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## City of Beaverton, Multi-Family Recycling Program

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**City of Beaverton**  
**Multi-Family Recycling**  
**Program**

**Final Report**

June 1990

By

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## INTRODUCTION

Every person in the United States generates about 4.5 pounds of garbage each day <sup>1</sup>. The City of Beaverton generates 100 tons daily or 36,500 tons of solid waste per year. Multi-family dwellers account for 58 tons or 58 percent of Beaverton's daily total. The St. John's landfill will reach capacity in 1991 which will require that Beaverton's waste be transported to a landfill in central Oregon.

In 1983, the Oregon legislature enacted the nation's first recycling bill. The bill called for a state-wide curbside recycling program, in communities with populations greater than 4,000, aimed at reducing the volume of waste going to landfills and increasing participation in recycling. In the Beaverton area, the curbside recycling effort has focused primarily on single family residences, while multi-family dwellings, including apartment buildings and condominiums have received less attention. One of the most serious problems confronting Beaverton's recycling effort is gaining the cooperation of apartment building owners, managers, and tenants to participate in recycling.

This report examines the Multi-Family Recycling Program sponsored by the City of Beaverton and operated by Portland State University's Recycling Education Project (REP). The program operated from July 1, 1989 to June 30, 1990. The purpose of the program was to implement a pilot recycling program that addressed the unique needs of apartment and condominium dwellers. The effort involved establishing 30 recycling systems in multi-family buildings. The program used a multi-materials approach that included separating newspaper, clear, green, and brown glass, tin, aluminum, and cardboard.

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<sup>1</sup> "Re: Thinking Recycling, an Oregon Waste Reduction Curriculum," The Oregon Department of Environmental Quality, 1988, page 25.

The pilot program was undertaken to further the City's and Metro's solid waste reduction goals, in accordance with DEQ's Solid Waste Plan. These goals call for increasing recycling in the city to 50% by the year 2000<sup>2</sup>. In addition, the program attempted to field test strategies for establishing both outdoor and indoor recycling systems; to identify problems encountered by apartment managers and tenants unique to multi-family sites; and to identify problems encountered by local garbage haulers when servicing the recycling systems. The program was directed by PSU Professor Gerald F. Blake and coordinated by Tamara Roth and Lynne Storz, PSU students. The program was carried out by a team of PSU graduate and undergraduate students.

## STUDY DESIGN

The sample of apartment buildings selected for the program was drawn from several sources:

- (1) referrals from West Beaverton Sanitary of potential recycling sites from their franchised routes;
- 2) referrals from apartment managers and tenants who had contacted the City with requests that recycling be started in their building;
- (3) lists of apartment buildings identified by the Recycling Education Project during the course of the field work; and
- (4) several referrals resulting from tenant calls to Metro's Recycling Hot Line.

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<sup>2</sup> "Annual Waste Reduction Program for Local Government, Year One of a Five Year Plan, 1990 – 1995," Metropolitan Service District, 1990, page 7.

A total of 33 apartment buildings or condominium complexes were included in the pilot project. Of that number, 18 or 55 percent, participated in the program (See Table 1). Appendix A contains a list identifying the buildings included in the study. Fifteen buildings were not included in the program because the apartment owners or managers refused to participate in the program.

Of the 18 participating buildings, 14 were equipped with 19 outdoor recycling systems (3 outdoor sites contained multiple recycling systems). Four buildings were provided with six indoor recycling systems (all contained multiple systems) (See Table 1).

TABLE 1

**Buildings Included in the Multi-Family  
Recycling Program**

Participating	Number	Percent
Outdoor Sites	14	43%
Indoor Sites	4	12%
Not Participating	15	45%
Total	33	100%

The 18 buildings in the program included 1,356 apartment and condominium units. The average size of the multi-family dwellings was 81 units (See Table 2). The 14 outdoor sites

contained 989 dwelling units, or an average of 71 units per building. The four indoor sites contained 367 dwelling units for an average of 92 units per building.

TABLE 2

**Distribution of Recycling Systems  
by Dwelling Units**

Location	Dwelling Units	Percent	Average No. Units
Outdoor	989	73%	71
Indoor	367	27%	92
Total	1,356	100%	81

**EQUIPMENT USED IN PROGRAM**

The outside recycling shelters were designed by the City of Portland’s Bureau of Environmental Services (BES), the Education Project, the Office of Energy, and DeWald NW Inc., in consultation with local haulers. The outdoor systems consisted of two 71” x 25” x 44” metal recycling shelters (See Appendix B) that contained six 32 – gallon fiber barrels for storing recyclables. The City purchased 15<sup>3</sup> pairs of the metal outdoor recycling shelters. The indoor systems were comprised of six 32 – gallon fiber barrels for each of the systems. The REP purchased the fiber barrels for each of the outdoor and the indoor systems. There was a much

---

<sup>3</sup> One management firm purchased an additional 4 pairs of the metal outdoor recycling shelters

higher demand for the outdoor shelters compared to the indoor systems and the supply was exhausted early in the project.

## **PROCEDURE**

The Recycling Education Project staff made personal contact with the management companies and/or on-site building managers to provide technical assistance in establishing outdoor and indoor recycling systems. Technical assistance included a recycling audit, a site visit, scheduling and assisting in the delivery of the recycling system, and notification of the local hauler.

During the audit phase, REP staff advised the building owner or manager on the best location of the recycling system. The recommendations were based on tenant and hauler accessibility and on fire code regulations. A field investigation report (see Appendix C) was completed, noting any physical barriers unique to the building site that would prevent maximum use of the recycling area by tenants. The report also contained a site sketch showing the location of the dumpster sites or trash rooms where the recycling system would be installed.

At the time of the audit, the owner or manager was given an Apartment Building Recycling Kit (see Appendix D). The Kit contained a letter of introduction from the Mayor, and information on the preparation of recyclables suitable for posting on bulletin boards or in recycling areas. The kit also contained signs to identify where recyclables are being placed. The signs could be laminated for use in either outdoor or indoor recycling areas.

Discussion between REP staff and managers also occurred at the audit phase on the variety of education materials available to tenants. All tenants received a "how-to-recycle"



brochure (see Appendix E) through a door-to-door educational campaign. Several managers also placed this information in tenant newsletters. A number of managers requested that REP staff put on a “how-to-recycle” presentation at tenant gatherings where questions and answers could be addressed.

Upon completion of the recycling audit, the REP scheduled delivery of the recycling shelters. Placement of the outdoor systems involved coordination with DeWald Northwest Inc., the recycling container manufacturer; the fiber barrel supplier, and the building owner or manager. The garbage hauler was then notified of the recycling system’s delivery date. At the time of delivery REP staff returned to the apartment building and assisted in the installation of the system. The tenants received the educational material when the system was in place. The procedure for installing indoor systems was similar, except it did not involve the delivery of the metal shelters.

Follow-up visits were made to each Beaverton site in the pilot program to monitor the progress of the new recycling systems. The follow-up report attempted to measure tenant participation in the program; the extent of separation and/or contamination of recycled materials; and gather additional information from building managers on barriers to recycling (See Appendix F).

After the recycling system was installed, REP staff made contact with haulers to solicit any positive or negative reactions they had in servicing the systems. Recommendations for improvements were noted for future recycling efforts.

## **MAJOR FINDINGS AND RECOMMENDATIONS**

The pilot project revealed a significant amount of interest in expanding recycling in the multi-family buildings that were contacted. The monitoring effort showed that the metal outdoor shelters were particularly popular with tenants and managers.

1. The follow-up effort was based on each of the 18 buildings. The following highlights were revealed:

### **Overall Participation**

Managers reported that tenant use of the recycling systems was relatively high. In 7 buildings, 50 – 100 percent of the tenants were using the systems on a regular basis. In 1 case 25 – 50 percent of tenants were using the system, while in none of the buildings were less than 25 percent of the tenants using the recycling systems. In 10 cases tenant participation information was not available.

### **Contamination of Recyclables**

There was no significant evidence of contamination of recyclables among 15 of the 18 buildings monitored. Only 2 of the systems showed heavy contamination, meaning that the containers were being used primarily for garbage. One building had minor amounts of contamination, for example, plastic shopping bags mixed in with the newspaper.

### **Properly Prepared Materials**

It was found that tenants in 17 of 18 buildings were properly preparing the recyclable materials. The most frequent example of improper preparation was not rinsing and flattening tin cans.

