integrated with multifamily service for efficiency. May serve smaller generators. Increase of 50% in tonnage to 27% of commercial cans & bottles
Commercial General	1,600	4,200	In-house	Services not yet specified, plan to use commercial style front loading trucks with carts and/or dumpsters. Expect to recycle 30% of commercial waste excluding cans, bottles and food.
Urban Curbside	20,560	10,996	Contract	Separate bins for paper and containers. Weekly continued.
Rural Curbside	22,005	7,139	Contract	Separate bins for paper and containers. Biweekly continued. Universal service by 2006-07
Multi Family	16,600	2,703	In-house	Universal service by 2003-04. Convert to two-sort (fiber/container) system in 2006-07.
Drop Off sites	13	6,465	In-house	13 th site not yet chosen
Hazardous wastes: oil, oil filters, batteries, HHW, computers & other electronics	7, 6 convenience centers and one HHW	605	Combined in-house and contract	Assumed to be same as current.