

WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

Home Composting Survey Report

Prepared for the
Washington State Department of Ecology

By
Ridolfi Inc.

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1.0 INTRODUCTION

1.1 Purpose and Objective

The Department of Ecology (Ecology) and other organizations are interested in promoting statewide home composting at the local community level throughout Washington, which will aid Ecology in implementing important elements of Washington State's "Beyond Waste" plan. As a first step, an accurate, up-to-date survey of existing programs is needed. The survey will be used in part to direct efforts in assisting interested communities expand their home composting programs.

The objective of this survey is to provide Ecology with a comprehensive overview of home composting programs in Washington. Home composting is the practice of recycling household organic wastes by residents to create compost through the controlled decomposition of these wastes at their homes. Home composting was identified as a key component in the Organics Recycling initiative of Ecology's Beyond Waste plan.

Recycling of organic materials has been identified in the Beyond Waste plan as a strong starting point to reducing the current waste stream. Organic wastes are generated in large quantities in Washington by virtually every sector of the economy. Ecology and other organizations are concerned with how to provide leadership regarding organics recycling with the use of the Beyond Waste plan.

1.2 Methodology

The survey was developed with input from Ecology and directed toward appropriate individuals in each of Washington's 39 counties and the Cities of Everett and Seattle (e.g. recycling coordinators). The survey was administered by both mail and telephone and results were compiled in a spreadsheet database. The survey was designed to gather data about the activity level of home composting programs statewide, with emphasis on identifying why programs have been successful or unsuccessful, as well as determining future opportunities. Nonprofit and other governmental agencies involved with home composting were also given a short survey by telephone. One city, 33 counties, and six nonprofit groups and other agencies responded to the surveys. Figure 1-1 shows the responding counties. The survey form is attached as Appendix A. The spreadsheet database is provided in electronic format as Appendix B. *(Note: Appendix B is not included in this copy of the report, but may be obtained from the Department of Ecology. See Appendix B for more information.)*

1.3 Report Organization

This report provides the results of a survey of home composting activities in Washington. Section 2 gives a snapshot or overview of the current state of home composting programs statewide. The components of these programs as identified from the survey responses are described in Section 3.

Section 4 describes those elements of composting activities that can lead to success.

Section 5 evaluates the barriers to a successful composting program and the disincentives to home composting encountered by individuals.

Based from the results summarized in the previous sections, Section 6 identifies the future opportunities available to the state in its goal of reaching the Beyond Waste milestone of home composting programs being active and successful in every county.

2.0 OVERVIEW OF HOME COMPOSTING

Overall, home composting in Washington State is healthy but not thriving. Although 88% of cities and counties that responded to the survey have an active home composting program, lack of funding and staff time were commonly cited as barriers to a successful program. Six counties did not respond to the survey.

Programs to promote home composting are active in 29 of the 33 counties that responded and the two major cities surveyed, Seattle and Everett (the City of Everett did not respond and is not included in the total number of respondents, but the City coordinates with Snohomish County to promote composting). One county has had a composting program in the past, but does not currently have one. The components that can comprise a program are listed below, with the number and percentage of cities and counties that responded to the survey. Percentages are based on a total of 34 responses, received from 33 counties and the City of Seattle.

- 18 (53%) currently have composting classes
- 20 (59%) currently have other educational events
- 23 (68%) currently offer resources such as brochures and information on Web sites
- 20 (59%) have composting demonstration sites
- 17 (50%) currently distribute composting bins (of these, 14 subsidize the bins)
- 21 (62%) currently have staff with responsibility for promoting home composting

Materials that are encouraged to be composted are listed below by number of responses out of a total of 34. All active composting programs encourage composting of yard debris.

- Yard debris: 30 (88%)
- Grasscycling of grass clippings: 24 (71%)
- Food waste: 24 (71%)
- Other wood waste: 14 (41%)
- Livestock manure and bedding: 14 (41%)
- Sawdust: 11 (32%)
- Soiled paper such as pizza boxes: 8 (24%)

Table 2-1 lists the methods of composting that are encouraged for the three major categories of compostable organics: yard debris, kitchen scraps, and livestock manure. Table 2-2 summarizes the current status of home composting for each county, including activities, issues, upcoming changes, and respondent recommendations.

Four of the 33 counties that responded do not have any composting activities, either now or in the past. One of these four counties is planning to start home composting activities and has the resources to do so. The other three report that there is currently no perceived need to decrease the amount of organics in the waste stream. In one of these three counties, organics are accepted by a private composting facility and because organics are being managed, there is little incentive for the county to spend extra funds to promote home composting. The other two counties reported little public interest in composting.

3.0 COMPONENTS OF EXISTING COMPOSTING PROGRAMS

Counties, cities, nonprofit organizations and other government agencies provide a variety of activities and resources to promote home composting. Existing composting programs were found to consist of just one activity or resource, or many. The following are the components reported by survey respondents:

- Composting classes or workshops
- Other educational events
- Educational materials/resources
- Demonstration sites
- Bin distributions
- Staff to promote composting
- Incentives

The following sections summarize the components reported by the counties and the City of Seattle, and by nonprofits and other agencies. Table 3-1 summarizes these components by county. Table 3-2 summarizes program cost information provided by counties.

3.1 Counties and Cities

Composting Classes or Workshops

Most counties and cities that responded currently offer or have offered composting classes or workshops (Table 3-1). The classes are generally implemented by WSU Extension, Master Gardeners, Master Composters, city and county staff, and cities within the counties. In most cases, partners assist with the classes. For example, classes implemented by a city within the county often receive assistance from the county; classes implemented by the county solid waste division often partner with the local Master Composter program, volunteers, and the local WSU Extension office.

