

rality—provide *no* recycling services, and 28 counties provide only minimal services. These latter counties offer only one or two services or spend \$10,000 or less on recycling. The survey clearly indicates that in *most* counties—those offering minimal services and those offering none at all—there is little opportunity for citizens to recycle. Even among the 34 counties with established programs, the level of activities varies greatly. Recycling budgets total at least \$100,000 in only 11 counties—Alamance, Buncombe, Burke, Caldwell, Catawba, Durham, Gaston, Mecklenburg, Onslow, Orange, and Wake.

City and county administrators and sanitation officials were asked how many years of useful life remained in their current landfills, whether their

county or municipality paid a full-time recycling coordinator, how much money was budgeted for recycling during the past two years, what recycling activities they engaged in, and what revenues were generated through their recycling programs. (See Table 3, pp. 20-26, for a complete listing of the survey findings.)

One indicator of a strong commitment to recycling is the employment of a full-time recycling coordinator. According to the Center survey, 18 counties and six cities have a paid, full-time recycling coordinator. Mecklenburg has a recycling division manager who supervises a staff of 23 in an aggressive and highly visible program that includes curbside and drop-off center collection, a salvage operation, and processing of materials for

Mecklenburg County: An Urban County as a Model Manager of Solid Waste

Local government officials looking for a solid waste management success story need look no further than Mecklenburg County. "Our philosophy in this county is that we have an integrated waste management system," says Fred Remington, recycling division director. "Built into the system is a series of options for waste disposal. The first option in this community is recycling."

Residents and businesses in this densely populated south Piedmont county on average produce an 1,800-ton mountain of garbage daily, enough to load a 10-mile line of half-ton pickup trucks. Mecklenburg, through a contractual agreement, is responsible for disposing of the waste of six of seven municipalities within the county, including that of Charlotte, the state's largest city and the producer of some 80 percent of the county's waste. This responsibility for disposal means operating the county landfill, which brings with it all the political headaches and expense of siting a new landfill when the old one is filled. The county's current landfill has two years of life remaining. A 574-acre site has been purchased for a new

landfill near the South Carolina border, but South Carolina is suing to block its opening. It is this burden of siting new landfills that during the past decade has propelled recycling from a marginal fundraising scheme for schools and civic groups to an integral component of a model waste management system.

In January 1990, Charlotte will go city-wide with curbside collection of recyclables. The city has set aside more than \$2 million for this expansion, by far the state's most generous budget for recycling. The expansion is the fruit of a successful county pilot program that currently serves about 16,000 homes. Under this program, residents toss aluminum, glass, and plastic containers into 20-gallon bins, then top the bins off with newspapers and place them at the curb for weekly pickup. Remington says some 70 percent of residents in neighborhoods served actually participate by setting out their bins for collection at least once a month, and about 36 percent set out their bins every week. City collectors separate the materials at curbside and haul them to a county-operated

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market. (For more on recycling in Mecklenburg County, see sidebar, page 15). The Town of Chapel Hill operates an extensive recycling program with drop-off facilities throughout Orange County and recently awarded a contract to expand its curbside collection services. The towns of Newton and Long View in Catawba County offer curbside collection through a private contractor. Other metropolitan areas in North Carolina are planning large recycling programs. Raleigh re-

cently launched its pilot curbside program, and Wilmington also plans a curbside program.

Rural counties are tackling recycling on a smaller scale, but in some cases with equal enthusiasm. Chatham County's recycling program has grown from a one-Saturday-a-month pilot project into a full-fledged program with four permanent drop-off sites for recyclables and a full-time recycling coordinator, Judy Ingram. Ingram says the county collected 61,000 pounds of newspaper,

Mecklenburg County, *continued*

facility, where cans are flattened, glass is deposited into roll-off containers for shipment to buyers, and plastic is granulated.

Curbside programs operate in the much smaller municipalities of Huntersville, Cornelius, and Davidson, and Remington says Pineville and Mint Hill, by signing the county's waste management plan, also have committed to provide curbside recycling. The town of Matthews has contracted with a private hauler for waste collection and disposal. Besides the curb-side program, Mecklenburg maintains 10 drop-off boxes for recyclables and diverts appliances and metals such as aluminum, copper, and brass through a salvage operation at the county landfill. County workers also operate two tub grinders at the landfill, which grind scrap wood and yard waste into mulch sold for \$5 a cubic yard and used for landscaping. "We made \$27,000 last year just on our relatively small mulch generation," says Alan Giles, a county resource recovery specialist. County residents currently must bring yard waste to the landfill, but those served by curbside recycling programs also will be able to place yard waste at curbside beginning in July 1990. "Everyone is recycling everything they can—everything that is economically viable," says Remington, adding that the next target is the commercial sector.

