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Columbia Villa Recycling Project: Final Report

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Columbia Villa
Recycling Project

Final Report

June 30, 1990

Gerald F. Blake, PhD.
Lynne M. Storz

This research was funded by the City of Portland's Bureau of Environmental Services, Bureau of Community Development, The Private Industry Council, the Collins Foundation, and the Oregon Youth Conservation Corps.

Dr. Blake is a Professor of Urban Studies and Planning and Research Associate in the Center for Urban Studies, Portland State University. Ms. Storz is a graduate student in Urban Planning in the Department of Urban Studies and Planning and Research Assistant in the Center for Urban Studies.
COLUMBIA VILLA RECYCLING PROJECT
Final Report

Gerald F. Blake, PhD.
Lynne Storz, B.S.

Recycling Education Project
Portland State University

The Recycling Education Project is pleased to report on the progress and accomplishments of its Columbia Villa Recycling Project. The project operated from July 1, 1989 to June 30, 1990 and involved 16 high school age youth who were trained as Recycling Interns and supervised by Portland State University students.

Introduction

Every person in the United States generates about 4.5 pounds of garbage each day. The City of Portland generates almost 975 tons per day, or approximately 355,150 tons of solid waste per year. Multi-family dwellers account for 225 tons, or 23 percent of Portland’s daily total. The St. John’s landfill will reach full capacity by 1991, which will require that Portland’s solid 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 of 4,000 and over, aimed at reducing the volume of waste going to landfills and increasing participation in recycling. In the Portland 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 Portland’s recycling efforts is gaining the
cooperation of apartment building owners, managers, and tenants to participate in source separation and recycling.

Portland also has an unacceptably high rate of youth unemployment, with teenagers being more than twice as likely as adults to be among the city's jobless. Columbia Villa's teenagers represent an important resource that can assist the Housing Authority with establishing a recycling program.

In the summer of 1989, the Recycling Education Project (REP) at Portland State University, in cooperation with the Housing Authority of Portland, the City's Bureau of Environmental Services, the Private Industry Council, and the Portland Public School's Home Repair Project began a multi-materials recycling program in the Columbia Villa housing project. The "Villa" is comprised of 478 multi-family housing units containing over 1,500 low-income tenants, and is administered by the Housing Authority of Portland (HAP).

Source separation and recycling has been established in several of the Housing Authority's high rise buildings, primarily those occupied by elderly residents. It was not until July, 1989, however, that Columbia Villa had a systematic recycling program in place. It is estimated that the Villa generates 3.35 tons of solid waste per day, at significant cost to the HAP.

Recruiting the Interns

The high school youth involved in the project were recruited and hired through the Private Industry Council's Summer Youth Employment Program. The youth were paid $3.85 per hour and worked approximately 35 hours per week over the summer months. Personal interviews with the youth were held in early June, 1989, and were based on interest in environmental issues, communications skills, and interest in light construction work.
Training the Interns

Youth received 36 hours of training in construction skills, environmental science and services, solid waste management, and public speaking. Training was planned as an on-going part of the project, with extensive field trips to recycling industries such as newsprint manufacturing, glass and aluminum production plants, and yard debris composting facilities. The training was provided by the project director, REP staff, and guest experts. Field trips were made to the Environmental Learning Center at Clackamas Community College, the Smurfit Paper Company, the Reynolds Aluminum Company, the Brockway-Owens glass manufacturing plant, the St. John's Landfill, and Grimm's Fuel and Composting plant.

Procedure

The youth were divided into three teams to carry out the recycling program. One of the teams constructed 60 wooden recycling shelters and placed them at 30 different locations around the Villa (see map). The shelters were sited next to the existing trash areas so that they could be easily serviced by HAP maintenance staff. The shelters were designed by the Bureau of Environmental Services, the Housing Authority of Portland, and the Home Repair Program. Each shelter was 4’ x 4’ x 5’ and constructed of 1/2” plywood then painted with an exterior grade paint. The shelters held four metal or fiber containers for storing recyclable materials. At the trash collection sites, the shelters were placed in pairs, where 1 shelter held 4 containers for newspaper and the second shelter stored tin, clear glass, colored glass, and aluminum (1 container for each material).

