

# Community Cleanups:

## *Models for Local Government Recycling and Waste Reduction*

### **Overview**

Local governments could reuse and recycle much of their bulky goods by implementing the types of programs and activities highlighted in this model study. Programs that focus solely on reuse and recycling of materials generally are able to divert 90 percent or more of their materials from landfills. Programs that are combined with trash cleanups are able to divert 50 to 60 percent of their materials from landfills, if well designed and operated.

### **Program Characteristics**

Community cleanup programs are organized to collect materials that are not easily placed in garbage or recycling containers. Typically, cleanup programs address the following “bulky goods,” depending on what materials are routinely collected by local recycling programs:

- White goods (for example, refrigerators, stoves, ovens, dishwashers, washers, dryers).
- Brown goods (for example, computers, CRT monitors, printers, fax machines, television sets, radios, microwave ovens, telephones, and other small appliances).
- Wood (for example, chairs, tables, cabinets, bookcases, bureaus, armoires, desks, and large green waste items such as prunings and stumps).
- Used building materials (for example, lumber, bricks, doors, windows).
- Upholstered furniture (for example, couches, chairs).
- Mattresses and frames.
- Carpets and padding.
- Hardware (for example, plumbing fixtures and parts, and electrical supplies).
- Housewares (for example, windows, lamps, dishes).

- Toys and sporting goods (including bicycles).
- Garden equipment and supplies.
- Auto parts.
- Paper (for example, large boxes, magazines and books).
- Textiles (for example, clothes, towels, linens, blankets).

Most communities provide some type of cleanup service as part of their regular garbage and recycling collection system. Usually these are curbside collection services or special events one to four times per year. (The materials are either collected at curbside and/or dropped off at a central location). Increasingly, communities are seeking to reduce, reuse, and recycle as much of the materials collected by these programs as possible.

### ***Curbside Collection Programs***

There are generally two types of curbside collection services: on-call service and special events.

**On Call Service.** Communities collect bulky goods within one to seven days of a call for such service. Some communities provide this service free for the first two to three items, charging a fee for additional items or additional collections. This service is often very popular because the timeliness of response is important. Often residents are involved with a cleanup, redecorating, or remodeling project. Or they may be moving, so they do not want a long wait to dispose of an item.

In the past, thrift stores and charities such as Goodwill Industries and Salvation Army also provided pickup service. However, in many communities, it is no longer economic for these thrift stores or charities to provide this service by themselves. Some communities are now contracting with these charities (either directly or through their waste hauler) to help with these services.

In San Francisco, Calif., the city established a new on-call program. A limit of five bulky items may be collected. However, “reasonable” amounts of the following materials are accepted for recycling:

- Properly prepared scrap metal.
- Yard waste in paper bags, cardboard boxes, or tied in bundles less than four feet long—no plastic bags.
- Motor oil in a plastic jug with a screw-top lid.
- Oil filters drained and placed in a sealed, leak-proof plastic bag.
- Lumber, carpet, or similar items tied in bundles no more than four feet long.
- Broken appliances with refrigerator doors removed for safety.
- Scrap metal items placed in boxes or tied in bundles less than four feet long, with a maximum of 60 pounds per item or bundle.

This program is not for trash, items that fit inside a garbage can, items collected in the curbside recycling program, or items that could be donated to charity. The program brochure refers residents to the phone book listings for thrift shops or requests that they call the city for a “Residential Reuse and Recycling Directory.” Residents can also visit the city’s Web site for more information on donations ([www.sfrecycle.org/](http://www.sfrecycle.org/)).

Residents must call ahead to schedule an appointment for pickup. Their garbage account is then verified as active. Residents then tell customer service staff exactly what items are to be collected. Each household is allowed two collections each year. Residents are asked to group materials by type and place them at the curb by 6 a.m.

The promotional brochure stresses that residents are held accountable for all materials set out at their address, regardless of who set them there. Program limits are to be strictly enforced. Citations will be issued and fees will be charged if program rules are not followed.

**Special Event Cleanups.** Communities collect once to four times each year, often as a spring and/or fall cleanup. Sometimes these events coincide with other recycling campaigns and community events (see below).

Curbside collection special events have the potential of mixing materials together so that they cannot be reused or recycled. Special efforts could be made to target different materials on different days to address this concern (for example, one day for electronics pickups, another day for furniture).

Charities and reuse businesses have also been asked to help address this concern.

In Fremont, Calif., the waste hauler gives bulky goods collection route maps to CURA, a nonprofit organization. CURA staff precedes the waste hauler’s truck to collect anything of value that can be reused or recycled.

Similarly, Urban Ore has for years provided curbside pickup of bulky goods throughout Berkeley. The organization coordinates with the city on bulky goods pickup days.

Berkeley’s neighborhood cleanup is organized as ten events in different neighborhoods each week. The city provides:

- A coupon for one free load of compostables to be delivered to the transfer station.
- Friday collection of reusable and repairable items (collected for East Bay Depot for Creative Reuse) and mattresses and sofas (collected for Total Recycling Systems).
- Saturday collection of up to 4 cubic yards of plant debris and unpainted wood and up to 4 cubic yards of mixed trash.

There is a \$25 charge for setouts above the 4 cubic yard limit. The city scheduled this cleanup in the university housing area to coincide with student move-out week and made special arrangements with Goodwill to obtain reusable items. The city also provided extra cardboard collection services for the student move-out and coordinated publicity for the event with the university. The university also did a book exchange.

Emeryville, Calif., also uses East Bay Depot to collect all reusables during its bulky waste cleanup days. East Bay Depot services are generally paid for by grant funding (for example, Alameda County Waste Management Authority).

### ***Drop-Off Facilities***

**Charities and Thrift Stores.** Many communities contain a wide variety of thrift stores, charities, and salvage businesses that serve the community.

These businesses usually accept materials from the public whenever they are open. This is an invaluable service that keeps valuable materials out of the landfills and helps communities meet the goals of the Integrated Waste Management Act (AB 939, Sher, Chapter 1095, Statutes of 1989 as amended [IWMA]). Communities are increasingly seeking out these locations to promote them and partner with them in reuse programs.

The City of Vacaville, Calif., has a program called “Give Winter Garb a 2nd Chance.” For several years, the Asian Pacific Islander Club at Wood High sponsored an on-campus coat drive. In 1998, the city became involved and expanded drop-off locations in town. The city also arranged for a dry cleaner to donate cleaning services. That year, the program collected about 600 coats and jackets and distributed them through the local Christmas Wish program and to holiday parties at the city’s three neighborhood centers.

In 1999, the program was refined and again expanded. Four dry cleaners participated, both as drop-off locations and to provide cleaning and laundering services. Ads appeared in the local newspaper and at the 16-screen theater, both of which donated their services. Local students passed out flyers at shopping centers on Thanksgiving weekend. Vacaville Sanitary Service collected labeled bags for one week on their regular routes. California Medical Facility also contributed laundering services.

The city collected coats, jackets, sweaters, blankets, and other items. The students sorted and categorized all the items. Again distribution took place through the Christmas Wish program and the neighborhood centers. The advertising and work with the students stressed reuse as well as giving to those in need. With business donations, the city will be awarding an environmental scholarship of \$250 to one of the participating students.

The Give Winter Garb a 2nd Chance program collected more than 5,000 items. The leftover clothing after the distribution in Vacaville went to the nearby town of Dixon and to Mission Solano, which distributes food and clothing throughout Solano County.

**Solid Waste Facilities.** Transfer stations, material recovery facilities (MRFs), and landfills all provide opportunities for bulky goods to be

recovered instead of burying them. The public is particularly supportive of these programs if they can avoid paying tipping fees when they donate bulky goods for reuse or recycling.

A good example of this is the Last Chance Mercantile in Marina, Calif. The Last Chance Mercantile is a place where reusable materials get their last chance before ending up in the Monterey Regional Landfill.