### **Adequacy of Service Provided by Haulers**

Most haulers were servicing the recycling systems on a once or twice per month basis. Seven buildings (39%) were serviced on a once a month basis. Two buildings (11%) were serviced twice a month. Two buildings (11%) were serviced by haulers on a weekly basis. Seven building managers (39%) were unsure or had no response.

Thirty-three percent of managers felt that their level of service was adequate. Eleven percent felt their level of service was inadequate. The remaining managers (56%) did not answer or were unsure about their level of service.

### **Manager and Tenant Comments**

The most frequent comments made by tenants and reported by managers was that tenants were grateful to have the opportunity to separate recyclables and store them in a convenient location. In addition, tenants expressed positive opinions about the appearance of the outdoor shelters. Several managers indicated that the new recycling systems gave owners an added amenity to offer tenants.

## **Hauler Comments**

Haulers expressed several comments concerning their difficulties working with Metro. The most frequent comments center around government's lack of effort to remedy the poor markets for recyclables, and the perception that haulers earn significant income from selling recyclable materials. The only complaints by haulers concerning the recycling systems were the lack of containers for handling the large volume of newspapers and the poor design of the containers themselves (having no handles to lift the containers).

## **Continuing Education Effort**

The constant turnover of tenants and managers, and the unique way in which recyclables are collected and stored at multi-family buildings suggests that a continuing education effort is necessary for a high level of participation in recycling. This effort should include periodic re-leafletting of dwelling units, conducting "how-to-recycle" presentations, and publishing information on preparation of recyclables for tenant newsletters.

- 
2. In some respects the pilot project proved a little too successful, in that the recycling systems were initially overwhelmed by the amount of newspaper being recycled. This problem contributed to some manager's perception that recycling areas would become disorganized and unsightly causing them more work. The fact that local haulers were not able to respond to new pick-up schedules contributed to this perception. We fully expect that haulers will adjust their schedules to accommodate the increase in recyclable material. In the case of indoor recycling systems, the major drawbacks were fire danger from the combustible material and the perception that recycling will cause odor and infestation.

3. Both outdoor and indoor systems performed well given their intended use. The outdoor shelters were easily identifiable to tenants and haulers and were perceived as being a positive addition to the apartment complexes. The major uniqueness of multi-family dwellings is that tenants can recycle at any time because there is a centralized location on the property.

In high rise apartment buildings where there are large numbers of elderly and disabled persons further, barriers to recycling may have to be overcome. From our observation, these tenants will require assistance in transporting recyclables to centralized locations. One possibility would be to employ teenagers to provide door-to-door recycling services for these tenants. It may be possible that grocery shopping services for the elderly could be combined with recycling services. Another possibility would be to establish networks among tenants to assist neighbors in recycling. A final possibility would be to add recycling services to manager's job descriptions.

4. The outdoor shelters were not adversely affected by weather conditions and were not found to be damaged by tenants and others. None of the 19 outdoor systems sustained any damage.

The monitoring reports show that managers did not find it necessary to lock the shelters, however as market conditions improve for recyclables, this may change. The decals used to identify the recyclables contained in the shelters held up well after six months of weather conditions. A decal should be added to the shelters showing tenants how to prepare recyclables for storage. Another decal should display the phone number of the hauler or City to clarify who to call for questions or problems. Most indoor recycling systems were sited in covered parking areas or in laundry areas out of the weather. There were not any reports of significant physical damage associated with the indoor systems.

5. The containers that were used in the recycling shelters, while inexpensive, did not prove adequate for the task. The major problem was that the containers were inadequately designed for the needs of the haulers, particularly because they did not have handles for servicing. Another problem was that the containers would deteriorate when wet. In addition, the pilot project was continually plagued by not having a dependable supply of containers.
6. Due to the volume of recycled newspaper, it is apparent that a separate collection container may be appropriate. Several haulers have suggested using a metal 1 1/2 yard dumpster. This may be an appropriate solution to the newspaper problem. In the future, outdoor systems may contain a combination of multi-material shelters and separate dumpsters for newspapers. Another possibility would be to use six to seven roller carts to handle the recyclable materials. The volume of newspapers could be accommodated by adding more roller carts.
7. We found that the high percentage of absentee ownership of multi-family housing created two significant problems that will have to be remedied by the city. The first was the inordinate amount of difficulty in contacting owners, this slowed down the audit and delivery process. The second problem was a certain amount of reluctance from owners to pay for the physical improvements that were required to establish suitable areas for recycling systems. Examples of these improvements are concrete pads for locating outdoor recycling systems or enlarging fenced dumpster enclosures. In order to remove these barriers, the City may need to modify building codes to support these changes and develop incentives for owners that promote recycling.
8. In order to increase recycling in multi-family dwellings, the City should look at strategies for standardizing recycling services and equipment. In addition, the City will need to add financial resources and staff to monitor recycling systems in multi-family buildings. The City should also settle on one or two standardized approaches to recycling in apartments.

Whatever the approach, haulers and building owners and/or managers should be heavily involved in the planning process.

9. At the regional level, Metro should strongly consider making public funds available to local haulers to enable them to purchase or lease state-of-the-art recycling equipment, including trucks and containers. This would enable garbage haulers to move to a more standardized regional approach to recycling collection.

APPENDIX A

Participating Buildings Located  
in the City of Beaverton

Address	Number of Recycling Systems	Number of Apartment Units
Valley Park 6900 SW 104th	1 outdoor	8
Laurelridge 6567 SW 123rd	1 outdoor	30
Valley West 6855 SW 104th	1 outdoor	26
Reef Apartments 5200 SW 141st	1 outdoor	56
French Chateau 11730 SW Bel Aire	1 outdoor	17
Meadow Park 13963 SW Butner	1 outdoor	40
Chateau Ecole 2435 SW Ecole	1 outdoor	90
Continental 13155 SW Allen	1 outdoor	24
Fir Grove 6000 SW Menlo	1 outdoor	30
Allentown 14100 SW Allen	2 outdoor	107



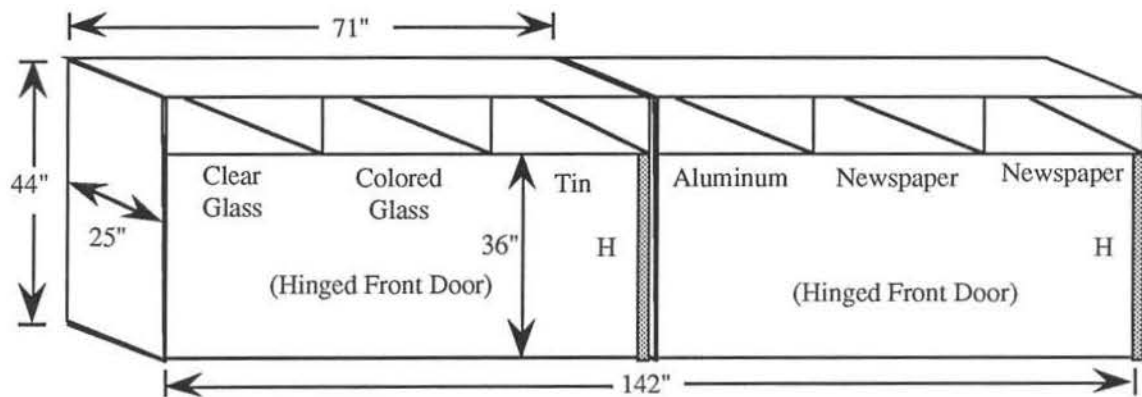
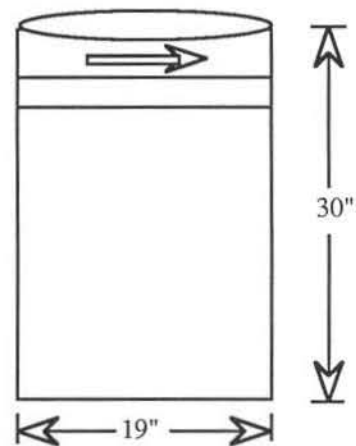
Springbrook 10080 SW 5th	1 outdoor	24
Briarcliff 13925 SW Allen	1 outdoor	65
On the Green 10141 SW Trapper Lane	4 outdoor *	272
Westlake Village 12600 NW Barnes	2 outdoor *	200
Scholl's Bridges 6745 SW Scholl's Ferry	2 indoor	38
Sequoia Park 9th & Algier	3 indoor	132
Hallwood 7535 SW Hall	4 indoor	76
Beaverton Retirement Lodge 12900 SW 9th	2 indoor	121
<b>TOTAL</b>	<hr/> 30	1,356

\* On the Green and Westlake Village each purchased two additional outdoor recycling systems with the technical assistance of the PSU Recycling Education Project (REP). The REP also provided the containers and educational materials for the recycling systems.