Other Educational Events

Most counties and cities that responded have or have had other educational events related to home composting, including promotional events at local fairs, special composting events, presentations at community centers and schools, annual events at the local WSU Extension office, advanced Master Composter classes, and Earth Day events (Table 3-1). The frequency of these events ranges from once a year to up to 30 times a year, depending on the county or city. The compost-promoting portions of these events are generally implemented by county staff, WSU Extension, Master Composters, volunteers, cities within the county, and in one case a consultant. The events usually have partners, primarily from the same groups, although in one reported case the partner was the county air pollution control authority, and in another case the county had partnered with retailers for the event.

Educational Materials/Resources

Most counties and cities that responded have educational materials related to home composting (Table 3-1). These include information about how to compost, uses of compost (as an organic fertilizer or soil amendment, keeping plants moist, and reducing pesticide use, etc.), natural or stewardship gardening, healthy soils, natural pest management, protecting water quality, grasscycling of lawn clippings, and plans for building compost and worm bins. Table 3-3 lists the educational topics indicated by survey respondents. The information is available through brochures, books, posters, and Web sites. These resources are most often provided by the county or city, usually by the composting or recycling coordinator. WSU Extension offices or the Master Gardeners and Master Composters also provide informational resources. In some cases partners assist with funding for information resources, such as Ecology, the local air quality agency, or the local fire district.

Demonstration Sites

Most counties and cities that responded have composting demonstration sites (Table 3-1). Master Gardeners and Master Composters most commonly implement the demonstration sites. County and city staff are also common implementers. There are often partners such as community supported farms (CSAs), city parks, or a local school.

Bin Distribution

Most counties and cities that responded currently distribute composting bins, or have done so in the past (Table 3-1). Most bin distribution events occur once a year, although a few respondents have distribution events more often, generally associated with another event such as a local fair. A few respondents indicated bins are available continuously. Distribution is most commonly implemented by city and county staff, a contractor, and occasionally by Master Gardeners, Master Composters or volunteers. Partners in these events are generally volunteers, Master Gardeners, Master Composters, and agencies that provide funding, such as the county solid waste department and Ecology.

Staff to Promote Home Composting

Most counties and cities that responded have at least one person on staff whose job partly or wholly involves home composting (Table 3-1). Typical job responsibilities for this person include coordinating a comprehensive program of bin sales, educating the community, and coordinating events.

Incentives

While not a specific part of home composting programs, most cities and counties reported various incentives were effective at increasing participation, such as disposal rates, bans on yard debris in the trash, bans on outdoor burning, infrequent solid waste collection, and having compost to use in the garden.

3.2 Nonprofit Groups and Other Governmental Agencies

Nonprofit groups and government agencies promote home composting by offering classes and educational resources, and by providing direction to other groups interested in promoting home composting. The following nonprofit groups and government agencies were surveyed by telephone for their activities related to home composting (described in section 3.2.2):

- Master Gardener program (Washington State University Extension)
- Whatcom County Master Composter/Recycler program (Washington State University Extension)
- Seattle Tilth Association
- City of Seattle Natural Soils Building Program (administered by Seattle Tilth Association)
- Seattle P-Patch program
- King County Extension (Washington State University Extension)

3.2.1 Nonprofit Groups and Agencies Surveyed

Statewide Master Gardener Program

The statewide Master Gardener program, started in 1972, provides university level training to volunteers to enable them to provide horticulture-related public services. The program is centrally coordinated by Washington State University Extension (WSU Extension), which provides a training curriculum, manages volunteers, and supervises the programs for the county WSU Extension offices. Thirty-six of Washington's 39 counties participate in the Master Gardener program. The approximately 4,000 volunteers across the state are considered para-professional educators for their county WSU Extension offices. A leadership council of ten members directs the statewide program.

Whatcom County Master Composter/Recycler Program

The "master" volunteer concept started by the Master Gardener program has led individual county Extension offices to offer Master Composter or Master Composter/Recycler programs. The Whatcom

County Master Composter/Recycler program is one of these. Once the volunteers have completed their training, they provide advice and leadership about resource conservation and work on composting-related projects.

Seattle Tilth Association

The Seattle Tilth Association is a nonprofit organization that promotes organic gardening in an urban setting through education. Sources of funding for the organization are primarily membership fees, class fees, plant sales, and grants. Seattle Tilth is also under contract with the City of Seattle to manage the Natural Soils Building Program.

City of Seattle Natural Soils Building Program

The Natural Soil Building Program maintains a telephone hotline and trains Master Composter/Soil Builder volunteers. After completing their training, the Master Composters/Soil Builders conduct outreach.

Seattle P-Patch Program

The Seattle P-Patch program provides community garden space for residents of 44 neighborhoods, serving more than 4,600 gardeners. The program, started in 1974, is currently run by the City of Seattle and the nonprofit organization P-Patch Trust. Any city resident may apply for a gardening plot for an annual fee of \$31 to \$61, and a commitment of at least 8 hours of volunteer labor to support the garden site or the program. The program publishes a quarterly newsletter, which is sent to participants.

King County Extension (Washington State University Extension)

WSU King County Extension promotes lifelong learning, self-sufficiency and a livable environment by providing research-based education. Volunteer programs offered include Master Gardeners and Master Composter/Recyclers, which are indirect forms of education: the agency trains the volunteers, who in turn provide education to the community. King County Extension also provides home composting education directly to the public through classes and compost bins to county residents.