Residents who participate in the curbside programs have little incentive other than civic mindedness spurred by an ongoing public relations campaign. But residents and commercial haulers who bring waste directly to the

landfill do have an incentive. The landfill charges a tipping fee designed to recoup waste disposal operating costs. Small load dumpers can get the fee waived or reduced by bringing recyclables to the landfill. A resident bringing a trunk full of garbage in his car, for example, would have to bring along three bags of newspapers for recycling or pay \$5 for dumping. Commercial haulers pay \$23 a ton for dumping, so any material that is recycled rather than dumped results in a direct savings for the hauler.

Mecklenburg's waste management strategy also includes a trump card that puts it well ahead of the game compared to most North Carolina counties—a waste-to-energy incinerator that already consumes all of the backyard garbage produced by the city of Charlotte—about 190 tons a day. Steam produced through incineration is used to heat buildings on the campus of the University of North Carolina at Charlotte in the winter, and steam-generated electricity is sold to Duke Power Company in the summer. County officials say the incinerator produces five megawatts of electricity a day—enough to power 20,000 homes. Ash from incineration currently is hauled to the county landfill, where it is being stored until the county gets a permit for its specially engineered landfill.

Remington says waste-to-energy ranks second in the county's three-tier management hierarchy for non-hazardous waste, and landfilling ranks last. "If it has no economic value and no energy value, then you have to landfill it," says Remington. Mecklenburg traces its solid waste management program to planning efforts that began in the early 1970s.

glass, and aluminum during June 1989. (See sidebar, page 18, for more on recycling in Chatham County.) Watauga County has recycled about 250 tons of waste annually through its buy-back center for aluminum, glass, non-ferrous metals, and paper. "Our little system has worked well, and it hasn't been too costly," says recycling coordinator F. Mark Combs. "We believe in recycling, but at the same time we are pragmatic about the system's limitations. Labor, commodities mar-

kets, and public participation are some tough obstacles."

Nonprofit groups coordinate recycling in many areas of North Carolina. The N.C. Recycling Association, founded in 1988, already claims more than 200 members, including concerned citizens, industries, environmental groups, and solid waste professionals. The group promotes recycling and provides technical assistance to both government and private recycling efforts.

The county's experiment with recycling started modestly in 1977 with a Charlotte Women's Club proposal for four drop-off sites at public schools. Former County Commissioner LaFontaine "Fountain" Odom, now a state senator (D-Mecklenburg), championed the hiring of a part-time recycling coordinator in 1981. From there the program blossomed into a national model with a \$1 million annual budget and a staff of 23.

Although Charlotte now collects recyclables, the county still holds responsibility for processing and marketing these materials. The county—faced with heated neighborhood opposition to its site—scrapped plans for a high-volume materials recovery facility to process the surge of recyclables anticipated from curbside expansion. Instead, the county contracted with a private firm, which will open its own facility. Mecklenburg will pay the contractor \$7.50 a ton for accepting recyclable materials, but officials say that's cheaper than the \$7.80 a ton it would cost the county to operate a processing center.

Mecklenburg has set a goal of diverting 30 percent of its solid waste from landfills by 1994. That exceeds the state goal of 25 percent set in the Solid Waste Management Act, and the county's long-range plans are much more ambitious. By the year 2006, the county hopes to recycle 30 percent of its waste and incinerate 40 percent. That would mean burying only 30 percent of the county's waste in sanitary landfills. "We think it's realistic to assume that 30 percent of waste will always have to be landfilled because we believe at least 30 percent of the waste stream is innocuous, non-combustible, and not economically

recyclable," says Remington.

Comparing those projections to the present, it becomes evident that even Mecklenburg—among the state's best waste managers—has a way to go before its problems are solved. The county currently captures about 10 percent of its waste through recycling and salvaging, and burns another 10 percent in its incinerator. But the county plans to add a second, larger incinerator, to expand recycling even further by targeting multi-family residences and commercial establishments such as restaurants and bars, and to open up a 35-acre facility for producing mulch and compost from wood and yard waste. Remington says the county hopes to divert as much as 18 percent of its current landfilled waste to this facility, 12.5 percent of which could count toward the state's 25 percent waste diversion goal. The remaining 12.5 percent would be achieved through recycling and salvage, Remington says. "I'm confident we will be able to make the waste management goals," says Remington.

Although he concedes that Mecklenburg has gotten a head start, Remington says the state's 25 percent goal is achievable for most North Carolina counties. The key to success, he says, is providing the financial incentive to recycle—an aggressive tipping fee at the landfill. "The challenge is particularly great in an area where there is no or very little tipping fee in the disposal area," says Remington. "Where there is no charge, there is very little economic incentive to recycle. Some incentive *has* to be developed to encourage people to recycle."

—Mike McLaughlin