The second and third teams of youth conducted an intensive, door-to-door informational campaign to introduce the recycling program to Villa residents. The youth passed out leaflets, answered questions, and demonstrated to residents the proper preparation of recyclables for
storage in the shelters. The Housing Authority maintained and serviced the shelters once they were put in place. The shelters were serviced on a weekly basis.

**Follow-up and Monitoring**

The recycling system was monitored several times by the youth and the supervisors over the course of the project. The purpose of the follow-up visits was to estimate the level of participation by tenants, the volume of materials being recycled, the extent of contamination of recyclables, and the degree of proper preparation of recyclables. The largest volume of material being recycled was newspaper, followed by clear glass, tin, and colored glass. Only a small amount of aluminum was found in the shelters.

The follow-up found that 5 of the 60 shelters sustained varying amounts of damage after nine months of use. Two of the shelters were damaged by fire, while 3 others were defaced by graffiti or were otherwise damaged. In the future, it may be necessary for HAP to assume a higher profile in maintaining the condition of the shelters. Follow-up reports also suggested that the high turnover of residents will require a continuing effort to educate tenants about the recycling program. In addition, as the volume of recyclable increases over time, HAP staff will need to make adjustments in schedules and workloads to service the program.
Columbia Villa Recycling Project

Summary

PROJECT DIRECTOR: Gerald F. Blake, PhD.

PROJECT COORDINATOR: Lynne Storz
Susan McKinney

CONSTRUCTION SUPERVISOR: Doug Fanning

CREW LEADERS: Dominique Hardeman
Arnita Tucker

SUPERVISING AGENCY: Recycling Education Project,
Department of Urban Studies and Planning
Portland State University

COOPERATING AGENCIES: City of Portland, Bureau of Environmental
Services
Housing Authority of Portland
Portland Public Schools, Home Repair Program
The Collins Foundation
The Private Industry Council
Metropolitan Service District
Oregon Youth Conservation Corps
City of Portland, Bureau of Community Development

PROGRAM GOALS: Establish a multi-materials recycling program for the
1,500 residents of the Columbia Villa Housing Project

Employ 16 High School age youth as Recycling
Interns to construct recycling shelters for the Villa,
and carry out an educational campaign for residents.

TRAINING: Youth received training in construction trades, solid
waste management and recycling, public speaking,
and the environmental sciences.
**BE A PART OF THE SOLUTION—RECYCLE!**

YOUR OPPORTUNITY to help solve Portland'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.

### RECYCLING:

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

### REMEMBER

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

### RECYCLING 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.

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

*Printed on recycled paper.*
July 20, 1989

Media Contact: Dr. Jerry Blake
464-4087

RECYCLING STATIONS COME TO COLUMBIA VILLA IN PDX.

WHAT: Distribution of the first 15 of an anticipated 50 outdoor collection stations (approx. 4'x5'x4') for recyclable materials being built and installed throughout key points at the Housing Authority of Portland's (HAP) Columbia Villa multi-family housing project, located in North Portland.

WHEN: Wednesday, July 26th, 1:30 p.m.

WHERE: HAP Maintenance Facility, corner of North Woolsey Ave. and North Woolsey Court, Portland.

HOW: Four crews (16 youths in all), residents of North and Northeast Portland who have been working as paid summer recycling interns while receiving instruction and training for their roles at Portland State University and Jefferson High School in Portland, will assist in placing the new collection stations as they are unloaded from a truck driving around the housing project's streets.

WHY: Installing these collection stations for glass, tin, aluminum and newspapers demonstrates the visible successes of this year's Environmental Intern Project at Columbia Villa, a special educational outreach program being coordinated by Dr. Jerry Blake, who is a professor of Urban Studies and Planning at Portland State University as well as a Research Associate for PSU's Center for Urban Studies.