3.2.2 Components of Programs Offered by Non-profits & Agencies Listed Above

Composting Classes or Workshops

All but one of the nonprofits or agencies surveyed offer classes. As noted above, some of the classes are given to the public, and others are given to volunteers in special programs such as Master Gardeners. The Seattle Tilth Association offers classes and garden tours to educate residents about organic gardening, gardening for children, and raising chickens in the city. Seattle Tilth also trains Master Composter/Soil Builder volunteers through their contract with the City of Seattle. After completing their training, Master Gardeners, Master Composters/Recyclers, Whatcom County Master Composter/Recyclers, and Seattle

Master Composters/Soil Builders teach classes in their communities and give demonstrations on home composting. King County Extension office also gives talks to community groups, schools, garden clubs, and in garden stores. The talks focus on healthy soils, how to identify soil textures, and the value of compost.

Other Educational Events

Master Gardeners answer questions from the public about gardening and home composting at “plant clinics,” which are often held at fairs and farmer’s markets. Whatcom County Master Composter/Recyclers have set up composting facilities at school gardens and churches for their use. Seattle Master Composters/Soil Builders staff information booths at farmer’s markets.

Educational Materials/Resources such as Brochures, Web Site

All but one of the nonprofits or agencies surveyed distribute information through the Internet and printed materials. The Natural Soils Building Program maintains the Natural Lawn and Garden Hotline to answer questions from the public by telephone. Master Gardeners write articles and other printed materials as part of their public service. The Seattle Tilth Association has a Web site and a reference library open to the public, and sells worms, worm bins, and books. The King County Extension office is developing a fact sheet on compost tea.

Demonstration Sites

Many Master Gardener and Master Composter programs maintain demonstration gardens. The Seattle Tilth Association maintains demonstration gardens year-round at two city parks and exhibits a display garden at the Northwest Flower and Garden Show. These fulfill an educational purpose: when the public visits the sites, they can see composting techniques and envision how composting might work in their own garden. They also allow the volunteers and staff of the programs to try new methods of composting or conduct experiments, such as evaluating the effects of compost application on plant growth.

Bin Distribution

Of the nonprofits or other agencies surveyed, only Seattle Tilth distributes bins. They sell worm bins and also sell compost bins for the Natural Soil Building Program under their contract with the City of Seattle. The compost bins are distributed by Master Composters/Soil Builders at discounted prices at events 1 to 2 times a year and can be purchased anytime over the phone. Seattle P-Patch provides compost bins for use at several of their community garden sites but does not participate in community bin distribution. Other groups such as Seattle Tilth and the Whatcom County Master Composter/Recycler program provide instructions on how to build your own compost or worm bin.

Staff to Promote Composting

All but one of the nonprofits or other agencies surveyed has staff whose job includes promoting home composting.

4.0 ELEMENTS OF SUCCESSFUL PROGRAMS

Respondents define “successful” home composting programs differently, but many described the following common threads as key to a successful program. While some respondents did not have all of the common threads, they consider their programs to be “successful”.

Most respondents have not measured the success of their program, but many consider participation rates and bin sales to be an indication of success or a change in attitude of the home composter. Some respondents indicated their programs were too new to evaluate their performance. Respondents indicated the following elements improved the effectiveness of their programs.

4.1 Develop Goals to Decrease Organic Waste Disposal

Most counties see a need to decrease the amount of organics in the solid waste stream. Most that responded have goals in their solid waste plan related to home composting or organic materials recycling. Several counties indicated they have plans to start home composting-related activities.

4.2 Bin Distribution

Bin distribution was the most common measure to determine the success of a composting program. Counties that were successful with their bin distribution program had sufficient funding to purchase bins and had staff or another organization to manage the bin distribution. Generally, County bin distribution events are well attended. Bin distributions are usually subsidized and bins are offered to residents at a reduced price. Subsidies range from 25 to 75% of the cost. In one community, the cost is subsidized entirely, and residents are not charged. The large numbers of bins distributed shows an ongoing public interest in home composting. Most bin distributions also include information or demonstrations on how to compost and how to use compost. Follow-up surveys help measure participants’ success with home composting. For example, in a 2003 King County survey, most residents responded that they were “satisfied” with their Earth Machine bin, “satisfied” with their RPM Seattle Composter bin, and “very satisfied” with their Green Cone bin. Over half of the Green Cone purchasers were composting greater than 75% of their compostable food waste. This is a success because the participants have gained a positive attitude toward composting, are still composting, and have reduced their contribution of organics to the waste stream.

4.3 Educational Outreach

Educational outreach is the most common method that counties, cities and other organizations use to communicate the importance and significance of home composting. Educational outreach is conducted through composting workshops, demonstrations at special events such as Earth Day and local fairs, and at school presentations. Most counties that have composting activities offer workshops more than once a year. These workshops may be conducted in cooperation with Master Gardeners or WSU Extension Master Composters. In addition, educational materials and resources are provided through brochures, user guides for home composting, and Web sites.

Conducting community pilot projects and surveys also helps identify what is needed in order to have a successful composting activity. A few counties also have special outreach programs for small farms and ranches.

In addition to promoting home composting, educational outreach communicates the benefits of using recovered organics for home gardens and decreasing organic waste in the solid waste stream. One successful bin distribution event incorporated education through demonstrating the use of compost bins to people as they were standing in line to receive the bins.