Constructed together with a major MRF in 1996, the Last Chance Mercantile includes a room for processing materials for resale; indoor space for displaying items such as books, clothing, sporting goods, household items, and furniture; office space for the store manager; and restrooms. Building materials, plumbing fixtures (for example, tubs and sinks), patio furniture, and other items not affected by the weather are displayed outside. (See related model study by the California Integrated Waste Management Board in this series titled “Last Chance Mercantile: A Model for Local Government Recycling and Waste Reduction.”)

**Other Drop-Off Sites/Reuse Centers.** The City of West Sacramento, Calif., conducts a drop-off program that has obtained remarkable results. In three of the last four years of its beautification week program, West Sacramento diverted more than 60 percent of the materials collected for reuse or recycling. The program recycles yard waste, concrete, tires, mattresses, metals, and cardboard. An appliance repair company takes any usable appliances, and the rest are recycled. They set out for swapping any other usable items.

Thurston County, Wash., has held community recycle days biannually since 1992. At these events, they accept tires, appliances, scrap metal, bicycles, lawnmowers, and flowerpots, but no mixed waste. Some items are free to recycle; others carry a nominal fee. The county charges \$1 per tire, and a tire recycling firm collects the tires to use for retreads or to make chips for fuel. They charge \$5 for each washer, dryer, stove, and water heater, which are recycled as scrap metal.

The \$10 charge for each refrigerator does not cover the actual cost of recycling this item (about \$30) due to the costs involved with draining and reclaiming the coolant. The \$5 fees for the other white goods help cover that cost difference. Other items are taken for free. Scrap metal gets recycled,

although some people will take reusable/repairable items (including bicycles). One individual takes lawnmowers to repair and resell. His wife has a nursery and uses the flowerpots.

The Thurston County program also has a Goodwill trailer to accept reusable household items. They recently started accepting non-recyclable glass, which is used by a man who makes colorful “glasscrete” products. At the spring 2000 event, a company will be present to accept some computers and electronics.

To make the recycling day events as accessible as possible to all county residents, two events are scheduled (one in the north part of county and another in the south). One event is held at the county fairgrounds; the other, in a more rural part of the county.

The ReUse Center in Ann Arbor, Mich., will allow residents to request items to be saved for them. If someone stops by and the store does not have what they are looking for, the store puts their name and number on a “wish list” and they call if it comes in.

**Dormitory moveouts.** If there is a college or university in a community with substantial student housing, large quantities of bulky goods are generated at both the beginning and the end of the semester. Typically there is a six- to tenfold increase in disposal at the end of the school year, but in the past this material did not get reused or recycled.

That trend is changing. Increasingly, colleges are providing extra capacity for their recycling containers and collection system at the beginning and end of the school year. At the beginning of the school year, this is targeted to the large amounts of corrugated boxes that are generated.

At the end of the semester, there is a much wider range of bulky goods and recyclable materials, including bookshelves, mattresses, couches, chairs, tables, bicycles, books, beds, school supplies, and used building materials (for example, lumber, cinder blocks, and bricks). These are generally items that students may not want to take home at the end of the school year.

The University of California at San Diego increases collection schedules for recycling and trash during move-outs. They make sure that all

collection containers are empty at the beginning of the week. The university recycling program works with the resident assistants to encourage students to recycle and donate items instead of throwing them away.

Dormitory residents see posters in the halls about reusing and recycling bulky items, and they receive flyers with the message “DONATE IT!” Most of the housing areas designate a location in a lounge or laundry area for materials to be donated. Every housing area picks a different charity to help. The rule is: if you can reuse it, donate it.

Unfortunately, bulky items show up everywhere. Most of the time the university recycling crews pull them out of waste rolloff containers and put them aside for reuse. Recycling tonnages increase about 30 percent during move-outs.

Last year UC San Diego offered an organized “yard sale” for students to sell their unwanted items before the campus move-outs. Anything not sold was donated to a local teen shelter. The university set out donation boxes for non-perishable food items, and they designated special locations to dispose of unwanted household hazardous wastes. The university recycling program promoted the event and reserved parking lots for this purpose. Unfortunately, not many students participated this first year. They hope to do better in the future.

In Gainesville, Florida, the City of Gainesville conducted a community cleanup and giveaway program at the end of the school year. They collected furniture and household items from students and the community-at-large using charities and city and county staff.

The items were stored in a livestock pavilion on the University of Florida campus. They advertised the giveaway for 9 a.m., but people began lining up as early as 6 a.m. They collected more than 21 tons of materials that were all reused or recycled. It was a huge success and received great publicity.

Another year, Gainesville provided the furniture and household items to the Salvation Army for them to distribute. Also, the Alachua County Rural Collection Centers for Solid Waste and Recycling allow residents to drop off bulky items for either disposal or to become part of a “swap shop.”

These items are set under a canopy and the public can take whatever they like.

**Community Exchanges.** The City of Seattle, Wash., has established a community exchange. Residents are encouraged to bring their reusable or repairable items to give away at a neighborhood site organized by the city. Residents may also find items they want and take those away for free. The city staffs the exchange with volunteers as much as possible. Acceptable items include:

- Reusable furniture (for example, sofas, chairs, tables, bookcases).
- Working household appliances and electronics (for example, vacuums, TVs, radios, and stereo equipment).
- Reusable construction materials.
- Reusable housewares (for example, plates, kitchenware, decorations).
- Clothing and textiles (clean and dry).

Items not accepted are:

- Yard waste, food waste, recyclable glass, cans, or paper.
- Tires, car batteries, or concrete.
- Paints, oils, or solvents.
- Pressurized cylinders.

Residents must bring their notice of the event flyer as a “pass” and a proof of residency to participate; but they can participate only on the designated days. Residents are also provided the opportunity to dispose of larger unwanted items that may not be reusable or recyclable at these locations. The city contracts with King County Conservation Corps to fill dumpsters and haul away waste that is also brought to these sites.

These exchanges replaced the city’s previous program, in which residents placed bulky wastes on the curb to be picked up on a certain day. Problems occurred when people from inside and outside the city came and illegally dumped trash on residents’ lawns. The city is much happier with the new system.

**Habitat ReStores.** More than 50 Habitat for Humanity affiliates across the United States and Canada have established ReStores, including five

in Southern California. Another one is planned for the Sacramento area soon.

A ReStore is a thrift shop that recycles quality surplus, new, and used building materials at a fraction of retail prices. Many people wish to donate used items to Habitat, but Habitat can’t accept anything for Habitat Homes that isn’t brand new. ReStores were established to sell these items to help fund the construction of Habitat houses in the community. ReStores also give others in the area a way to improve their homes at a reduced cost.

All materials sold by Habitat ReStores are donated for that purpose, often from contractors with excess supplies. Items also come from demolition crews salvaging reusable materials or from the general public. ReStores give contractors and rental managers a way to cut their costs when renovating or demolishing buildings while recycling for a great cause.

The North Hollywood ReStore is also developing a tool “library” where people can “check out” the tools they need to do their work.



ReStores are good examples of the types of thrift stores for used building materials now appearing throughout the state. Communities could work to promote these operations and encourage contractors and homeowners to use them rather than disposing of these materials.

Habitat ReStores are currently located in California in the following communities:

- Tijuana/San Diego (Lemon Grove)

- San Fernando/Santa Clarita Valley (North Hollywood)
- Ventura County (Oxnard)
- Riverside (San Bernardino)
- Orange County (Santa Ana)

### ***Examples of Product Reuse and Recycling***

Municipal recycling coordinators do not fully understand some of the market dynamics of bulky goods because this has been a small portion of their responsibilities in the past.

However, with increased attention being given to reuse, recycling, and composting in all aspects of the waste stream, municipal recyclers are trying to better understand and expand the markets for these products. These efforts are often in partnership with charities and the private sector that have been operating for a long time in this arena. Some of the products in which significant progress is taking place are highlighted below.

**Appliance Recycling.** Appliances include washing machines, dryers, dishwashers, ranges, air conditioners, refrigerators, freezers, and water heaters. By weight, the typical appliance consists of about 75 percent steel. This steel is recyclable, and it is being recycled today. The 1998 appliance recycling rate was 72.1 percent.

As of 1998, 18 states enacted landfill bans for appliances, requiring them to be recycled. In California, all oil must be drained from appliances and chloroflourocarbons (CFC) need to be removed from refrigerators before they can be landfilled.