## APPENDIX B

### Recycling Education Project Portland State University

The Multi-Family Intervention Project proposes to install recycling systems in both indoor and outdoor locations this summer. The containers for recycling measure 19" in diameter by 30" tall and would be lined with a woven polypropylene liner to increase durability and container life. Each recycling system would contain 5 or 6 of these containers – 1 for tin, 1 for aluminum, 1 for clear glass, 1 for colored glass, and either 1 or 2 for newspaper. In outdoor locations the recycling system would be made up of two shelters each measuring 71" x 25" x 44". They will both contain three fiber barrels. The shelters would be serviced by a hinged front door. The modular design would allow the shelter systems to be arranged in a straight line, in an "L" – shaped configuration, or back-to-back.



APPENDIX C

FIELD INVESTIGATION REPORT  
Apartment Building Recycling Project

Investigator: \_\_\_\_\_

Date: \_\_\_\_\_

Apartment Building Name: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Number of Units: \_\_\_\_\_ Number of Floors: \_\_\_\_\_

Building Manager: \_\_\_\_\_ Telephone: \_\_\_\_\_

Owner's Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Garbage Hauler: \_\_\_\_\_

Recycling Status: Newspaper  Glass  Tin  Aluminum   
Cardboard  Plastic  Motor Oil  Scrap Paper   
**NOT RECYCLING**

Comments: \_\_\_\_\_

Recycling Barriers: No Space  No Containers  Too Messy   
Not Accessible to Hauler  Uncooperative Hauler   
Uncooperative Tenants  No Monitor

Comments: \_\_\_\_\_

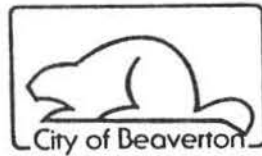
Site Sketch: Locate entrances (E), delivery areas(D), storage space (S) and potential sites for recycling containers (R).

APPENDIX D

**A**PARTMENT RECYCLING

**K I T**

City of Beaverton  
4755 S.W. Griffith Drive  
Beaverton, Oregon 97076



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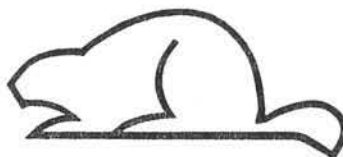
The Apartment Recycling Project  
is funded by Metropolitan Service  
District (Metro) and the City of  
Beaverton, and operated by  
Portland  
State University

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*Printed on recycled paper.*

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City of Beaverton

Larry D. Cole  
Mayor

September, 1989

Dear Apartment Owner/Manager:

The City of Beaverton is working to increase recycling participation in the city and decrease the amount of materials going into our landfills. Faced with a growing garbage disposal crisis, the Oregon legislature passed the Recycling Opportunity Act in 1983. This law requires that garbage haulers provide Oregonians living in cities with a population over 4,000 the opportunity to recycle a number of secondary materials.

This year, we are making a special effort to offer more convenient recycling for apartment dwellers. As a property owner/manager, you will probably be pleased to see savings in your refuse disposal costs, as well as the environmental and land use benefits, that result from recycling. To achieve this, the City and Portland State University's Recycling Education Project will work with you and your garbage hauler to design and set up a recycling program for your complex. Portland State student interns will be available to distribute recycling brochures and answer any questions your tenants may have. Tenant education is critical, both to encourage tenants to participate and to ensure that materials are properly prepared for recycling. The City has obtained funds to provide collection containers, and in some cases, outdoor shelters to stimulate greater participation in recycling.

A representative from the Recycling Education Recycling Project will be contacting you in the near future to determine how we can help you to custom design and establish a workable recycling system. We encourage you to become involved with us in this cooperative waste reduction effort. With your help, Beaverton can serve as a positive model for other communities to follow.

Sincerely,

Larry D. Cole  
Mayor

4755 S.W. Griffith Drive, P.O. Box 4755, Beaverton, OR 97076, General Information: (503) 526-2222

An Equal Opportunity Employer

# RECYCLING ... RECYCLING ... RECYCLING ... RECYCLING

## RECYCLING...

**REDUCES GARBAGE** dumped into diminishing landfills or burned in incinerators. Pollution from these sources is therefore reduced and disposal costs are avoided.

**CONSERVES NATURAL RESOURCES.** Recycling one ton of paper saves 17 trees. Recycling metals saves limited ore resources.

**SAVES ENERGY.** Making products from recycled materials requires much less energy than using raw materials.

**IS THE LAW.** The Oregon Recycling Opportunity Act, a state-wide solid waste management plan effective in 1983, requires monthly, curbside pickup of recyclable materials in cities of 4,000 or more. Recycling depots must be located at every landfill and transfer station or at a location MORE convenient to the people of the area.

\*\*\*\*\*

\*\* AMERICANS GENERATE ENOUGH WASTE TO FILL THE NEW ORLEANS SUPERDOME TWICE A DAY, EVERY DAY. That's 4.5 pounds of waste per person, per day, compared with 2.5 pounds in 1930. Although approximately half of this is recyclable, only 10% is recycled.

\*\* THE PORTLAND METROPOLITAN AREA GENERATES ENOUGH WASTE EVERY MONTH TO FILL THE MEMORIAL COLISEUM. That's 962,000 tons per year: 21% of this, 207,000 tons, is recycled; the remaining 755,000 tons is landfilled.

\*\* If all 240,000 metro dwellers who subscribe to The Oregonian recycled it daily, we'd save 2,000 trees...a day!

\*\* Three million cars, 100 million tires, 40 million tons of paper, 28 billion bottles, 60 billion cans, and 4 million tons of plastic are thrown away by Americans every year.

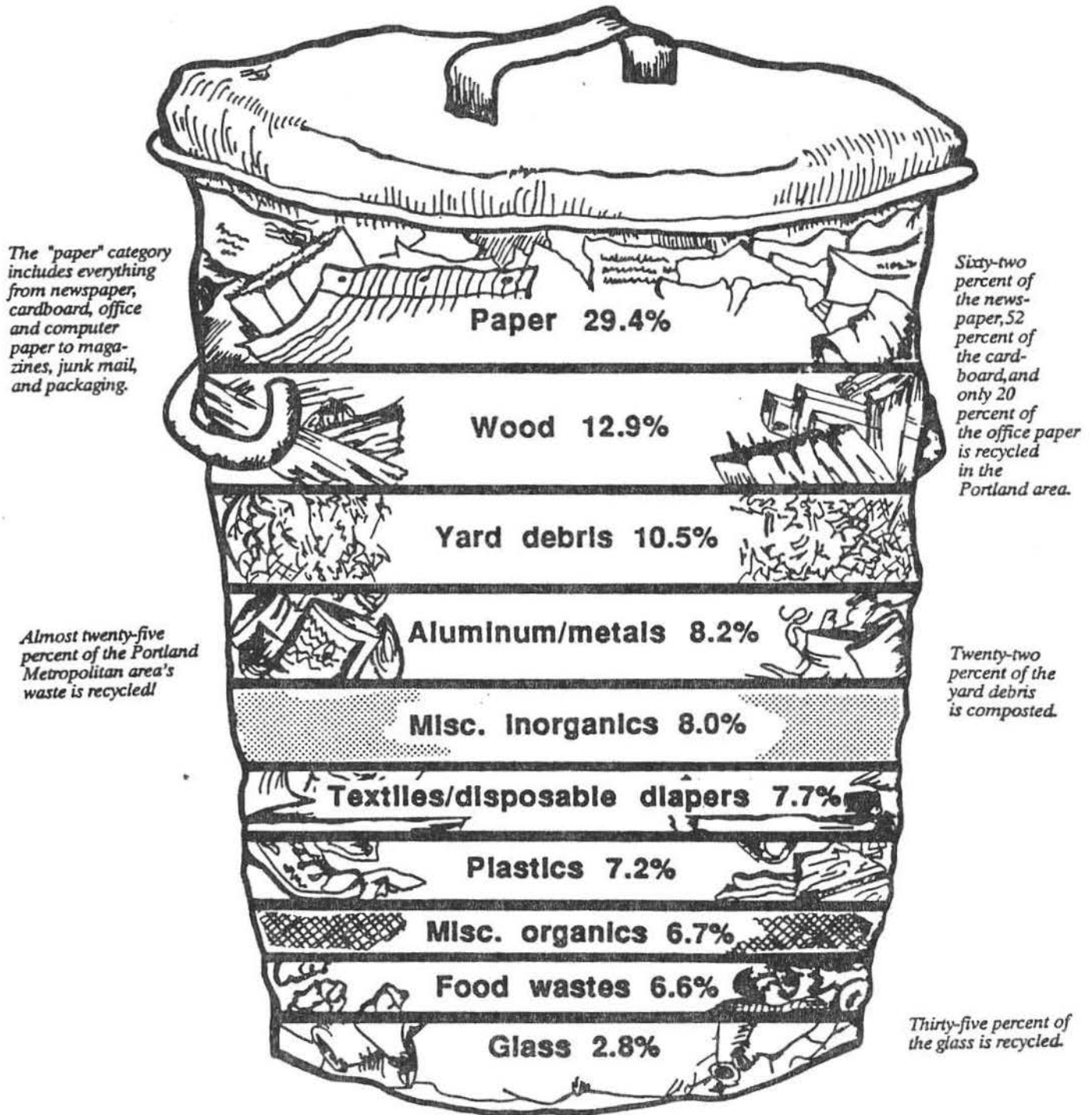
\*\* Nationally, 20% of container glass and 30% of newspaper is recycled. In the Portland area, 30% of container glass and 75% of newspaper is recycled.