4.4 Partners

Partnering with other government or non-government entities allows counties to accomplish more with their composting activities than they otherwise could accomplish on their own. Partners can provide support to county staff by providing educational material, helping or managing bin distributions, and conducting workshops. In addition, partners may also provide funding for the program. Funds may not be available to assign a county staff member to manage a composting program on a full-time basis, and partnering with another organization assures that the composting program is continuously being promoted. In some cases, partners may manage the entire composting program.

Stevens County provided a good example of partnering with another organization. Since Stevens County has been promoting home composting, burning of yard waste by the community has decreased. The number of fire related injuries and fire calls has also decreased. As a result, the local Fire District now sponsors and helps promote home composting. In addition to the success of having less fire related incidents, the county noted that the amount of yard waste taken to the landfill has also decreased.

4.5 Volunteers

The importance of volunteers was emphasized by nonprofit and other agencies. Master Gardeners and Master Composters are volunteers, and they are often involved in the composting program components described in Section 3. Volunteers can educate their communities about home composting through

scheduled opportunities such as staffing informational booths and giving talks. Volunteers may also have more credibility with community members than agency employees.

4.6 Incentives

Incentives are another important element of a successful composting program. People must have some reason, financial or otherwise, to compost at home. The following incentives can motivate individual residents to compost at home:

- Increased disposal rates
- Bans on yard debris disposal
- Bans on outdoor burning
- Infrequent solid waste collection
- Having compost to use in the garden

Increased Disposal Rates

Within the next few years, waste collection contracts will expire in some counties and several other counties will be evaluating their disposal rate structures. Waste collection fees often depend on the size of the garbage container, and the cost to dispose of self-hauled garbage in most counties depends on the total weight. Increasing disposal rates can provide an economic incentive for individuals to reduce the organic waste fraction of their household waste. Table 4-1 identifies counties with planned rate changes. Table 4-2 provides details on upcoming rate changes, by county, by year.

Ban on Yard Debris Disposal

Only two counties and one city indicated they ban yard debris disposal with household wastes. In these communities, yard debris must be composted, be placed in a separate collection container, or self-hauled to a transfer station for “clean green” disposal. Some counties provide containers for a minimal fee to dispose yard debris, food waste, and soiled paper. Banning yard debris disposal in regular trash helps reduce the volume of household waste. In many counties smaller curbside containers have a lower disposal fee. As an example, the City of Seattle bans yard debris disposal with household trash. Residents are given a separate container to collect their yard and food waste in; the container is picked-up every other week and taken to a permitted facility for composting. Table 4-1 identifies which counties currently ban yard debris disposal with household wastes.

Ban on Outdoor Burning

About half of the responding counties and cities minimize outdoor burning. Some counties work together with a Clean Air Agency to help manage and minimize outdoor burning of waste. Banning of outdoor burning also reduces the number of fire-related incidents. One county noted that in 2006 there will be a State ban on outdoor burning for towns and cities with a population of greater than 1,000 per square mile. Table 4-1 identifies which counties currently ban outdoor burning.

Infrequent Solid Waste Collection

One county noted a change in their contract within the coming year in which the disposal rate will remain unchanged, but the household waste collection schedule will be changing from weekly to bi-weekly. Therefore residents are being strongly encouraged to begin composting their organic wastes at home before the contract goes into effect; composting at home would help reduce odors from food waste and/or yard debris decomposing in the garbage can over the two week period between collections. In most jurisdictions with curbside pickup, household wastes are collected on a weekly basis and yard debris containers are collected bi-weekly.

Compost Use

Finished compost is most commonly used in home or community gardens as a nutrient source, a soil amendment, or mulch. Several counties have a composting facility where yard debris can be dropped off for free or for a minimal fee. The yard debris is then composted and sold to the public. One County mentioned that their composting facility sells out of finished compost within a day or two, demonstrating a demand for compost.

5.0 BARRIERS TO SUCCESSFUL PROGRAMS

City and county survey respondents were asked what resources were needed and what barriers exist to start and operate a composting program. The reported barriers to a successful composting program are as follows, in order of importance:

- Lack of funding, staff, or time
- Low participation
- Composting is handled by someone else
- Population density
- Lack of information
- Policy

These barriers are summarized in the following sections and in Table 5-1, by county.

5.1 Lack of Funding, Staff, or Time

Lack of funding was the most commonly listed barrier or reason for not having composting activities. Several counties also listed lack of staff or time as an additional barrier; however, since the number of staff is generally constrained by available funds, this is also considered a funding-related issue. Some counties reported that they had experienced recent decreases in funding and staff, which caused them to end their composting activities.

In particular, bin distribution has created financial problems for some counties due to decreases or fluctuations in the numbers of bins sold. Two counties have discontinued selling bins because the number of sales dropped below a level where it was economically feasible to hold a sale. Fluctuations in sales also make it difficult to predict the demand for composting bins. One county observed that one year they did not order enough bins to supply the demand, and the following year, more bins were ordered than needed. This led to financial loss, as well as the problem of storing the remaining bins.

5.2 Low Participation

Low participation rate is a barrier to a successful composting program. Participation rates are greatly influenced by:

- Lack of public interest
- Negative beliefs about composting
- Inexpensive or free alternative disposal
- Cost or difficulty of using compost bins
- Time and energy required for composting

5.2.1 Lack of Public Interest

Some agencies and several counties listed lack of public interest as a barrier to composting activities. In some cases, the perceived lack of interest may be because those people interested in composting are already doing it. In other cases, the lack of interest may be because other disposal options are convenient and inexpensive, or because of negative beliefs about composting.