Among the Villa's current difficulties is the fact that no coordinated recycling program has existed there until now. The current project focuses the untapped talents of area youth, by giving them the education and support they need to work on a practical community-building, problem-solving activity.

In order to encourage Villa residents to make use of the recycling service, the recycling education interns are scheduled (OVER)
Students clean up area as paid recycling interns

By W.H. JUDSON
of The Oregonian staff

Sixteen students are guilty of playing with garbage. They are helping to clean up their neighborhoods as paid summer recycling interns, trained under the auspices of Portland State University and the Portland School District.

The students, all residents of North and Northeast Portland, are involved in distributing the first 15 of 50 outdoor collection shelters for recyclable materials being built and installed at the Housing Authority of Portland's Columbia Villa multi-family housing project.

On Wednesday the students split into four crews and met at the HAP maintenance facility in the Columbia Villa project to assist in placing the new collection stations as they were unloaded by truck at each location.

Installing these collection stations for glass, tin, aluminum, and newspapers is part of the educational outreach program being coordinated by Jerry Blake, professor of urban studies and planning at PSU and research associate for the university's Center for Urban Studies.

Blake argues that recycling is a matter of opportunity. “People with private homes in Oregon have known that they could just distribute recyclables down at the curb, but with multi-family dwellings, apartments, where's the curb?”

In order to encourage Villa residents to make use of recycling services, the recycling education interns will visit the area’s apartment building tenants and managers to distribute leaflets about recycling, and to personally explain more about the merits of the community effort.

Blake said that “face-to-face education” would work best in a location such as the 478-unit Columbia Villa project because of the population density. Furthermore, Blake said that “it has been, and will be, a total recycling education effort for all of Portland, not just Columbia Villa.”

The interns plan on distributing approximately 500 of these recycling shelters throughout Portland.

The interns work approximately 20 hours each week for eight to ten weeks, and are paid $3.50 to $3.85 per hour. In addition to PSU and the school district, the program is supported by Metropolitan Service District, the city of Portland, the Private Industrial Council and the Oregon Youth Conservation Corps.

The students learn about careers in environmental sciences and solid waste management, and also gain experience in public speaking, construction skills, and completion of a project.

David Yeggin, a second-year intern, said that “the neighborhoods are cleaner. They have improved, and I feel that I have really accomplished something.”

The program, Blake said, focuses the efforts of young people on practical means of community assistance related to global issues, current and future. “Hopefully we will increase community participation through our efforts,” he said.

“The net effect of recycling is that it creates new jobs,” Blake said.
Youths Help Set Up Villa Recycling

A new effort at Columbia Villa will create a coordinated recycling system there while giving 16 North/Northeast youths a chance to work on a community-building, problem-solving activity.

The youth have been working as paid summer recycling interns. They work about 20 hours a week, for $3.50-3.85 an hour, visiting tenants and managers to encourage them to recycle. They are also learning about careers in environmental sciences and services, and solid waste management, as well as gaining experience in public speaking and construction skills.

On Wednesday, they placed new collection stations for tin, glass, aluminum and newspapers around the Villa.

The program, known as the Environmental Intern Project is a special educational effort being coordinated by Jerry Blake, Portland State University professor of urban studies and planning. The project will give the Villa a coordinated recycling system that it has not had to this point.

Youth participants are being trained at PSU and Jefferson High School. Training has included field trips to area landfills, solid waste recycling businesses, the Environmental Learning Center in Oregon City and local glass, aluminum and newsprint industries.