## YOUR RECYCLING PARTICIPATION COUNTS!

Portland State University \* Recycling Education Project \* 464-4087

# What's In Our Garbage?

Figures courtesy Metropolitan Service District Waste Composition Study, December, 1987.



**How can we empty the can before it's landfilled?**

## RECYCLING FACTS

### The Time It Takes Litter To Decompose

Paper . . . . .	1 Month
Cotton Rags . . . . .	5 Months
Orange Peels . . . . .	6 Months
Fiber Rope . . . . .	14 Months
Milk Carton . . . . .	5 Years
Filter Tip Cigarette Butt . . . . .	10-12 Years
Plastic Bags . . . . .	10-20 Years
Painted Wood . . . . .	13 Years
Leather Shoes . . . . .	25-40 Years
Tin Can . . . . .	100 Years
Aluminum Can . . . . .	500 Years
Glass Bottle . . . . .	500 Years +
Plastic Milk Jug . . . . .	Never?
Plastic Burger Container . . . . .	Never?

Information from: DEQ recycling handbook and the National Parks  
on Litter Decomposition



## SAFER ALTERNATIVES FOR TOXIC PRODUCTS

The following is a list of safer substitutes for some household toxics.

### AEROSOL SPRAYS

- \* Use pump-type sprays to replace aerosols.

### ANT CONTROL/BUG SPRAY

- \* Sprinkle cream of tartar in front of the ant's path. Ants will not cross over.
- \* Use screens on windows and doors.
- \* Brewers yeast tablets taken daily give the skin a scent that mosquitos seem to avoid.

### CHEMICAL FERTILIZERS

- \* Compost

### COPPER CLEANER

- \* Pour vinegar and salt over copper and rub.

### DETERGENTS (Laundry & Dishwashing)

- \* Replace detergents with "non-toxic", biodegradeable soaps.

### DRAIN OPENERS

- \* Pour boiling water down the drain.
- \* Use a plumber's helper (plunger).
- \* Use a plumber's snake.

### FURNITURE POLISH

- \* Soft cloth and mayonnaise.
- \* 1 part lemon juice and 2 parts vegetable oil.

### GLASS AND WINDOW CLEANERS

- \* Cornstarch and water.
- \* 1/2 cup white vinegar and one gallon warm water. Wipe with newspapers, if desired.

### OVEN CLEANERS

- \* 3 TBSP. washing soda with one quart warm water.
- \* Place liners in oven to catch drips during baking.
- \* Sprinkle salt on spills when they are warm and then scrub.
- \* Rub gently with steel wool.

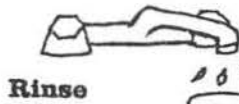
### SNAIL/SLUG BAIT

- \* Place a shallow pan with beer in infested area.
- \* Overturn claypots. Snails will take shelter in them during the sunny days and they can be collected and removed.

# RECYCLING Is As EASY As Taking Out The Garbage!



**Glass  
bottles  
and jars**



Rinse



No need  
to  
remove  
labels



Green



Brown

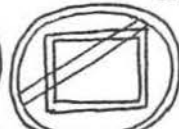


Clear

**Separate  
Colors**



No lightbulbs

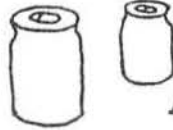


No windows



No dishes  
or glasses

**Put in bags, boxes, or  
buckets.**



**Aluminum  
cans**



Foil



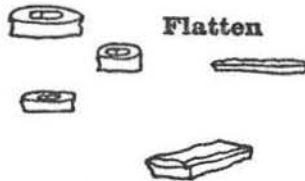
Magnets  
won't  
attract  
aluminum



Pie plates



Rinse

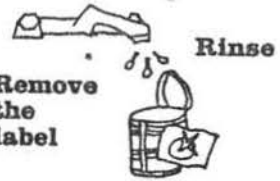


Flatten

**Bag or box it.**



**Tin cans**

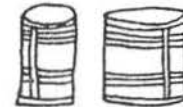


Remove  
the  
label

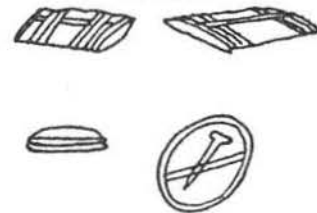
Rinse



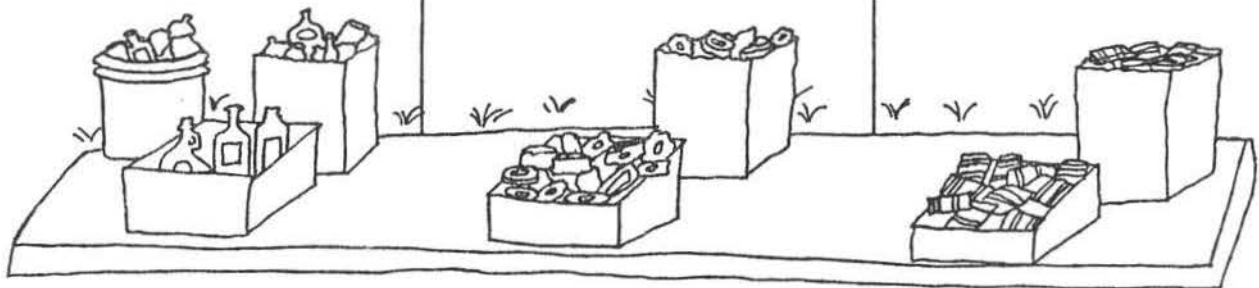
Open  
both  
ends



Flatten



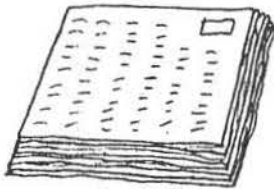
**Bag or box it.**



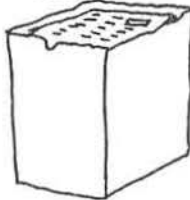
# RECYCLING Is As EASY As Taking Out The Garbage!



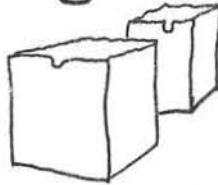
**Newspaper**



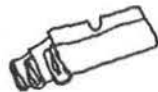
Stack it



then put in large brown grocery sack.



**Kraft paper and corrugated cardboard**



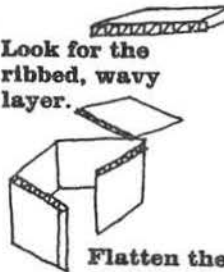
Grocery bags



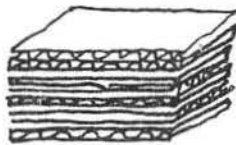
Look for the ribbed, wavy layer.



Brown wrapping paper



Flatten the cardboard



Include the Kraft paper.

Bundle, bag, or box it.