St. Vincent dePaul is probably the most active charity working with appliance recycling in California and the West Coast. Communities seeking to expand appliance recycling should contact St. Vincent de Paul, along with local metal recyclers, to explore opportunities to expand these efforts. Both are listed under “scrap metal” in local yellow pages.

The City of Alameda, Calif., has been recycling white goods since 1993. They have used Waste Management, ARCA, and now Freon Free for the pickups. In the past two years, Freon Free has added some small appliances and electronics (brown goods) along with scrap metal. For several years, the city also used Eagle Scout candidates to

perform the public service of helping the elderly or handicapped persons get their large items out to the curb for collection.

**Couches and Mattress Recycling.** Couches and mattresses are among the more difficult bulky goods to reuse and recycle. If items are in good shape, some thrift stores and charities will accept these on a limited basis. However, due to the high volume of these products discarded annually, most thrifts and charities have more than they can handle.

Each year, 30 million new bedding units are sold in the United States and about 4 million used/refurbished units are sold (not counting garage sales). There are at least seven major firms in California producing about 300,000 bedding units a year from old bedding, mostly in the Los Angeles area. Delta Bedding in Sacramento also does this.

A new company was formed in the Alameda County area in the late 1990s to address this problem: Total Recycling Systems. Total Recycling has been picking up furniture items (mostly couches and bedding products) since 1996. They have worked continually with the cities of Berkeley and Alameda since 1996, and they also collected one year for the Castro Valley Sanitary District.

The collection program has varied depending on the processing facilities available. Some materials went to an Oakland facility and some went to a Dublin facility (a prison project, from 1996 to 1997). For the last two years (1998–1999), materials went to a temporary outdoors site at the Berkeley Transfer Station. Beginning in 2000, materials are being delivered to their new Richmond facility. This new facility is 4,500 square feet at the Amigo Bag and Lining Company located at 740 Market Avenue, Richmond, Calif.

Total Recycling diverts about 90 percent of the materials from the dismantled products. About 60 percent is recycled (into steel, urethane, some wood, cotton batting, and fiberfill stuffing). For example, cotton batting is recycled into body punching bags, and urethane foam is made into carpet underpadding.

Some of the material received (about 25 to 30 percent) is composted (for example, sisal pad,

some of the wood, some of the cotton). Still going to the landfill is shoddy pad, some cover cloth materials (although they are exploring new markets for rags and drop cloth materials), and miscellaneous trash. Total Recycling has the world's largest collection of used couch parts.

Total Recycling also sells quality interesting older furniture to upholsterers who sell to clients favoring this type of vintage product. They also build wooden foundations out of old box springs and some couch wood for sale to Estates Mattress. Estates Mattress recovers and uses these with their renovated mattresses.

Total Recycling Systems charges rates based on the number of units they collect curbside on a specific agreed-upon date. Their rate is about \$20 per yard, or roughly \$10 per mattress and \$20 per couch. On a cubic yard basis, they are about the same as local landfill tipping fees. On a per-ton basis, they are about twice as expensive.

Total Recycling also has an on-call service during the rest of the year. The company charges \$20 for a house call and then a small amount above that, depending on the items collected.

Furniture can be dismantled; it just takes time. The company is now considering using power tools (mostly cutting tools) to speed the process.

The City of Berkeley Transfer Station began diverting all bedding products to the Total Recycling facility in Richmond beginning in February 2000. Total Recycling plans to receive some of Estates Mattress Company's "junkers" (non-rebuildable bedding units, as opposed to "keepers," or used mattresses that can be rebuilt).

St. Vincent dePaul is also trying to raise money to build a mattress shredder and recycling facility in East Oakland.

**Textiles Recycling.** Municipal recycling programs are just now adding textiles to these programs. Industry sources estimate that only 15 percent of textile materials are being diverted from the waste stream for recycling today. By contrast, more than 90 percent of the materials already collected by the textiles recycling industry is recycled.

Demand for high-quality, low-cost used clothing, industrial wipers, fiber, and related materials have made this a profitable industry. Industrywide sales are estimated at \$700 million. There are about

2,000 companies diverting 2.6 billion pounds of postconsumer textiles from the waste stream. More than 60 percent of these materials are exported. According to the U.S. Department of Commerce, used clothing is this country's eighth largest export item behind automotive parts and wheat.

Most textile recycling firms are small, family-owned businesses. The majority of these companies employ 35 to 100 people. These recycling firms are usually inner-city employers that hire people from the nearby communities who might otherwise be unemployable. Many of the workers are unskilled, semi-skilled, or physically challenged.

Textiles comprise about four to six percent of the residential waste stream. Materials include clothing, drapes, towels, sheets, blankets, tablecloths, belts, handbags, paired shoes, socks, and clean rags.

Charities collect the majority of used textiles in the U.S. Some organizations use a drop-off center, drop-off box, or telephone routing system where a truck will collect door-to-door on a regular schedule.

Some of the larger nonprofit collection agencies in the U.S. are Goodwill Industries International, Inc., the Salvation Army, and St. Jude's. These three organizations are the major collection forces within North America and have established drop-off centers. Proceeds from these operations are used for their charitable and rehabilitation efforts to help the disadvantaged. Because they collect far more than they can sell in their stores, the excess materials are sold by weight to individual textile recyclers.

Some organizations set up telephone banks to call residents in specific neighborhoods and ask them to set their items on the front porch for pickup on a specific date. Porch pickups help discourage scavengers from stealing or damaging the materials.

Drop-off boxes are commonly used in supermarket and shopping center parking lots. People bring their items to the box at their convenience. These boxes are sponsored by a charity or can be placed there by a private business. Over the years, the biggest problems with collection boxes have been

pilferage, people placing garbage in the boxes, and the failure of the sponsoring organization to make regular pickups. Increasingly, organizations are switching from drop-off boxes to staffed collection centers.

As cities and counties are forced to meet mandated recycling goals, textiles are becoming more attractive. One reason for this is that there is constant demand for used clothing. The revenue received for these goods helps offset the expenses for collecting other recyclables. In some communities textiles have helped offset collection costs of 10 to 20 percent.

Many communities are now adding textiles to curbside recycling programs to meet their recycling goals. Textiles are typically placed in a separate compartment on curbside recycling trucks or picked up with the paper. In some cases, the customer will be provided with a special plastic bag for textile collections (or asked to place textiles in their own plastic bag). Bags are either dropped off at each home or distributed through schools, grocery stores, or other methods. Ideally, textiles should be brought indoors for sorting, baling, and loading into trailers.

Unlike other recycled materials that are collected at curbside, textiles must be kept dry at all times during the collection process. Natural fiber textiles will decompose or become moldy if wet. Although rare, such decomposition can generate heat that could lead to spontaneous combustion and cause facility fires when stored in baled form. That is why clothing must be kept clean and dry during the collection process.

Textile recyclers pay from \$80 to \$150 per ton for the materials. Clothing that is unsuitable for wear because it is too worn, stained, or torn is cut into industrial wiping cloths. If materials are not suitable for wipers, they are sent to a fiber converter. Here the clothing is chopped, ripped, and torn to return it to a fibrous state.

From this blend of fibers comes high-quality carpet underlay for commercial and residential use, mattress filler, stuffing for pillows and cushions, insulation for housing, deck panels, and sound-deadening materials for the automotive industry. Every automobile contains nearly 80 pounds of this material. It can be found in the door panels, roof liner, under the hood, and in the trunk.

Carroll County, Iowa; St. Paul, Minn.; San Jose, Calif.; and Somerset County, N.J., are examples of municipalities that have curbside collection of textiles in place. Aberdeen, Md., and the Solid Waste Authority of Palm Beach County, Fla. collect textiles at curbside once a year.

Calvert and Montgomery counties, Md., and Cobb County, Ga., have added textiles to a long list of materials accepted at drop-off sites. Some of these municipal programs have partnered with local charities and nonprofit organizations. The City of Los Angeles is working with the Salvation Army in select neighborhoods to collect textiles.