Other organizations have been supporting the project. The Portland Neighborhood Revitalization Project funded construction materials for the collection stations. The Oregon Youth Conservation Corps funded a crew leader position. The Portland Public Schools Home Repair project helped with construction and location of outdoor recycling shelters. The Private Industry Council helped pay the youths' wages. The Portland Bureau of Environmental Services, Metro and the Housing Authority of Portland also provided support.
RECYCLING STATIONS AT COLUMBIA VILLA
-- The first 15 of an anticipated 50 outdoor collection stations were installed last Wednesday at the Housing Authority of Portland's Columbia Villa multi-family housing project in North Portland. Sixteen young people have been working as paid summer recycling interns, receiving training at Portland State University and Jefferson High School. The interns will help with the installation of the collection stations for glass, tin, aluminum and newspapers. No coordinated recycling program has existed at the Villa until now. (From left) Carla Salter, Dominica McCord holding Christian Daniels, Stephanie Williams and Seth Albertini.

Photo By Dean Guernsey
Apartment dwellers target of recycling effort

By KRISTINA BRENNEMAN

With a thud and a clink, residents of the Colony Oak Apartments dumped their glass bottles into a large bin Tuesday to inaugurate one of the Portland area's first apartment recycling stations.

The Southwest Portland apartment complex is one of 200 in the city to install stations in the once hard-to-reach apartment recycling market. The program, a joint effort of the city and Metropolitan Service District, "is significant because we're dealing with our recycling goals for apartment dwellers," said City Commissioner Earl Blumenauer at the event.

In today's throwaway society "we have to do everything within our power to encourage this," he said.

Although 26 percent of Portland residents participate in monthly curbside recycling, it has not been a convenient program for apartments, Blumenauer said. Obstacles of storage space and layout of the apartment buildings also have limited such programs, he noted.

Blumenauer said he is confident the availability and convenience of the collection station and peer pressure will prove an incentive for people to recycle. The city selected larger apartment units that would have the most impact on reducing waste tonnage and are working with owners, managers and residents to institute the program.

"We're confident it can succeed," he said.

Installation of recycling stations at 200 apartment sites by next summer will greatly impact the city's recycling efforts, said Jim Gardner, a member of Metro Council. The stations can potentially recover 77 pounds of recyclables for each bin and 16,000 pounds of newspapers a year, he said.

The $149,000 project is funded by a Metro grant, with additional assistance from the city.

Faculty and students from Portland State University are assisting Metro and the city Environmental Services and Energy Office in setting up the recycling systems at both indoor and outdoor locations. The $600 metal outdoor shelter at Colony Apartments designates barrels for tin, newspapers, glass and other recyclable products.

Colony manager Carl Douglas predicted that up to 40 percent of his 62-unit complex would participate in the recycling efforts.

When the city's recycling representatives approached him about the program "we immediately jumped on it," he said. "Tenants have been coming to me to institute a program."

Douglas said he hopes to save 20 percent to 25 percent from the complex's $350 a month garbage bill with the new recycling emphasis.

"It's a modest investment up front for its effect on waste disposal," Blumenauer noted.
COLUMBIA VILLA RECYCLING PROJECT

Smiling faces beaming into the camera July 26th belonged to those celebrating some of the first visible signs of success of this summer's Environmental Intern Project. The new "Recycle!" tee-shirts were worn as the first 15 of an anticipated 50 outdoor collection stations for recyclable materials were delivered to key points throughout the Housing Authority of Portland's (HAP) Columbia Villa multi-family housing project.

This summer's special educational outreach program at the North Portland site, where gang-related misdeeds have generated many of the area's headlines in recent months, has been coordinated by Dr. Jerry Blake, PSU professor of Urban Studies and Planning (kneeling with glasses at lower right of picture).

Blake's program focused the untapped talents of area youth by giving them the education and support they need to work on a practical community-building, problem-solving activity. Sixteen young residents of North and Northeast Portland have been working on the project as paid summer recycling interns while receiving instruction and training for their new roles at PSU and Portland’s Jefferson High School.

After building and installing the rest of the collection stations, the interns will don the tee-shirts again in coming weeks to re-visit Columbia Villa, giving apartment building tenants and managers leaflets about recycling, as well as to personally explain more about the merits of the community effort.

PSU training for the youths has included field trips to area landfills, solid waste recycling businesses and local industries.