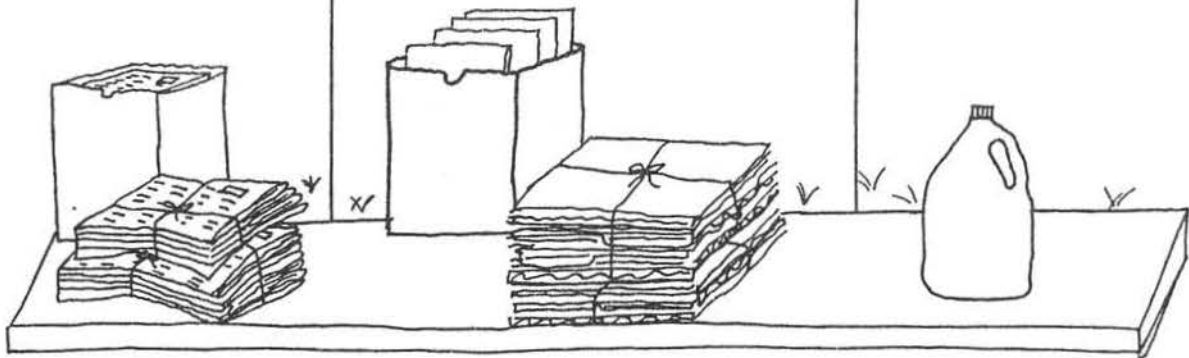
**Motor Oil**



Pour motor oil into clean leak-proof, non-breakable container.

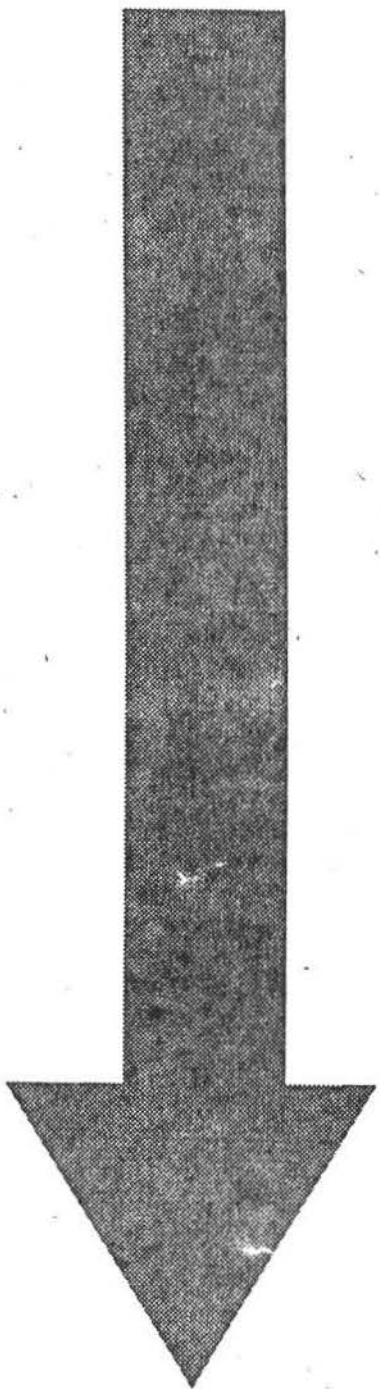


Put on the tight-fitting lid.

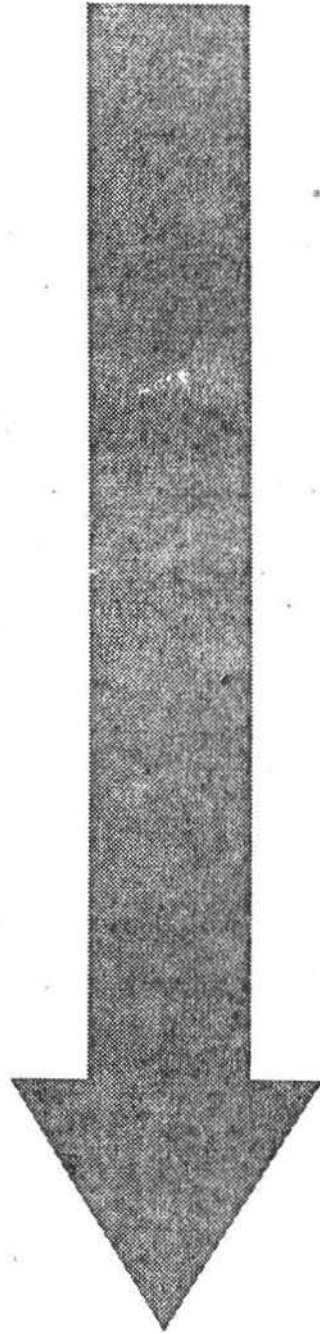


# recycling area

# recycling area



**recycling  
area**



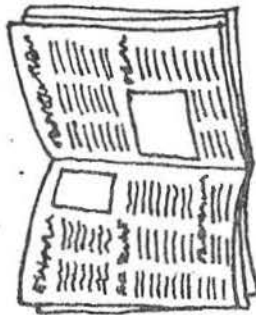
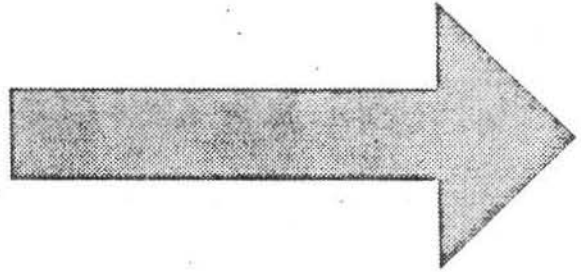
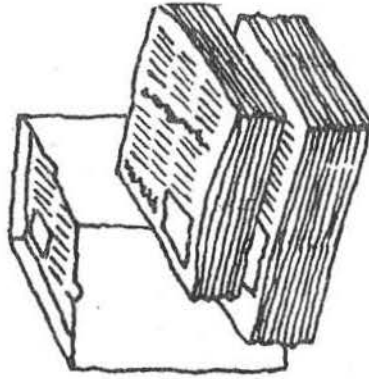
**no glass**