Communities of all sizes are now exploring new ways to collect these materials economically. Communities should work with local charities and thrift stores that collect textiles to determine the local needs and best ways to reuse and recycle those materials.

**Used Building Materials.** Used building materials include lumber, bricks, doors, windows, and plumbing fixtures (for example, tubs, showers, and sinks). Many of these materials have a high value if properly recovered and distributed. Much of the material is increasingly coming from “deconstruction” or “soft” demolition projects.

Montgomery County, Md., has a program called “Don’t Dump, Donate.” The county works with a building materials recycling nonprofit called The Loading Dock. Items are accepted at the county’s solid waste transfer station on Wednesday afternoons and on Saturdays. The Loading Dock then comes with its own trucks and takes the donations back to its warehouse. The Loading Dock sometimes will do pickups for large donations (for example, a set of kitchen cabinets).

King County, Wash., has held special recycling events twice a year since 1993. In 1998 and 1999 the county tried collecting used building materials. They had some success, but the quality of the materials was low. The Seattle area also has three building recycling businesses. Those businesses couldn’t spare staff to come to the county’s collection point on their busiest day (Saturday) for the volume and quantity of materials collected. So the county decided to stop collecting these materials at the special recycling events.



**Furniture Recycling.** Furniture recycling includes both wood and metal furniture (for example, chairs, tables, and bookcases) as well as upholstered furniture (couches, mattresses, and bed springs). Wood and metal furniture has often been reused through salvage and thrift stores. Upholstered furniture is much more difficult to recycle, as described in the couches and mattresses section above.

The City of Alameda, Calif., has used Total Recycling Systems for several years to salvage or recycle couches, mattresses, box springs, and other upholstered furniture (see description above). Some years, the city had customers pay Total Recycling directly for the service, but most of the time Total Recycling sent the city an invoice for services after the event was over. The City of Alameda has also worked with the East Bay Depot for Creative Reuse. East Bay Depot has collected other furniture and bulky items with “artistic potential” for refurbishing and resale.

In Montgomery County, Md., the county’s Housing Opportunities Commission makes home pickups of reusable furniture. The donated items are used to furnish homes for people getting back on their feet after having been on public assistance.

**Electronics Recycling.** More than 12 million computers are scrapped every year in the United States and more than 75 of all computers ever bought are in storage, because no one knows what to do with them. With HDTV being implemented universally in 2006, and computer technology becoming obsolete every 18 months, the problems are accelerating. Some communities are trying different approaches to address this growing problem.

In Southern California, the City of Thousand Oaks and Ventura County Solid Waste Management Department conducted its first electronics collection event on January 8, 2000. More than 300 people came to the drop-off site at the city’s municipal yard. More than 13 tons of computers, televisions, and other electronics equipment were collected, including:

- 6,955 pounds of computer drives.
- 6,518 pounds of televisions.
- 5,876 pounds of monitors.

- 3,300 pounds of miscellaneous scrap (for example, modems, and stereo equipment).
- 2,005 pounds of printers.
- 1,560 pounds of microwave ovens.
- 400 pounds of cables, mice, keyboards, and other small parts.

All materials from Thousand Oaks were stacked and palletized, plastic-wrapped, and transported by HMR USA to their facility in Gardena. Working computers (Pentium and above) were provided to the prison system for repair and donations to schools. Everything else was dismantled and recycled. CRTs were shipped to HMR’s monitor-crushing machine in South San Francisco. HMR claimed that nothing was landfilled.

Meanwhile, in 1998–99, San Francisco and Alameda County worked with the Materials for the Future Foundation (MFF) to develop four electronic collection and recycling pilot programs. The purpose of the pilot programs was to document the quantity of consumer electronic products that flow into the residential waste stream and to determine if the recovered electronic products can be recycled cost-effectively.

The materials collected in the pilot programs included all consumer electronics (or “brown goods”) that plug in or operate on batteries. “White goods,” such as electric stoves and refrigerators, were not included.

The pilot programs collected materials from residential curbside collection programs, residential drop-off programs, and a public disposal area. A summary of those programs is included in the companion CIWMB model study in this series, “Business Recycling Plans and Policies: A Model for Local Government Recycling and Waste Reduction.”

Unfortunately, the MFF pilot program was overwhelmed by old TVs and CRT monitors. The pilot paid \$500 per ton for CRT recycling. Overall, these pilot programs demonstrated a cost to communities of \$750 to \$2,000 per ton to collect and recycle electronic waste materials through these approaches.

MFF concluded that residential collection programs should target products that have a higher recycling value (for example, computer

components), or products with similar materials to achieve greater economies of scale.

Alameda County Waste Management Authority staff noted that some type of manufacturer responsibility for the public cost of this type of program might be necessary to reduce costs to a more reasonable range of traditional recyclables (\$100–200 per ton). Another idea is to attract a cathode ray tube recycling facility to the county to process the most ubiquitous and costly components of the electronics stream. Such a local facility might improve the program costs for recycling.

For now, programs at nonprofits and drop-off centers and participation of retail stores may be more appropriate ways to reuse and recycle these products. Communities need to explore what services are available locally, particularly working with computer recycling specialists.

Based in part on the MFF and Alameda County Waste Management Authority staff analysis, some local governments are beginning to work with retailers and manufacturers to take back their products. Takeback programs are also highlighted in the business recycling model study.

### ***Reuse and Recycling Campaigns***

**Second Chance Week.** The Local Government Commission, a nonprofit organization based in Sacramento, Calif., has organized Second Chance Week in the fall (usually October) for the past three years, initially under contract to the CIWMB. Second Chance Week has stimulated a wealth of information and ideas about how to promote reuse of materials, including bulky goods, in communities throughout California.

Many activities that have been organized are highlighted on the Second Chance Web site, [www.choose2reuse.org/](http://www.choose2reuse.org/), and are profiled in a case study below. Some of those activities have targeted many of the same bulky goods as community cleanups. Second Chance Week would be a particularly good time to organize a fall cleanup activity to promote reuse and recycling of bulky goods.

Communities could also use many of these ideas throughout the year. They could incorporate one or more of these ideas into their regular municipal services and/or franchise agreements.

In addition to Second Chance Week, other major events designed specifically to promote reuse, recycling, and composting are Earth Day and America Recycles Day.

**Earth Day.** Earth Day is held each year on April 22. The goal of Earth Day is to promote a healthy environment and a peaceful, just, sustainable world by organizing events, activities, and campaigns. Since its inception in 1970, reuse and recycling events associated with Earth day have provided opportunities for the public to demonstrate their support for the environment. Communities can promote reuse and recycling of bulky wastes annually through one of the activities described in this case study. This is a particularly good time to organize spring cleanups focused on reuse and recycling.

### **America Recycles Day.**

America Recycles Day is held each year on November 15. America Recycles Day is designed to encourage people to buy more recycled-content products at home and in the workplace to keep recycling working. Their slogan is “For our children’s future, we must buy recycled today.”



To encourage Americans to pledge to buy more recycled products, organizers are offering incentive prizes like remanufactured computers, a family trip to Disney World, and even a new home, the “American Green Dream House,” built primarily from recycled materials. More than 2.9 million Americans participated in 1999 America Recycles Day (ARD) events held in 49 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

Although the focus of America Recycles Day is on buying recycled products, many communities also use this event as a time to promote reuse, recycling and composting in general. This would make another good opportunity for a fall cleanup event that promotes reuse and recycling.

### ***Cleanup Campaigns***

In addition to community organized cleanup campaigns, many volunteer groups conduct cleanups of neighborhoods, vacant lots, rivers, lakes, and beaches. These cleanups produce many

of the similar bulky goods that are the targets of community cleanups.

These volunteer groups appreciate the support of their community in organizing these events, and they appreciate seeing the materials they collect reused or recycled. Some communities include requirements in their franchise agreements that waste haulers must provide, collect, and dispose of a certain number of trash and recycling containers for such events. In other communities, this is done more informally, with the city or volunteer group requesting such assistance from their hauler.

If communities structure their own bulky goods collection programs to focus on reuse and recycling, they should also have the resources and systems to reuse and recycle materials from such volunteer initiatives.