5.2.2 Negative Beliefs about Composting

The negative beliefs about composting are the most common disincentives reported by nonprofit groups and other agencies. The reason for this may be that the community is not well informed about how to manage their compost. A common misbelief is that composting can be difficult to maintain, has a foul odor, and attracts vermin. Odor and pests can be a problem, but they can be avoided by following recommended practices.

5.2.3 Inexpensive or Free Alternative Disposal (pickup, transfer station, burning)

In some counties, it is more convenient and easier to dispose of organic wastes because disposal fees are inexpensive. Some jurisdictions charge a minimal fee for household waste collection, and few ban yard debris disposal with household waste. The low cost of disposal and the convenience factor deter people from composting at home. In addition, some counties either offer curbside pick-up of yard debris or have low fees or do not charge for self-hauled yard debris at transfer stations.

In areas where disposal fees are more expensive and other options are not available, residents generally burn their yard debris or dispose of organic wastes on their property. Whereas the latter is an unmanaged form of composting, burning is not a desirable alternative.

5.2.4 Cost or Difficulty of Using Composting Bins

In most jurisdictions, the cost of composting bins has varied from year to year. In some counties, city and county residents pay different fees for bins. In counties without bin subsidies, the bins are sold at retail prices to the community, which may be above what the public is willing to pay.

Bin designs vary and some are easier and more convenient to use than others. Although various types of composting bins are available, some counties only offer one type of bin. Most types of composting bins that are currently being offered in the state received only an average rating in the survey. In particular, difficulty of turning the compost or of installing the bin were cited as barriers. For example, the Green Cone, used for composting food scraps, requires digging a hole to install it. Some yard debris composting bins have openings that are too small to easily insert yard debris or remove the finished compost. Bin rankings are summarized in Table 5-2.

One agency recommended a cylindrical bin with identical top and bottom, so that the top and sides of the bin could be removed and placed next to the composting material, allowing turning to be accomplished by shoveling the material back into the bin. A similar technique is to use two bins, and turn the compost by moving it from one bin to the next; however, most counties that distribute bins are only able to offer one per household. Elevated tumbler-style bins can be easier for people who have physical limitations; however, they are limited in volume and require more knowledge to use.

5.2.5 Time and Energy Required

Some counties observed that residents feel that composting is not convenient and compost bins are not easy to maintain. Some residents feel they don't have the space for a compost bin. Additionally, residents may not understand the benefits of composting. Some residents have become accustomed to how they handle their wastes and show no interest in changing.

5.3 Compost is Processed by a Private Business

A few counties noted that a local compost business processes the organic wastes for free or a small charge, therefore there is little incentive for the counties to spend limited funds on implementing home composting programs as there is a perception that organics are already being "handled." Additionally, some counties either rely on a city within its boundaries or another county to process their organic wastes or assist with home composting program support.

5.4 Population Density and Climate

In some rural counties where population density is lower, respondents indicated that education and outreach were more difficult. One county listed sparse population and climate as their major barriers to home composting. The climate in this county has low humidity with temperatures that can exceed 100° F. In this climate it is difficult to maintain adequate moisture content in compost, which is required for efficient breakdown of organic material.

5.5 Lack of Information

Some counties are concerned that they may not have the appropriate resources on home composting to provide to their community. Although they may consider their composting program to be successful, they are concerned that they may still be lacking critical information that may be available but that they are unaware of. In a few counties, the composting activities are managed and run by a single individual, who may be especially concerned that they are providing the most recent and appropriate information on home composting.

5.6 Policy

Policy barriers include lack of incentives for residents. One respondent cited city regulations against home composting; they mentioned working with residents to find creative ways for them to compost within local restrictions.

6.0 FUTURE OPPORTUNITIES

This section describes future opportunities for Ecology and its partners that can lead to active home composting programs in every county.

6.1 Statewide Master Composter Program

The WSU Master Gardener program is currently active in 36 of the 39 Washington counties and is considered very successful. It was started because of limited staffing: WSU Extension agents in two counties were overwhelmed with public demand for horticulture information, which far exceeded their ability to provide education. Most counties that responded to the survey have limited staff, and having a Master Composter Program in each county would allow the counties to implement composting activities that they might not be able to do otherwise. Master Composter programs are currently implemented by individual counties and cities, and the opportunity exists for this type of program to become as well organized and structured as the Master Gardener program. A statewide, standardized curriculum and criteria for training could be developed that would provide all counties with access to the same information.

6.2 Funding and Partnering

Ecology could assist counties in obtaining consistent funding to support their composting activities. Two counties responded that they receive grant money to support their composting program. Some counties may not be aware of available funding resources. Ecology could also encourage counties to partner with other state agencies for direct support with their composting activities.

6.3 Targeted Efforts to Expand Home Composting

Since resources are limited, it would be most effective for Ecology to target specific counties that have expressed a need for assistance or interest in decreasing the amount of organics in the waste stream. State efforts to encourage county and city home composting programs should coordinate with the various jurisdictions prior to scheduled changes to their solid waste fees (Table 4-2). Solid waste disposal and collection fees are identified as a “key leverage point” for Ecology or its partners to affect the organics cycle (Cascadia, 2003), and present an opportunity for counties and cities to create incentives for residents to compost. The following counties are recommended for targeted efforts. They have reported plans to start home composting activities or a desire to decrease organics in the waste stream, but are limited by lack of resources:

- Adams
- Benton
- Chelan
- Clallam
- Lincoln
- Mason
- San Juan
- Snohomish

Adams County plans to work with Master Gardeners to provide composting demonstrations at local fairs, but does not have enough staff available, or enough financing to support the staff. There is a perception that composting causes odor and vermin problems, so they will need to provide education to the community.