**no cans**

**no newspaper  
in the dumpster**

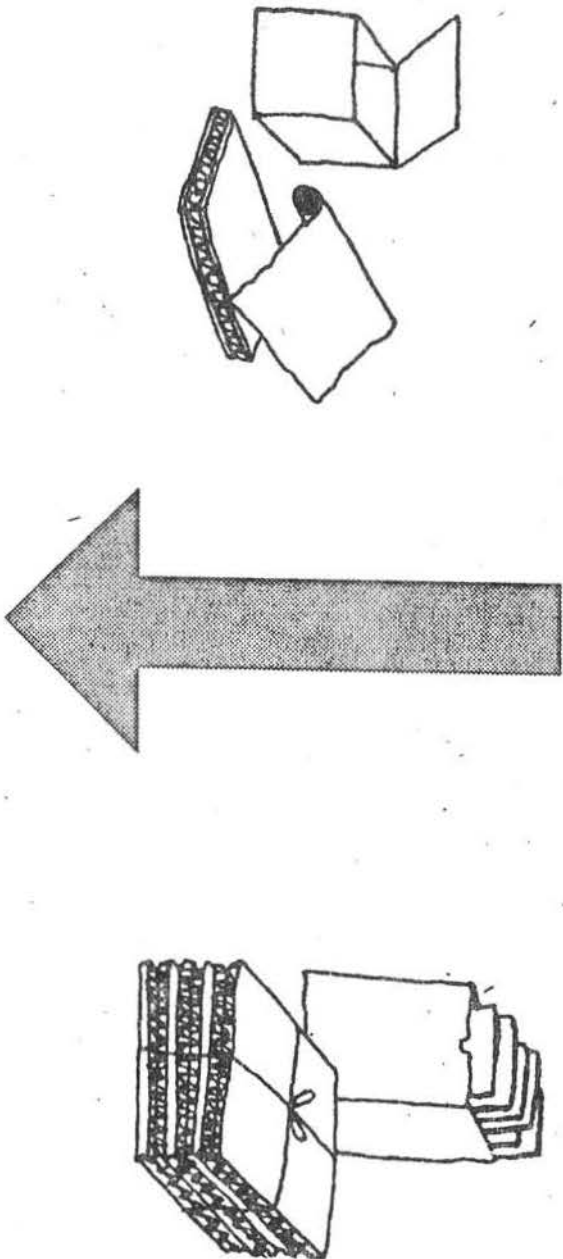
**please recycle!**

# newsprint

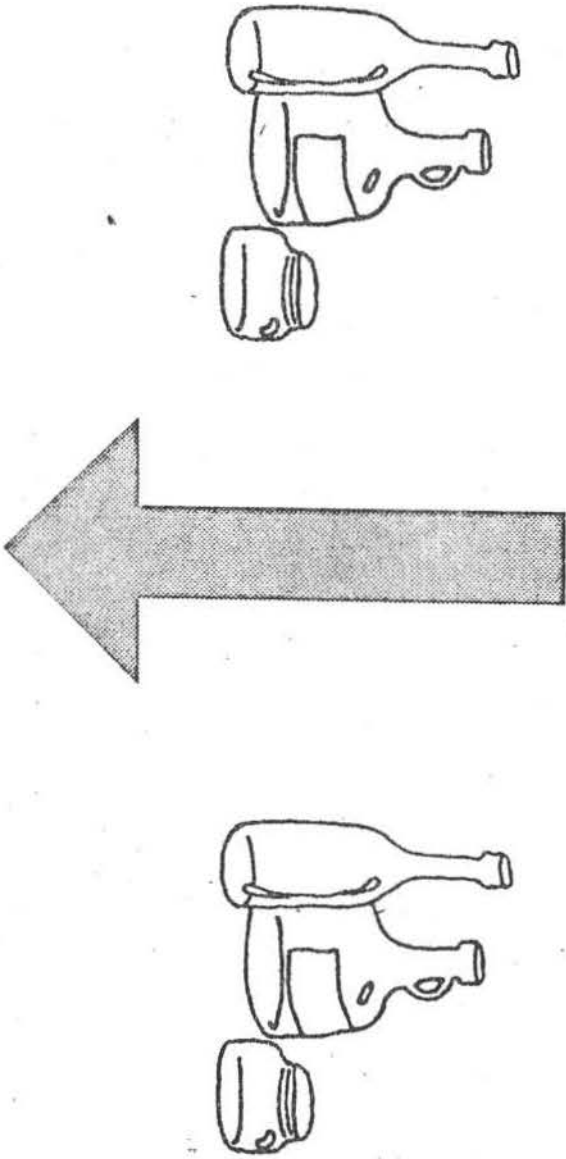




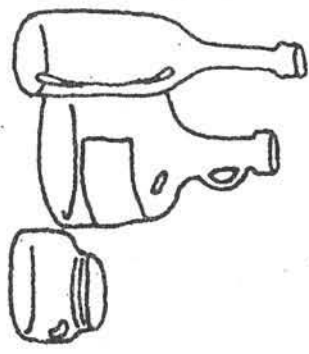
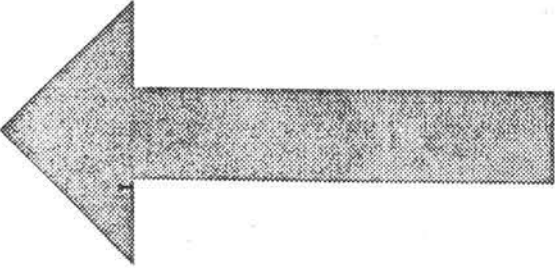
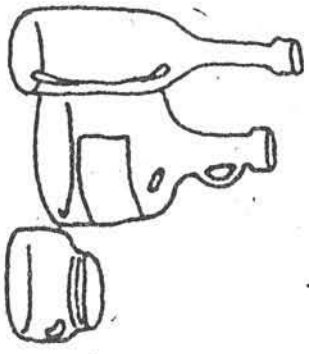
# corrugated cardboard



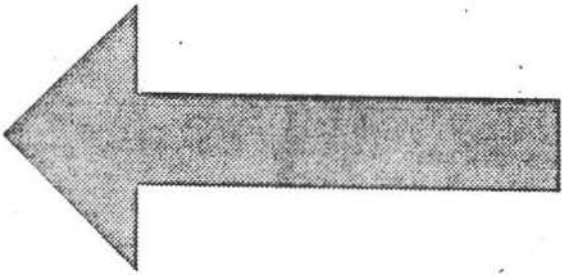
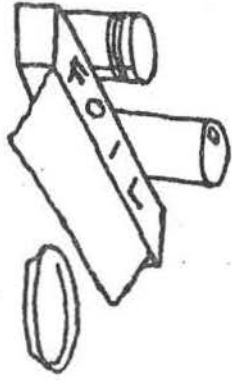
**clear  
glass**



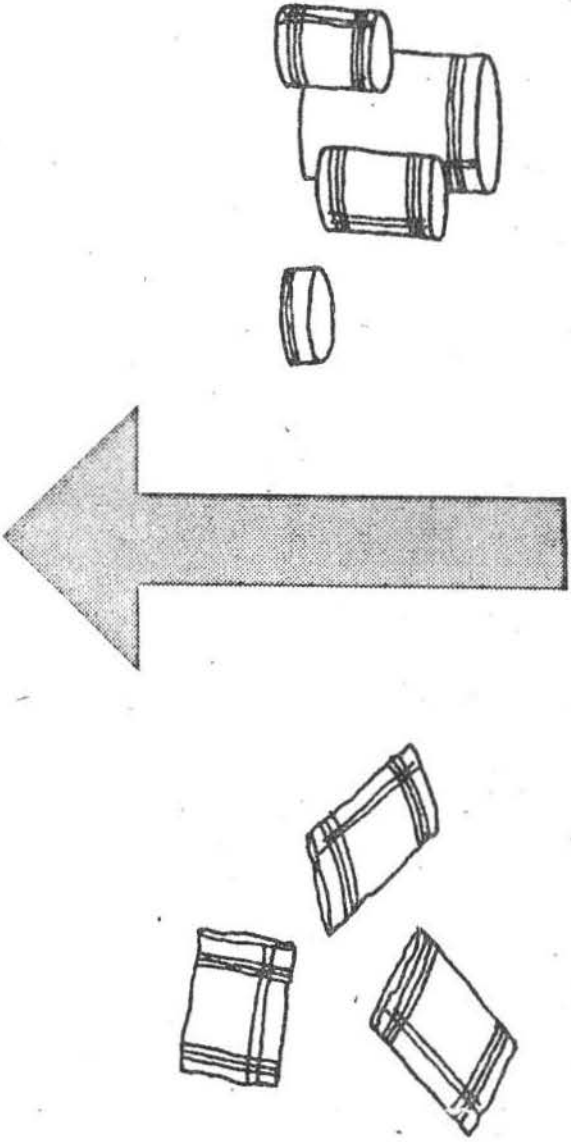
# percolated glass



# aluminium



# tin cans



APPENDIX E

# BE A PART OF THE SOLUTION- RECYCLE!

*YOUR OPPORTUNITY to help solve Beaverton's waste crisis is "knocking at your door".*

*HERE'S HOW to prepare your recyclables before you take them to the recycling station. If you can't find the station, ask the building manager.*

## R ECYCLING:

- REDUCES** the volume of solid waste in our landfills;
- HELPS KEEP** Beaverton and our environment clean;
- SAVES** tremendous amounts of energy;
- CONSERVES** our vital natural resources.

## R EMEMBER

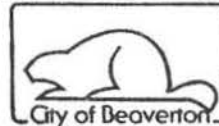
- Avoid buying disposable and non-recyclable items and packages.
- Select products carefully, buy in bulk, reuse your own bags and containers.

## R ECYCLING FACTS

- Every glass bottle you recycle saves enough energy to light a 100-watt bulb for four hours.
- Every ton of recycled newspaper saves the lives of seventeen trees.
- Tin is available in the U.S. only through imports or recycling. Each year over 65 billion cans are discarded by Americans.
- Oregonians produce 5,480 tons of garbage a day - enough to cover one acre of land eight feet deep.
- In Oregon, approximately 95% of aluminum cans are recycled - thanks to our bottle bill.



City of Beaverton  
4755 S.W. Griffith Drive  
Beaverton, Oregon 97076



The Apartment Recycling Project is funded by the Metropolitan Service District (Metro) and is operated by Portland State University.