**Keep California Beautiful.** Keep America Beautiful, Inc. is a nonprofit organization whose network of local, statewide, and international affiliate programs educates individuals about litter prevention and ways to reduce, reuse, recycle, and properly manage waste materials. Through partnerships and strategic alliances with citizens, businesses, and government, Keep America Beautiful's programs motivate millions of volunteers annually to clean up, beautify, and improve their neighborhoods. This creates healthier, safer, and more livable community environments. Keep California Beautiful is an affiliate of Keep America Beautiful, based in San Diego.

This spring, from mid-March through mid-May, more than 2 million volunteers of all ages will be taking on the challenge to "pick up, spruce up, and paint up," as the second annual Great American Cleanup gets underway. Under the leadership of Keep America Beautiful, thousands of creative cleanup, beautification, and community improvement events will take place in more than 10,000 communities in 35 states. More events are scheduled in Washington, D.C., Puerto Rico, and Winnipeg, Canada.

In California, there are four KAB affiliates, in addition to Keep California Beautiful:

- I Love a Clean San Diego.
- San Jose Beautiful.
- Keep Riverside Clean & Beautiful.

- Seaside Neighborhood Improvement Commission.

Keep America Beautiful maintains an excellent Web site with extensive information about organizing cleanups and the psychology of cleanups, as well as other implementation materials and sample news releases. The organization also publishes a variety of materials on these topics. Communities seeking to improve their cleanup programs could obtain a significant amount of information from Keep America Beautiful and their California affiliates.

### ***Information and Assistance***

**Grants Programs.** One of the ways communities can help partner with other organizations on community cleanups is to set up small grant programs.

San Jose Beautiful provides matching grant support to nonprofit organizations, neighborhood associations, schools, and other community organizations that wish to help foster community pride in San Jose through beautification or landscaping. Grants generally range from \$100–\$2,000. However, on a project-by-project basis, some grants may be funded at a higher level. Funding is to be matched by volunteer efforts and/or matching cash donations.

San Jose Beautiful is an office of the City of San Jose Department of Parks, Recreation and Neighborhood Services. San Jose Beautiful receives funding from both the city and businesses in the area to fund these grants and other programs.

The Alameda County Waste Management Authority has set up a grants program for:

- Recycling collection and processing.
- New technologies.
- Market development for recycled-content products.
- Increased public awareness.

Grant sizes range from mini-grants (under \$5,000) to very large grants of \$300,000 and more. The overall philosophy is to fund innovative efforts, develop partnerships, and invest in infrastructure to support recycling in the long term. Some efforts are targeted to specific audiences, while others are designed to meet specific short-term needs of

organizations that need assistance. The main grant program, the recycling board grants to nonprofits, includes a special focus on low-income communities.

Other communities have established grant programs to accomplish similar purposes, including the City and County of San Francisco, the County of San Diego (in the early 1990s) and the County of Santa Cruz.

**CalMax.** The California Materials Exchange, or CalMax, offers a tremendous resource for the reuse and recycling of bulky goods collected from community cleanups. CalMax is a free service provided by the CIWMB. It is designed to help businesses find markets for materials that have been traditionally discarded. CalMax recognizes that materials discarded by one business may be a resource for another.

CalMax publishes a quarterly catalog and maintains a Web site, [www.ciwmb.ca.gov/CalMAX](http://www.ciwmb.ca.gov/CalMAX). Both of these list available and wanted materials throughout the State of California. Listings are provided at no cost, and exchanges are generally handled directly between interested parties. Some of the items listed may have a minimal cost, or they are free but the receiving party must provide transportation.

Bulky goods are often listed in CalMax, particularly those generated from excess inventory of businesses. However, CalMax could also assist communities in marketing the bulky goods they collect, particularly if the communities have a storage area for those materials until a match is made.

**Minimaxes.** Communities are providing local businesses with additional help to match their resources by organizing minimaxes. Minimaxes typically publish their own catalogs of materials available and wanted in a specific region. Local recycling coordinators that manage these minimaxes can often assist businesses in learning how to use this system and identify other local resources to help meet their needs.

Local minimax programs have now been set up in the following areas:

- Los Angeles County Materials Exchange Program (LACoMAX).

- Napa County Materials Exchange Program (NapaMAX).
- Santa Cruz County Materials Exchange Program (ProMAX).
- Shasta County Materials Exchange Program (ShastaMAX).
- Sonoma County Materials Exchange (SonoMax).
- Ventura County Materials Exchange Program (VCMAX).

**Donate...Don't Dump!** Under Internal Revenue Code Section 170(e)(3), tax deductions are available to donors of excess inventory. This law allows "for profit" enterprises to donate their excess inventory to charitable organizations and receive a deduction of up to twice the cost. Shipping and handling expenses are also deductible.

United Way set up Gifts in Kind America to help businesses find out where and how to donate excess inventory. This nonprofit directs the donations of materials and services to needy charities. Every year, the group disperses products to approximately 50,000 nonprofits nationwide.

Some of the organization's clients include Fortune 500 corporate giants such as Hewlett-Packard and the Gillette Company. Others are small independent family businesses. Gifts in Kind also brokers and handles all "product giving" for computer firms such as Microsoft. It also networks with nearly 400 retailers to donate clothing via the American Apparel Manufacturing Association.

**Guides to Reuse.** Many communities are now preparing and distributing guides to reuse, resale, and repair businesses and to donation opportunities in their region. Some communities incorporate these into recycling directories or buy-recycled guides. Guides often include addresses, telephone numbers, and specializations.

Some guides consist of just a map and listing of the businesses. Others are produced as a booklet with some information and tips about how to reuse and recycle different materials and products. Often guides are distributed just before Second Chance Week to coordinate it with other events and highlight reuse opportunities during that period.

The City of Oakland worked with the local reuse community to develop a comprehensive directory to local reuse opportunities. This listing includes more than 200 local businesses and nonprofit organizations where residents can buy, sell, consign, trade, rent, repair, and donate reusable goods. More than 50,000 directories were distributed during Second Chance Week in 1998 as an insert in The Oakland Tribune, and many others were handed out at reuse establishments, libraries, and public events.

Other good examples of directories include:

- “Put It To Good Reuse: A Directory of Donation Opportunities for Los Angeles.”
- “Berkeley /Albany Reuse Directory.”
- “Rummaging Through Northern California’s Resale Directory.”
- “Contra Costa County Second Chance Directory.”
- “Mojave Desert Reuse Guide.”

The Bay Area Recycling & Reuse Directory for Computers, Electronics, & Business Equipment is published by the Environmental Partnership. This guide lists businesses and nonprofit organizations that accept computers and parts, electronics, business equipment, and specialty items for recycling or reuse. This is one of many specialized reuse guides that have been developed regionally.

The San Francisco recycling program has now brought reuse guides online. The program provides a reuse database of opportunities to reuse goods and purchase reused items on their Web site at [www.sfrecycle.org/](http://www.sfrecycle.org/). The database allows residents to look up reuse options by neighborhood.

Rummaging Through Northern California (RTNC) is a free bimonthly newspaper distributed at 500 locations around the Bay Area. RTNC is about great places to shop for secondhand goods, including surplus and salvage items in the Bay Area and beyond, with everything from “clothing to computers” and “furniture to food.”

As a way to get the word out for startup businesses, RTNC lists all the new places that offer secondhand goods. RTNC also annually compiles a free directory of more than 1,000 places to resale shop, along with a listing of

related annual events. RTNC has an excellent Web site at [www.secondhand.com/](http://www.secondhand.com/). This Internet resale directory of RTNC can help individuals find all types of secondhand, surplus, and salvage businesses around the country.

Four Sacramento Valley local governments partnered to produce a Second Chance 1999 Reuse Calendar. This full-sized color calendar features a different reuse business each month, such as consignment clothing stores, repair shops, and used sporting equipment outlets. The calendar also includes a directory of more than 100 additional local reuse businesses and organizations. More than 10,000 calendars were distributed to Sacramento residents during Second Chance Week.