Benton County is currently updating their solid waste management plan and it will include goals related to organic wastes. They are limited by a lack of funding.

Chelan County sees a need to decrease the amount of organics in the waste stream, but reports that the local community perceives composting is not convenient or easy. They do not currently offer classes or bin distributions, but have in the past. Funding these activities and raising community awareness are the key issues.

Clallam County plans to expand their efforts to promote home composting, combined with changes to solid waste collection frequency and fees for disposal of yard debris. They currently have no staff at the county level assigned to home composting.

Lincoln County expressed a strong interest in doing more to reduce organics in the waste stream. However, the survey respondent noted that the county is a small rural county, and at this time, they are limited by budget and time availability.

Mason County plans to begin activities to promote home composting at the city level; however, at the county level there is not enough funding to subsidize compost bins. They would also like to begin a broader countywide education campaign.

San Juan County currently has no activities or program to promote home composting, but has an interest in initiating a program in the next 1-2 years. They are working with WSU Extension to develop a composting education program, and would like to decrease the amount of organics in the waste stream. However, they are concerned with long-term funding to maintain a program.

Snohomish County is supporting the City of Everett in its sale of worm bins. The county has had to discontinue activities such as composting classes and compost bin distributions, due to loss of funding and staff. They would like to address food waste composting by working with schools and through curbside pickup.

6.4 Centralized Educational Resource for Counties

One county is concerned about whether they are providing the community with sufficient or the most up to date information on home composting, and feels a lack of knowledge about what other counties are doing for home composting. The solution to this problem is a resource at the state level that a county can refer to for administering its home composting program. Ecology could serve as a home composting information "clearinghouse" by providing and publicizing information through a Web site and telephone hotline.

Ecology could provide all counties with information on the benefits of home composting and best practices. This approach is complementary to the targeted efforts. It is important for Ecology to provide information and resources not only to the counties that are currently seeking to expand or begin their home composting efforts, but also to those that have not yet expressed an interest in home composting. As more landfills close, an increasing number of counties will see a need to decrease organics in the solid waste stream.

This centralized resource could also connect potential composting partners in communities or regions. Partnering with public or private organizations helps counties' funds to go farther.

6.5 Rural Opportunities

In general, for a composting program to be successful, it must be easy for residents to start composting, and resources must be readily accessible. In rural areas this is often not the case, since resources may be limited and disseminating information in areas with a dispersed population is more difficult. Local information on home composting may exist, but a coordinated effort and a consistent message must be delivered to the public to be effective. Ecology could provide assistance to help foster partnerships between rural programs and other organizations to help rural programs be more successful.

6.6 Food Waste

Composting of food waste was identified by one county as “the next big frontier,” and another county has a pilot program in which businesses and schools practice on-site composting of food waste. The City of Seattle has recently started a food waste collection program in conjunction with their yard debris collections. In the past, one agency surveyed did not include food waste composting in their educational talks, because of potential problems with pests and odors. However, they now cover this topic, because of increased interest from residents. Food waste composting requires more knowledge on the part of the home composter, and therefore more education will be needed in this area. An opportunity exists for Ecology, possibly in partnership with WSU Extension, to proactively distribute information on best practices for food waste composting. This information could be provided as part of Ecology’s centralized information resource.

6.7 Subsidize and Recommend Bins

Survey responses indicate that the cost of compost bins can be a barrier to successful home composting activities, both for residents getting started composting, and for counties distributing bins. Ecology could address this in a variety of ways:

- Establish a statewide buying pool, in which counties order bins through the State
- Subsidize counties’ and cities’ purchases of bins
- Provide a buy-back service for counties’ unsold bins

Additionally, the bins distributed need to be efficient and easy-to-use, otherwise users may become discouraged. The bins that were rated highest in the surveys were the Green Cone, Biostack, Home Composter, Cascadia, and Garden Gourmet, although responses were quite variable (Table 5-2). A coordinated bin-testing program could be established to determine the best bins to distribute.

6.8 Research to Develop Best Practices

Two respondents from WSU Extension expressed the concern that more study is needed on the science of composting, and that educational materials and resources provided to the community need to be scientifically verified. WSU Extension believes that establishing a partnership with Ecology to develop a

standardized curriculum on home composting would be beneficial. In addition, WSU Extension recommends that educators teaching Master Composters should have scientific training. For example, they offer a seminar on soil biology.

6.9 Ecology's To-Do list

This list suggests steps for Ecology to take in pursuing the opportunities described earlier in this section:

- Initiate a conversation with WSU Extension about establishing a statewide Master Composter program.
- Provide support to Adams, Benton, Chelan, Clallam, Lincoln, Mason, San Juan, and Snohomish counties in expanding or creating their composting programs.
- Establish a central information resource for counties, including information on composting methods, benefits of composting, best practices, and potential local partners.
- Proactively distribute information about food waste composting.
- Start a buying pool, subsidy or buy-back program for counties and cities that distribute compost bins.
- Establish a research grant program to study the science of compost in university horticulture and soil science departments in the state.

7.0 REFERENCES

Cascadia Consulting Group (Cascadia) and Ross & Associates. 2003. Beyond Waste Consultant Issue Paper #4: Establishing the Organics Cycle.