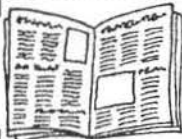
*Printed on recycled paper.*

# YOUR RECYCLING GUIDE

## WHAT CAN BE RECYCLED

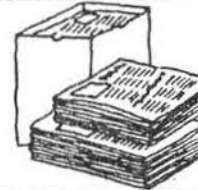
## HOW TO PREPARE RECYCLABLES

### NEWSPAPERS



- Newsprint only
- No magazines
- No junk mail
- No slick papers

- Put your newspapers into large brown grocery bags
- Put in proper bins



### GLASS CONTAINERS



- Jars & bottles only
- No light bulbs
- No dishes or glasses
- No window glass/mirrors

- Wash
- Sort by color:  
clear  
green  
brown
- No need to remove labels
- Put in proper bins

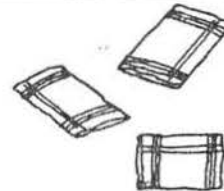


### TIN CANS

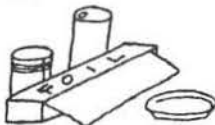


- Separate from other metals
- Magnets will attract tin

- Rinse
- Remove labels
- Cut out both ends
- Flatten
- Put in proper bin

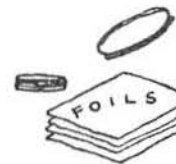


### ALUMINUM

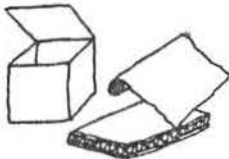


- Cans, pie plates, food trays, foils
- Magnets will not attract aluminum

- Wash
- Separate from other metals
- Flatten
- Put in proper bin

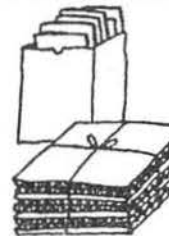


### CARDBOARD/BAGS



- Only brown paper bags and brown cardboard with ribbed layer between two flat pieces
- No cereal boxes, egg cartons or wax-coated cardboard

- Flatten all boxes.
- Put into brown bags or bundle and tie together
- Stack at recycling area



## KEEP MATERIALS SEPARATE, NO TRASH

Many other items are recyclable but will not be collected at this recycling station. These include magazines, plastics, office paper, junk mail and many other products.

For information on what can be recycled and where to take it, call The Metro Recycling Information Center, 224-5555.

**APPENDIX F**

RECYCLING EDUCATION PROJECT FOLLOW-UP REPORT      Date: \_\_\_\_\_

Field Monitor: \_\_\_\_\_

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Apartment Building Name: \_\_\_\_\_

Manager / Owner: \_\_\_\_\_

Number of Units: \_\_\_\_\_ Number of Shelters: \_\_\_\_\_

Hauler: \_\_\_\_\_

Recycling Status

	Before		After			Before		After	
	Yes	No	Yes	No		Yes	No	Yes	No
Newspaper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Brown Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clear Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Green Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aluminum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How Frequently are the Shelters Emptied? (Circle Below)

Weekly                      Twice/Month                      Once/Month                      Less than Monthly

Is this Level of Service Adequate for your Needs?    Yes                      No

What Percent of Your Tenants are Using the Shelters? \_\_\_\_\_ %

Have You Had Any Comments From Tenants (Positive or Negative) About the Recycling Program?

\_\_\_\_\_

Was the Information Provided in the Recycling Kit and in the Leaflets Helpful to your Recycling Program?                      Yes                      No

Comments: \_\_\_\_\_

\_\_\_\_\_



**FIELD REPORT**

Monitor: \_\_\_\_\_ Date: \_\_\_\_\_

Building Address: \_\_\_\_\_

Volume

	None	1/4	1/2	3/4	Full	
Newspaper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Newspaper
Clear Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Clear Glass
Green Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Green Glass
Brown Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Brown Glass
Tin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tin
Aluminum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aluminum

Contamination in Recycling Barrels                      None                      Minor                      Major

---

Are Recyclables Placed in the Proper Barrels?                      Yes                      No

Circle Any Damage:                      Shelters                      Barrels                      Decals

                    None

Is There Equipment Missing or in Need of Replacement?                      No                      Yes

---

Are There Additional Barriers to Tenant Use of the Shelters?

---

Are Shelters Kept Locked?                      Yes                      No

Comments: \_\_\_\_\_

---

Action Taken: \_\_\_\_\_

---

# Your City



City of Beaverton Newsletter

October, 1989

## Fanno Creek 'cleans up'

Saturday, August 12th, in the sun and occasional rain, 40 local residents and seven maintenance staff from Tualatin Hills Park and Recreation District (THPRD) played in the mud in Fanno Creek.

The event was the first Fanno Creek Clean-up in Greenway Park. Sponsored by the Greenway Neighborhood Association, the effort was a huge success.

Greenway NAC members and residents from Beaverton, Portland and Tigard spent the day pulling out a bowling ball, 12 tires, 50 gallon drums, a shopping cart and various lumber.

Larger finds included a stove pipe, wash basins, a retaining wall, electrical spool, a newspaper rack and a six foot concrete culvert.

Vergie Ries, honorary chairman of the creek cleanup and Benita Harper, co-chair, spent the day shuttling volunteers, delivering messages and taking pictures of the work in progress.

THPRD staff drove through the park retrieving garbage bags and delivering them to three dumpsters donated by West Beaverton Sanitary. By the end of the day, volunteers amassed over 40 cubic yards of trash and appliances.

Surgical gloves for the workers were donated by Beaverton Pharmacy and the park district provided for hand washing facilities.

Everyone enjoyed the excellent lunch provided by Roger Cooper, manager of the Greenway Albertson's. Mass quantities of sandwiches, fruit, drinks and doughnuts were consumed with gusto!

Councilman Forrest Soth, covered in creek mud, spoke of our need to improve and maintain all creek systems as they flow into the Tualatin River Basin.

Eric Johansen, Greenway NAC chairman, said the NAC had been wanting to do the project for a long time.

After the success of the first cleanup, residents can look forward to an annual Fanno Creek Cleanup to maintain a viable creek and surrounding area.

## New neighborhood coordinator hired

The City of Beaverton recently hired Deborah Horrell as the new Neighborhood Association Coordinator. Horrell replaces Vergie Ries who resigned her position in July.

Prior to accepting her new position, Horrell managed and monitored service contracts for Portland area refugee and homeless programs funded through Metropolitan Community Action. She was grants manager for the state of Idaho's Community Services Block Grant Program for six years.

Additionally, Horrell has an extensive background in community organizing and volunteer management.



Deborah Horrell

Ms. Horrell is a Beaverton resident and is looking forward to working with all the dedicated and concerned citizens through the neighborhood associations.

She also said she is grateful for, and challenged by, the inspirational example left by the former coordinator, Vergie Ries.

## Metro funds pilot project for recycling at apartments

Residents in selected apartment complexes in Beaverton will take part in a pilot project funded by the Metropolitan Service District to come up with ways to make recycling easier at multi-family units.

On July 1, Metro gave grants totaling \$150,000 to Portland, Beaverton and Clackamas County for projects to establish on-site recycling for multi-family complexes.

Beaverton received \$19,500, Portland's share was \$126,000 and Clackamas County whose program will take place in Lake Oswego, got \$4,500. The allocation was based on the number of apartment buildings in relation to the city's population.

The Opportunity to Recycle Act, passed by the Oregon Legislature in 1986, mandates curbside pickup of newspaper, glass, tin, cardboard and other materials for recycling.

This has been difficult to implement for resident of multi-family units such as apartments or condominiums.

Beaverton's project will be implemented in up to 30 multi-family complexes. "They will represent a varied cross-section of multi-family dwellings in Beaverton, and will be equipped for different types of recycling services, so we can compare the end results," said Beth Erlendson, the city's recycling coordinator.

"One of the major challenges apartment dwellers face in recycling is the lack of space for siting recycling bins. Each building in this program will be individually evaluated to determine whether indoor or outdoor containers will be the most efficient."

The apartment complexes for the pilot program will be chosen by the City of Beaverton, West Beaverton Sanitary Service, and the Portland State University Recycling Program, who will coordinate the program with the city.

Metro will also provide technical assistance for the project and monitor progress of the program, which runs through June 30, 1990.

## Pitching in

Oregonian 11/22/89



The Oregonian/ROBERT BACH

Ian Blyth, 6, lifts his 3-year-old brother, Shawn, so he can toss a can into a new recycling bin at the Briercliff Park apartments, 13925 S.W. Allen Blvd., Tuesday. The bin is part of an experiment by Beaverton and the Metropolitan Service District to encourage apartment residents to recycle paper, metal and glass. If residents of Briercliff's 65 apartments follow through, they should generate 12 tons of recycled material in a year, Beaverton Mayor Larry D. Cole said.