### **Case Study: Second Chance Week**

Second Chance Week is a public awareness campaign held for the past three years in the fall to promote reuse, repair, resale, and donations. Events are organized to give reusable items that might otherwise be thrown away a “second chance.” Local governments, community groups, reuse businesses, and others organize these activities.

Many of the events organized encouraged the public’s support of existing reuse establishments, such as thrift stores and repair shops. In other locations, communities worked to organize new reuse opportunities, such as citywide garage sales and reuse art contests.

The first Second Chance Week in 1997 involved more than 125 organizations that coordinated more than 95 reuse activities. It attracted almost 20,000 participants and reached more than 370,000 people through direct outreach materials. These efforts directly resulted in the reuse of more than 90 tons of used goods and materials statewide and laid the foundation for future efforts to promote reuse.

In 1998, more than 180 organizations sponsored about 100 reuse activities throughout California, reusing more than 100 tons of used goods and materials. Approximately 3,000 volunteers and paid staff helped coordinate reuse events. Second Chance Week 1998 attracted more than 24,000 participants and reached approximately 390,000 community members through direct outreach materials.

The Local Government Commission organized Second Chance Week under a contract initially with the CIWMB. Second Chance Week has helped California communities organize a wide range of activities that helped reuse and recycle bulky goods, including:

- Communitywide garage sales.
- Community rummage sales.
- Donation drives.
- Bulky item pickup day.
- Curbside exchanges.
- Street festivals.
- Used building materials events.
- Office cleanup events.

Second Chance Week helps California residents and businesses go beyond recycling to further realize the many benefits of reuse. Following are some examples of Second Chance Week activities that could help reuse and recycle bulky goods.

**Communitywide Garage Sales.** A city- or countywide garage sale involves a designated date on which community members hold their own garage sale. The local organizers are responsible for selecting and promoting the date (usually a weekend during Second Chance Week), registering and providing support to participating residents (for example, garage sale planning kit), and promoting registered garage sales through media outlets and information booths.

Nearly 90 households participated in the Castro Valley Sanitary District's first annual districtwide garage sale in 1997. Participating residents registered their sales with the district to be included in a listing and map distributed to the public. Based on a survey conducted of those holding garage sales, more than 75 percent of the sales were successes.

In response, the district coordinated a second annual districtwide garage sale the following year. The district again offered advertising at no cost, and more than twice as many sales registered (189).

The City of Berkeley's recycling program coordinated a citywide garage sale in 1997. The city provided participating residents with tips on

organizing a garage sale, a listing of registered garage sales, and a bright yellow poster that they could customize to promote their sale. The city also distributed the listing of participating residents to potential shoppers. Approximately 225 households and organizations participated, plus others who decided to sell after they saw the long list of participants.

Other California communities that have successfully organized communitywide garage sales include the City of Palo Alto (172 households in 1997) and San Mateo (400 households in 1998). Also, the rural town of Lake Elsinore offers free garage sale permits to residents annually in celebration of Second Chance Week.

**Community Rummage Sales.** Community rummage sales are generally fundraisers for local charities. Community members contribute items to the event, and volunteers help staff booths to sell those items. Rummage sales are organized by identifying a date, securing a location, and promoting the event. City hall, a schoolyard, or a library parking lot are excellent locations that reinforce the civic nature of the event.

The City of Ripon, Calif., sponsored a community yard sale in conjunction with "Main Street Day." The sale was held at a city maintained park-and-ride parking lot. The 60 vendor spaces completely sold out and more than 800 shoppers attended the event. Due to the event's tremendous success, the city plans to hold an additional yard sale in the spring.

The City of Rialto, Calif., sponsored a parking lot sale at city hall to benefit local nonprofit organizations. The city invited only local nonprofits to sell their wares, encouraging them to use the event as a fundraiser. The city handled event promotion and provided vendors with tips on having a successful rummage sale.

The City of Victorville, Calif., partnered with the local swap meet to hold a community garage sale. Community members were encouraged to clean out their garages and closets and bring their surplus items to the swap to sell. Half-priced booth spaces were offered to those interested in setting up there.

Chabot College and the City of Hayward, Calif., held a “garage sale only” day at the college’s old-fashioned flea market. Instead of allowing vendors to sell new items, the market was strictly for used items, with free admission and parking for shoppers. Sellers reserved 85 spaces, exchanging more than 4,250 pounds of goods and materials. The event drew 2,000 people.

**Donation Drives.** Communities encourage the public to donate materials to their favorite charities. This encourages infrequent donors to make a special effort to dig through garages and closets in search of reusable materials. It also encourages those who never donate to get involved. Donations can either be directed toward community yard sales or can go directly to local charities that are able to accept donations.

Donation drives are a great way to partner with another event organizer, such as a school or the scouts, to increase donations and to instill the joy of giving in youth. School kids or boy/girl scouts could go door-to-door to collect items for the drive. Some donation drives have a particular focus, such as winter coats, which are distributed as cold weather approaches.

The City of West Sacramento coordinated an in-house donation drive for recreational and sporting equipment. Donated equipment was sold at a swap meet held in conjunction with another event organized by the parks and recreation department.

Warner Brothers Studios in Burbank coordinated an in-house donation drive to benefit four local nonprofit organizations. Employees donated “gently used” clothing, children’s items, art supplies, books, furniture, and housewares.

The City of San Leandro, Calif., sponsored a used coat drive to benefit the Davis Street Community Center. More than 500 coats were collected for distribution to local families in need.

The City of Ceres, Calif., worked with the Salvation Army to place and promote a donation trailer at a shopping center. In addition, other donation locations were promoted through local newspaper ads, fliers, and utility bill inserts.

**Bulky Item Pickup Day.** Local charities usually collect bulky goods by appointment. During a special event like Second Chance Week, charities may be able to cruise given neighborhoods for

bulky goods without appointments. Alternatively, local waste haulers might be willing to pick up bulky items during these special events and deliver them to storage areas or directly to charities.

**Curbside Exchanges.** At curbside exchange events, residents leave reusable goods on the curb to be scavenged by other community members. Residents can sign up to be listed as participants in the curbside exchange. Lists of participating addresses can be made available at the local farmer’s market, the city library, and other public spaces. Local scouts and other youth organizations can help tally up the results of the exchange. Cambria, Calif., has done this successfully in recent years.

The Canadian city of Brockville, Ontario, organized a similar event called a “community treasure hunt.” The Brockville instructions were to leave any unwanted but still useful items at the curb in front of the house on Saturday by 9 a.m. and remove any uncollected treasures from the curb by Sunday evening. All treasures claimed to be in “as-is condition.”

**Street Festivals.** These are events with multiple activities at a single location. The Davis Street Transfer Station in San Leandro hosted a Second Chance Street Market in 1997. This event included a garage sale, organic produce sale, recycled product sale (featuring landscaping/garden materials and soil products), a Halloween pumpkin sale, and reuse and environmental information booths. More than 17 tons of used goods and materials were reused as a result of the event. Money raised from sales was donated to the local community center.

The City of Barstow, Calif., sponsored a second chance/make a difference day fair, which included a community garage sale, informational booths and seminars, a Halloween costume swap, and a “Community Chest Fashion Roundup & Rummage Sale.” More than 100 residents rented spaces for the garage sale. Fifty groups and organizations set up awareness booths, and 5,000 people attended the event. Leftovers from the rummage sale were donated to a battered women’s shelter.

**Used Building Materials Events.** Windows, doors, lumber, plumbing fixtures, and appliances can be reused for new construction and for

refurbishing older buildings and homes. Some materials from old buildings are more valuable than their newer counterparts: old growth redwood timbers and Victorian fixtures can command high prices in some markets. It is also a way to preserve local architectural history.

For the last three annual community cleanups during Second Chance Week, Solana Recyclers teamed with The Reuse People to solicit reusable building materials in Encinitas. Solana Recyclers is a local nonprofit that promotes recycling in the area. The Reuse People is a nonprofit organization specializing in getting used building materials to the economically disadvantaged.