TABLES

Table 2-1. Encouraged Methods of Composting

	Yard debris (number of counties and *percent)		Kitchen Scraps (number of counties and *percent)		Livestock Manure (number of counties and *percent)	
In compost bin	28	82%	21	62%	7	21%
Compost pile	28	82%	14	41%	14	41%
Worm bins	6	18%	25	74%	3	9%
Grass clipping left on lawn	24	71%	1	3%	1	3%
Direct application to yard/garden	16	47%	6	18%	8	24%
Buried	3	9%	6	18%	1	3%

*The percentages are based on a total of 34 responses, received from 33 of Washington's counties and one city.

Table 2-2. County Home Composting Summary

County	Home Composting Program Status	Home Composting Activities	Home Composting Issues	Upcoming Changes	Respondent Recommendations
Adams	X	Distributes bins each year at local fairs.	Some towns in Adams County do not allow composting.		
Asotin	NA		Local compost businesses takes the residential and commercial compost. It is not economically feasible for the county to implement composting at the Solid Waste Landfill.		
Benton	X	Distributes bins and provides composting classes annually.	Financial resources are needed.		
Chelan	X	Distributed bins once in 1997 and offered their last composting class in 1998.	Home composting is not efficient, convenient, or easy.		
Clallam	X	Distributes bins.	Time is a barrier in operating home composting activities. Only one person in the county deals with Waste Reduction/Recycling.	In 2007, yard debris collection will be every other week (instead of weekly) but the rate will be the same.	
Clark	X	Offers annual home composting classes and distribute bins. Also does ongoing special outreach to small farms, hobby farms, and horse farms.			
Columbia	X	Offered composting classes and distributed bin in the mid-1990s.	Columbia County is part of the Walla Walla County Regional Recycling. Most programs and the Coordinated Prevention Grants (CPG) are administered through that agency.		
Cowlitz	X	Offers composting classes and distributes bin annually.			Cities and county collection companies should evaluate pay as you throw waste programs.
Douglas	NR				
Ferry	X	Offers composting classes and distributes bin annually.			

X = Has a composting activity NA = No composting activity NR = No response

Table 2-2. County Home Composting Summary (continued)

County	Home Composting Program Status	Home Composting Activities	Home Composting Issues	Upcoming Changes	Respondent Recommendations
Franklin	X	Offers semi-annually composting classes and bins are distributed to the attendees. They feel that they have a pretty successful program and supported by all partners involved. Probably the best program for their community and locality.	If CPG funds are cut, they feel that the composting program is one of the first elective programs to go.		
Garfield	NA		They don't have the funding and space for a home composting activity. There is a lack of funding for supplies and lack of interest by the community.		
Grant	X	Offers composting classes and distributes bin annually.			
Grays Harbor	X	Offers composting classes and distributes bin.			Partnering with public & private interest groups should be investigated/pursued. If the pressure of wood waste problems becomes severe, the county should participate in exploring regional solutions with neighboring counties.
Island	NR				
Jefferson	X	Offers brochures on composting.	There is no financial or other incentive of significance other than goodwill. Community shows a reluctance to commit space & energy. Composting is legal within city limits.		Community would prefer the use of recycled, local materials in the construction of bins rather than commercial products. .
King	X	Offers composting classes annually and the last bin distribution was in 2003. Composting bins are now purchased online.	Hard to buy bins at retail.		
Kitsap	X	Offers composting classes.			

X = Has a composting activity NA = No composting activity NR = No response

Table 2-2. County Home Composting Summary (continued)

County	Home Composting Program Status	Home Composting Activities	Home Composting Issues	Upcoming Changes	Respondent Recommendations
Kittitas	X	Offers composting classes and distributes bins.			
Klickitat	NR				
Lewis	X	Offers composting classes and distributes bins.	People in rural parts of county (unincorporated) can still burn yard debris.		
Lincoln	X	Promotes home composting at local fairs and provides books on composting.	Lincoln County is a small rural county. While it would be beneficial to do more in the area of home composting, budget concerns and time availability are a concern.		
Mason	X	Bin are distributed annually.	Many residents either burn yard debris or pile it on their property but do not call it 'composting'.		
Okanogan	X	Promotes home composting at local fairs. Residents who do backyard compost are few and far between. They educate themselves, through books, brochures, internet, etc.	The community does not have much interest in home composting. Lack of water and high heat.		
Pacific	NA	Master Gardeners have plant clinics; no activities specifically for composting.	Pacific County is a small, rural county where people do not experience the pressures of a higher-density environment. They have plenty of space and their composting is of an "elementary" form, where they just have a pile in their yard. There is no interest or perceived need for more complicated composting methods involving bins.		
Pend Oreille	NR				
Pierce	X	Offers composting classes and distributes bins.	Have a central composting facility.		