## Beaverton City Briefs

### Americanism Award due Exchange Club

The Beaverton Exchange club will be the recipient of an "Americanism Award" at the city's "Pause for the Pledge" Flag Day ceremony next Wednesday night.

The ceremony is part of a national observance in honor of Flag Day. Beaverton's observance will take place in the courtyard of the Beaverton Town Square, 11665 S.W. Beaverton-Hillsdale Highway, beginning at 7 p.m.

The Beaverton Exchange Club was nominated for its diligence in promoting patriotism in the community. During the last four years, club members have distributed miniature flags to the public on Flag Day as part of their "Give a kid a flag to wave" program.

The club also donated to the city in September 1987 a "Freedom Shrine" consisting of copies of famous historical documents. The shrine is now on display at Beaverton City Hall, 4755 S.W. Griffith Drive.

Robert Bruno, president of the Beaverton Exchange Club, will accept the award at Wednesday night's ceremony. More information is available by calling Beth Erlendson at 526-2487.

### Council approves light-rail route

The City Council has passed a resolution formally approving the route of the proposed westside light-rail line west of Southwest Murray Boulevard.

The Tri-Met board of directors adopted an alignment Feb. 22 that follows the Burlington Northern Railroad

tracks between Murray and 185th Avenue. Tri-Met has asked all jurisdictions that may be affected by the route decision, including Beaverton, Hillsboro and Washington County, to pass a resolution approving the adopted alignment.

Beaverton and Tri-Met officials are continuing to work together to identify a specific alignment for the light-rail line through the Central Beaverton area that will maximize development and redevelopment opportunities. One possible alignment would place the light-rail line near Southwest Henry Street just north of Tualatin Valley Highway.

The City Council will hear a presentation on the light-rail project at its Monday night meeting.

### City to resubmit rejected annexation

The City Council decided Monday night to modify an annexation proposal rejected by the Portland Metropolitan Area Local Government Boundary Commission last week and to ask the commission to reconsider the modified proposal.

The boundary commission voted unanimously to reject Beaverton's proposal to annex 245 acres west of Southwest 170th Avenue and south of the Burlington Northern Railroad tracks. The proposed annexation contains 245 acres, has an estimated population of 1,800 and is valued at almost \$40 million.

The commission rejected the annexation primarily because it would have created a 300-acre unincorporated "island" that would have been surrounded by Beaverton. Once residents become part of an unincorporated island, they can be annexed by the city that surrounds them even if

they overwhelmingly oppose joining the city.

The annexation was sought by 34 percent of the registered owners in the annexation area. Many residents in the area have expressed an interest in joining Beaverton to ensure that they remain in the Tualatin Hills Park and Recreation District.

At their Monday night meeting, City Council members voted 5-0 to remove the Panzer Nursery, 17980 S.W. Baseline Road, from the proposed annexation. That modification will prevent the creation of an island because part of the proposed island would be bounded by Hillsboro.

### Council OKs animal ruling aimed at cougar

Sasha, the declawed pet cougar that lives in the back yard of a Hyland Hills residence and has been disturbing residents for more than a year, may soon be looking for a new home.

The City Council had "first reading" of an ordinance amending the city code to prevent the keeping of wild, exotic and dangerous animals within the city limits.

The ordinance is largely in response to the female cougar that Tony Roggi, 14150 S.W. Barlow Road, is keeping in a 10-by-40-foot roofed cage in his back yard. Residents have expressed concerns about their physical safety and voiced complaints about the noise the female cougar will make when she goes into heat.

Joyce Roggi, Tony Roggi's mother, appeared before the City Council Monday night to ask that the council not approve the ordinance. Roggi questioned how the council could determine the cougar was a danger when no members of the council have

inspected the cougar's cage.

"She was raised as a pet," she said. "She is not any more of a threat than any of your dogs if she is properly housed."

But Councilor Rob Drake said he sees the cougar as a danger. "I cannot see any reason why an animal like that should be raised in an urban area," he added.

The council voted 4-1 to tack an emergency clause onto the ordinance which will make it effective when Mayor Larry Cole signs it after the council has second reading and passage of the ordinance next Monday night.

### City to participate in recycling program

Beaverton has been chosen to receive a \$19,500 grant from the Metropolitan Service District to participate in a program to encourage recycling at apartment complexes and other multifamily housing.

Metro's "Multifamily Recycling Project" will take place in Beaverton, Portland and Lake Oswego between now and June 30 of next year.

The program is aimed at starting a recycling program in a sampling of multifamily residences in Beaverton, not in every multifamily residence.

The elements of the program are to identify multifamily buildings in need of recycling assistance; contact building owners, managers and tenants to disseminate information and provide technical assistance to establish recycling programs; provide containers to separate and store recyclable material.

No city money will be spent on the project with the exception of the time staff assistant Beth Erlendson will spend coordinating the project.



## Beaverton City Briefs

### **Drake, Shick, Dunn eye re-election bids**

City Council member Rob Drake announced this week that he will seek re-election during the May primary election.

Drake, who is currently attending a National League of Cities conference in Atlanta, said he plans to file by the end of the week.

Last week, Vergie Ries became the first candidate to file for Drake's Position 5 spot. Two other positions, those occupied by councilors Carole Shick and Sarah Dunn, also expire at the end of 1990. Shick has filed for re-election and Dunn said she will do so soon.

Residents interested in running for one of three positions on the Beaverton City Council have until March 6 to file with City Recorder Ann Johnson.

New four-year terms take effect on Jan 1, 1991.

Anyone interested in running can pick up applications and candidates' handbooks at city hall, 14755 S.W. Griffith Drive.

### **Apartment recycling program under way**

A handful of Beaverton apartment dwellers won't have to go outside their complexes to recycle glass, tin and paper following last week's kick-off of a program aimed at renters.

Beaverton and the Metropolitan

Service District held a ribbon cutting ceremony Nov. 21 at Briercliff Park Apartments to mark the placement of what will eventually be 30 recycling bins at apartments throughout the city, according to Beth Erlendson, city recycling coordinator.

To date, the containers, which cost \$289 each, have been placed at The Reef, Allentowne Village, Fir Grove Apartments, Continental Apartments and the French Chateau. Fir Crest apartments will soon receive a bin.

"The people seem to be really pleased so far," Erlendson said. Though all the receptacles thus far are designed for outdoor use, Erlendson said plans are to provide half of the complexes selected for the program with indoor containers.

### **Safeway and Goodwill seek help for needy**

Area Safeway stores and Goodwill Industries of the Columbia-Willamette are seeking donations to benefit needy

families during the holiday season.

Residents are being asked to bring in donations of food or money to area Washington County Safeway stores on Saturday during the seventh annual Supermarket Saturday.

Coordinated by Tualatin Valley Food Center, items most in demand are tuna, peanut butter, canned meats and stews, macaroni, powdered milk, packaged dry beans, peas and lentils.

The food drive is of increased importance this year because of a 67-percent reduction in area food supplies, said Denise Harkness of the food center. For more information, contact Harkness at 642-3236.

Goodwill needs donations of reusable books, toys, clothing, household items and small appliances, and will accept larger merchandise such as cars and recreational vehicles.

All articles are tax deductible. Donation stations are located at the Goodwill, 4700 Griffith Drive, and the Raleigh Hills Fred Meyer, 7700 Beaverton-Hillsdale Highway. For more information, call 238-6174.

### **Dinosaur needs permanent home**

The Beaverton Post Office is still seeking a permanent home for its 30-foot green papier-mache dinosaur.

Built by letter carrier Dennis Peneflor, the reptile was part of an October promotion for the Prehistoric Animals Stamp issued during the 1989 National Stamp Collecting Month.

Dubbed "Stampy" by Sara Rober, 5, of Beaverton, the dinosaur was the result of more than 100 hours of work by postal employees.

Postal workers are looking for museums, schools, businesses, civic groups or individuals interested in having the 275-pound beast.

Stampy needs some patchwork and postal employees are requesting that the dinosaur be coated with fiberglass to ensure she won't become extinct.

Anyone interested in adopting the dinosaur should call Bonnie Barrett at 646-3197. Stampy is on display at the Beaverton Post Office, 4550 Betts Court.