Solana Recyclers prepared inserts for trash bills and news releases for three local papers, and they left fliers at local construction stores. The local waste hauler, EDCO Disposal, printed and stuffed the bill inserts at their cost. About 5 tons of wood, windows, metal, doors, miscellaneous electrical fixtures, paint, tile, electrical cords, and couches were collected each year. According to Solana Recyclers, nearly 100 percent of the materials collected were reused.

Staff time at the event for Solana Recyclers has been covered under the oil block grant program. Solana Recyclers always hands out oil collection containers, oil center directions, household hazardous waste information, and facility directions at these events. The Reuse People view this event as an opportunity to do a bulk collection instead of a prior collection route to the area. For EDCO, the collection event is a required component of their franchise agreement.

**Office Cleanup Events.** A large amount of bulky goods are generated from businesses and offices, including paper. The U.S. Conference of Mayors sponsors its annual “Clean Your Files Day” for offices to reuse and recycle paper (some communities also focus on other office supplies and equipment). Other offices have organized swap meets or “white elephant sales” during Second Chance Week to encourage the reuse of these materials.

The U.S. Environmental Protection Agency Region 9 sponsored an in-house swap meet for household goods. Employees at the San Francisco headquarters office were encouraged to bring

reusable items that they didn’t want anymore to work and swap them during this event.

The City of Los Angeles Community Development Department held an in-house “white elephant” sale. Employees rummaged through their closets and garages at home for reusable items to donate for the sale. Proceeds benefited the L.A. Unified School District.

### **Case Study: Moraga Pilot Reuse and Cleanup Days**

In November 1999, the Central Contra Costa Solid Waste Authority (CCCSWA) sponsored “reuse and cleanup days,” a pilot collection program in Moraga to divert reusable items collected during Pleasant Hill Bayshore Disposal’s (PHBD) community cleanup. The East Bay Depot for Creative Reuse (EBD) provided the collection services and handled the material distribution and sales.

The pilot program allowed the CCCSWA to assess the feasibility of adding a reuse component to community cleanups in their service area. This pilot helped:

- Determine EBD’s ability to collect curbside materials.
- Identify how best to communicate this program to residents in writing and over the phone.
- Predict the volume of materials to expect in the future.
- Ascertain types of reusable materials likely to be collected.
- Ensure that materials not collected by EBD were collected by PHBD the next day.
- Locate appropriate storage facilities for materials collected.
- Estimate the revenue potential from the sale of the materials collected.
- Determine the cost of providing this program to the entire CCCSWA service area.
- Determine the level of likely participation and the residents’ impressions.

The staff report regarding this pilot program was also the most thorough information obtained in the



research for this case study. Due to the depth of information and analysis provided, this case study highlights many of the issues that need to be considered in developing and maintaining a high quality community cleanup program in the future that emphasizes reuse and recycling.

**Pilot Program Description.** The pilot program offered residents the opportunity to place reusable items on the curb for collection by EBD on the day before their community cleanup. PHBD collected any items rejected by EBD or intended for the landfill the next day. The program was publicized in the following ways:

- By direct mail brochure.
- Flyers distributed at three Moraga town events.
- Information in the town and CCCSWA newsletters.
- Articles in several newspapers (two articles in the Contra Costa Sun, one in the San Francisco Chronicle East Bay Edition, and one in the Contra Costa Times).
- Discussions at the CCCSWA board and Moraga Town Council meetings.
- A public service announcement on cable television.
- Responsibilities of the participants. The responsibilities of EBD were to:
  - Operate the material collection services.
  - Hire and train employees.
  - Provide insurance.
  - Maintain records documenting the program.
  - Provided the expertise to reuse, recycle, and market the collected materials.

The responsibilities of PHBD were to:

- Provide route maps.
- Provide a bin at the storage site for any residual trash.
- Inspect and maintain trucks.
- Orient the EBD project manager about the trucks and routes.
- Redesign and mail residents brochures.

- Design and print a material rejection tag.
- Provide storage for the CCCSWA-owned program equipment (trucks and storage containers) while they are not in use.

Valley Waste Management (VWM) donated two storage containers to the CCCSWA for the program and EBD took the collected recyclable materials, such as cardboard boxes and metals, to the Walnut Creek Recycling Center.

The responsibilities of CCCSWA were to:

- Provide EBD with the two collection trucks.
- Locate and lease a temporary storage site in Moraga.
- Assist in designing and promoting the program.
- Help locate partners for material distribution.
- Coordinate meetings and communication among the program partners.
- Collect evaluation data regarding residents' impressions of the program.
- Provide financial support for the program.

**Evaluation.** The public and press enthusiastically received the pilot program. It also increased the awareness for reuse, thus moving the focus of the CCCSWA constituency up the waste management hierarchy. It also aided in diverting heavy and difficult-to-recycle items.

In the past, EBD had collected materials from other East Bay cities on an on-call basis; however, it had never served the number of homes that are served per day during the CCCSWA community cleanups. The pilot program proved that EBD could serve up to 800 homes per day. This is the typical number of homes served per day during the cleanups throughout the CCCSWA service area. EBD only missed one small area (due to map confusion) that PHBD collected the next day.

During the program, there were 190 calls tallied by EBD, PHBD, CCCSWA, VWM and the Town of Moraga combined. Of those calls, EBD received 136. Only one call addressed missed collection of materials, although six residents called to express disappointment that their materials were not collected for reuse. In these

cases, EBD was able to return and collect these previously passed-over materials the next day.

Customers called primarily to request tax donation receipts, to confirm collection days, and to inquire about specific materials not listed on the brochure. There were no complaints regarding the trucks or the storage location. Finally, there were no complaints that materials were left on the street following the cleanup.

The CCCSWA commissioned David Binder Research (DBR) to conduct a telephone survey of 400 Moraga residents to assess their impressions of the program. The survey showed that:

- 80 percent of respondents were aware of the program.
- 84 percent would like to see the program continued.
- 95 percent said they would participate in the program in the future.
- Half of those surveyed learned about the program from the mailer.
- 55 percent of the Moraga residents participated in the reuse and cleanup program.
- There was a relationship between how a respondent learned about the program and the respondent's likelihood in participating. The majority of participants (62 percent) learned about the program through the direct mailer.

Prior to the program, concerns existed regarding the impact of scavenging on the program. Two people suspected of scavenging materials were cited. However, none of the program partners perceived any difficulties as a result of this activity. Additionally, some materials (namely bicycles) were stolen from the temporary storage site. Presumably, these were reused.

**Volume and Types of Reusable Materials.** The pilot program diverted approximately 20.5 tons total from the 4,560 homes served. EBD estimates that 20 to 30 percent of residents set out materials on the reuse day. This estimate is consistent with information gathered during the telephone survey. EBD estimates that approximately 10 percent of participants placed reusable items in a separate pile from other items. Ten to twenty percent of residents set out reusable materials on the cleanup (or garbage) day only.

EBD used two flat-bed trucks leased from the CCCSWA to collect items on the reuse day and put its own fully enclosed truck into service to collect additional reusable items set out on the cleanup day.

Of the 20.5 tons diverted, EBD marketed 17 tons (typically these are art, craft, and garden items), Urban Ore marketed 1 ton (building products), VWM recycled one 1 ton (scrap metal and cardboard), a half ton were reusable bicycles that were donated to the City of Oakland's youth bicycle program.

One ton was diverted through referrals made by the EBD hotline to Moraga residents. Items collected included original paintings, wicker baskets, 150 bicycles, posters, frames, furniture, sporting equipment, hand tools, garden furniture and pots, rugs, and some large items such as wrought iron fencing, a spa, and a cement mixer.

Based on the DBR survey, 25 percent of the respondents reported setting out less material for disposal this year than in the past. DBR also provided a cross-reference of responses. This showed that of those who said they had disposed of reusable items in the past, 36 percent said that they set out less material for disposal in the November cleanup. Conversely, 30 percent of the respondents who put out less material for disposal had in the past placed reusable materials out for disposal. These demonstrate the program's effectiveness in encouraging reuse over disposal.

**Local Storage Facilities.** One of the key components to the program's success was a local temporary storage facility. It was not economically feasible for the EBD drivers to collect materials curbside in Moraga, unload them at its Oakland facility, and then return to Moraga for further collection the same day. Therefore, a local site was necessary. This site needed to be large enough to accommodate lockable storage containers, bins for trash and recyclables, and room for a canopy setup in case of rain. Ideally, this site should not be visible from the roads for security reasons.

The CCCSWA leased the parking lot behind the closed Rheem Bowl for six weeks at a cost of \$500. When the trucks were full, the EBD drivers returned to this spot to unload materials. An EBD employee sorted the materials on site and packed them into the on-site storage containers. The

employee then organized the materials for repacking onto the trucks for their delivery to Oakland at the end of the route day.

EBD continued to use this site for two weeks after the collection ceased to sort the material for distribution. Staff perceives locating and leasing a suitable storage site as one of the most challenging aspects of the program, since it is critical yet difficult to do in this service area.

**Costs and Revenues.** The CCCSWA used its remaining FY 1998–99 mini-grant funding of \$19,303 to award the contracts for this pilot program. Staff estimates that the program’s actual cost was approximately \$20,000.

Although this was nearly the amount funded by the CCCSWA, the actual costs of the program were different from those anticipated. Labor costs were overestimated, but EBD managerial and overhead costs were underestimated. Uniform costs were overestimated; however, the costs for cellular and regular telephone usage, gas, and insurance were underestimated.

Additionally, the original budget did not include a lease payment, canopy, and magnetized signs for the truck. It also did not include costs of using the EBD truck to collect reusable items put out with items set out on the cleanup day.

EBD’s projected sales revenues are \$8,693 (including a small credit from Urban Ore). Given the program’s cost minus the projected sales, the cost per household for this program was \$2.48, or 21 cents per month.

**Future Plans.** Staff is exploring how to implement this program throughout the CCCSWA service area. The EBD is developing a strategic plan to ensure the program is a sustainable effort. This plan will also seek:

1. Local Contra Costa partners, such as Goodwill or St. Vincent De Paul, to aid in material storage and distribution.
2. A local storage site that would serve all the member agencies.
3. Possible development of a local storefront.
4. The evaluation of EBD’s ability to manage year-round curbside collection in the future.

## Local Government Challenges and Opportunities

Local governments could reuse and recycle much of their bulky goods by implementing the types of programs and activities highlighted above.

Programs that focus solely on reuse and recycling of materials generally are able to divert 90 percent or more of their materials from landfills. Programs that are combined with trash cleanups are able to divert 50 to 60 percent of their materials from landfills, if well designed and operated.

A good effort to increase reuse and recycling of bulky goods would include:

- Promoting existing reuse, thrift, repair, and salvage businesses, with guides, listings, advertisements, and referrals.
- Separating reuse and recycling activities from trash cleanup activities.
- Organizing communitywide garage sales, rummage sales, or donations events as part of Second Chance Week, Earth Day, and/or America Recycles Day.
- Developing or participating in local material exchange listings.
- Adding reuse and recycling operations to the transfer station, MRF, or landfill.

## Tips for Replication

- Identify what types of reuse, thrift, repair, and salvage businesses exist in your area, and ask them what might help them most to expand and promote their operations.
- Identify what other communities in your area are doing for community cleanups and build on their successes and services for reuse and recycling.
- Require contractors that operate transfer stations and landfills to provide reuse and recycling services (either by contract or solid waste or local land use permit conditions).
- Establish these sites publicly or make available land (preferably at low or no cost) for entrepreneurial reuse businesses to be located next to transfer stations and landfill sites.

## References

### *CIWMB Publications*

Many CIWMB publications are available on the Board's Web site at: [www.ciwmb.ca.gov/Publications/](http://www.ciwmb.ca.gov/Publications/).

To order hard copy publications, call 1-800-CA-Waste (California only) or (916) 341-6306, or write:

California Integrated Waste Management Board  
Public Affairs Office,  
Publications Clearinghouse (MS-6)  
1001 I Street  
P.O. Box 4025 (mailing address)  
Sacramento, CA 95812-4025

### *Other Publications*

Adolf Andres, "Points to Consider When Starting Up A Used Building Materials Store," UBMA.

Philip Kreitner, "Building Deconstruction for Reuse and Recycling," The Presidio of San Francisco.

Jennifer Corson, "The Problems Facing Public Acceptance of Building Material Reuse Facilities."

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National Waste Prevention Coalition.  
[www.reduce.org/](http://www.reduce.org/).

Gifts in Kind America. (703) 836-2121.

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Gifts in Kind America. (703) 836-2121.

Earth Day Network. [www.earthday.net/](http://www.earthday.net/).

America Recycles Day. [www.americarecyclesday.org/](http://www.americarecyclesday.org/).

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Habitat for Humanity of Ventura County, 167 Lambert Street, Oxnard, CA 93030-1044. (805) 485-6065.

Habitat for Humanity Riverside, P.O. Box 70-R, San Bernardino, CA 92492. (909) 787-6754.

Habitat for Humanity of Orange County, 2165 S. Grand Avenue, Santa Ana, CA 92705. (714) 434-6202.

Steel Recycling Institute, 1-800-937-1226.

Holly Harris, Rummaging Through Northern California and the Internet Resale Directory, Harris Publications, P.O. Box 297, Sonoma, CA 95476. Marketing & sales: (415) 921-3554. Technical and resale information: (707) 939-9124, rtnrc@sonic.net.

Architectural Salvage of Santa Barbara, 726 Anacapa Street, Santa Barbara, CA 93101. (805) 965-2446.

Art from Scrap, Community Environmental Council, 302 E. Cota, Santa Barbara, CA 93101. (805) 967-1350. afs@rain.org or [www.grc.org/afs](http://www.grc.org/afs).

Berkeley Architectural Salvage, 1167 65th Street, Berkeley, CA 94710. (510) 655-2270.

Beyond Waste, 3262 Wilder Road, Santa Rosa, CA 95407. (707) 792-2555, precycle@beyondwaste.com or [www.beyondwaste.com/](http://www.beyondwaste.com/).

Building Material Distributors, 1119 Heritage Road, San Diego, CA 92173. (619) 427-0430.

Building Resources Materials Re-use, 701 Amador Street, San Francisco, CA 94124. (415) 285-7814, [tundra@sirius.com](mailto:tundra@sirius.com).

C & M Diversified Company, 14684 Bronson Ave., San Jose, CA 95124. (408) 294-5185.

CA Area Resources for Educators, Old Sacramento Army Depot, 8350 Fruitridge Road, Gate 1, North, Sacramento, CA 95826. (916) 379-9765, [shireen42@aol.com](mailto:shireen42@aol.com).

Creative Re-Use/North Bay, P.O. Box 1802, Santa Rosa, CA, 95402-1802. (707) 546-3340.

Computers for Schools, 470 Nautilus Street, Suite 400, La Jolla, CA 92037. 1-800-939-6000, [info@detwiler.org](mailto:info@detwiler.org) or [www.detwiler.org/](http://www.detwiler.org/).

Crayons to Computers, P.O. Box 2872, Dublin, CA 94568. (925) 803-1234.

Direct Relief International, 27 S. La Patera Lane, Santa Barbara, CA 93117. (805) 964-4767, [info@directrelief.org](mailto:info@directrelief.org).

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ProMax, c/o Ecology Action of Santa Cruz, P.O. Box 1188, Santa Cruz, CA 95061-1188. (831) 426-5925, Ext. 28, [www.ecoact.org/ProMax](http://www.ecoact.org/ProMax).

Re-Sets, 17230 Knapp Street, Northridge, CA 91325. (818) 896-7573, [Re-Sets@aol.com](mailto:Re-Sets@aol.com).

ReSale Lumber, 4056 North Highway 101, Eureka, CA 95501. (707) 822-6034.

Resource Area for Teachers (RAFT), 1355 Ridder Park Dr., San Jose, CA 95131. (408) 451-1420, [raft@raft.net](mailto:raft@raft.net) or [www.raft.net/](http://www.raft.net/).

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San Diego Regional Materials Bank, Chula Vista, CA. (619) 691-5122.

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