X = Has a composting activity NA = No composting activity NR = No response

Table 2-2. County Home Composting Summary (continued)

County	Home Composting Program Status	Home Composting Activities	Home Composting Issues	Upcoming Changes	Respondent Recommendations
San Juan	NA		Funding is needed. Their Solid Waste Management Plan has a focus of organic reduction but no focus on home composting.	Working with WSU extension to develop an education program on composting.	
Skagit	X	Offers composting classes. The last bin distribution was in the mid 1990s.		Private transfer station may affect rates. Collection contracts will be renewed in 2013.	Wooden worm bins most effective but we did not sell them.
Skamania	X	Offers composting classes. Their last bin distribution was in 2001.			
Snohomish	X	City of Everett leads the composting activities and Snohomish county provides support. Offers videos and book at the library on composting. Their last composting class was in 2002 and the last bin distribution was in 2003.	At the current funding level they have lost staff, so bin events and volunteer programs are currently defunct, except for Master Gardeners.	Likely in the future at transfer stations.	Food waste seems to be the next frontier. Currently working with schools to encourage food waste composting.
Spokane	X	Offers composting classes and distributes bins four times in the year (Compost fair and chipping day).		There is always the potential of disposal rate increases due to cost increases in operations. Fuel surcharge is being looked at but not likely to be implemented.	
Stevens	X	Offers composting classes. Those who participate in the composting class receives a free bin. Their composting activity is supported by the Fire District.	Lack of funding	There will be a State ban on outdoor burning that will be incorporated in 2006 for towns and cities with a population of 1000 per sq. mile or more.	
Thurston	X	Offers composting classes and distributes bins many times within the year. They currently have a neighborhood food waste composting pilot.	Staff time is limited and some people are unwilling to try composting. The people perceive that composting takes quite a bit of time, is messy, has a foul odor, and attracts rodents.		

X = Has a composting activity NA = No composting activity NR = No response

Table 2-2. County Home Composting Summary (continued)

County	Home Composting Program Status	Home Composting Activities	Home Composting Issues	Upcoming Changes	Respondent Recommendations
Wahkiakum	X	Promotes home composting through WSU Extension office.	Wahkiakum County has limited resources to run a composting activity. Any composting or gardening classes are held through the WSU extension office; they also oversee the Master Gardeners program.		
Walla Walla	NR				
Whatcom	X	Offers composting classes. Bins won't be sold this year because sales have decreased in the past 10 years.			
Whitman	X	Offers composting classes. The last bin distribution event was 5 years ago.		The Solid Waste contract will be renewed in 2006.	
Yakima	NR				

X = Has a composting activity NA = No composting activity NR = No response

Table 3-1. Components of Existing Composting Programs, by County

County	Composting classes or workshops	Other education events	Educational materials/resources such as brochures, Web site	Demonstration sites	Bin distribution	Staff to promote composting
Adams		C			C	C
Benton	C	C		C	C	
Chelan	P		C		P	
Clallam			C		C	C
Clark	C	C	C	C	C	C
Columbia	P				P	
Cowlitz	C	C	C	C	C	C
Ferry	C				C	C
Franklin	C	C	C	C	C	C
Grant	C		C	C	C	C
Grays Harbor	C	C	C	C	C	C
Jefferson			C	C		C
King	C	C	C	C	C	C
Kitsap	C	C	C	C		C
Kittitas	C		C	C	C	C
Lewis	C	C	C	C	C	C
Lincoln		P	C	C		C
Mason		C	C	C	C	C
Okanogan		C	C			
Pierce	C	C	C	C	C	C
Skagit	C	C	C	C	P	C
Skamania	C				P	
Snohomish	P	C	C	C	P	C
Spokane	C	C	C	C	C	C
Stevens	C	C	C		C	C
Thurston	C	C	C	C	C	C
Wahkiakum		C				
Whatcom	C	C	C	C	P	
Whitman	C	C	C	C	P	

C = currently P = in the past Blank = none

NOTE: Counties not listed did not respond to the survey, or do not have existing composting activities.

Table 3-2. Yearly Cost of Activities, by Program

County	Bin distribution	Educational outreach	Administrative	Other		TOTAL
				Description	Cost	
Adams	\$50	\$100	\$100			\$250
Benton	\$2,000	\$3,500	\$1,500			\$7,000
Chelan						
Clallam						
Clark						\$100,000
Columbia						
Cowlitz	\$8,000	\$1,750	\$250			\$10,000
Ferry						
Franklin	\$1,860	\$850	\$600	Tri-City Herald	\$950	\$4,260
Grant	\$200	\$400	\$400			\$1,000
Grays Harbor						
Jefferson						
King	\$20,000			Budgeted	\$150,000	
City of Seattle	\$317,000	\$289,000	\$41,000			\$647,000
Kittitas						
Kitsap						
Lewis						
Lincoln	\$821		Staff wage			
Mason						
Okanogan				Educational flyers	\$65	
Pierce						
Skagit		\$25,000	\$4,000	Advertising and Composter training	\$4,850	\$33,850
Skamania						
Snohomish	\$20,170 in past (discontinued)	\$12,000	\$7,000	Repair and maintenance	\$1,000	\$35,170
				Support for Master Gardeners	\$15,000	
Spokane	\$2,390	\$1,000	1/4 FTE	other-not specified	\$3,390	
Stevens	\$2,400	\$1,000	\$1,000	Refreshments	\$100	\$15,000
Thurston	\$5,000	\$2,500	\$25,000	Kitchen countertop bin	\$3,000	\$35,500
Wahkiakum						
Whatcom	\$10,000	\$20,000		Clean Green site	\$120,000	\$150,000
Whitman	\$400	\$2,000	\$2,000	Vendor booth fee	\$175	

NOTE: Not all Counties provided the breakdown cost of their home composting activities.

Table 3-3. Educational Material Provided, by Topic

Topic	Number of Counties	Percent (%)
How to compost	28	82
Use of compost as an organic fertilizer	23	67
Use of compost to keep plants moist/reduce need for watering	20	59
Use of compost to reduce use of pesticides, herbicides	21	62
Natural gardening or stewardship gardening	15	44
Benefits for healthy soil	18	53
Natural pest, weed and disease management	16	47
Protecting water quality	17	50
Grasscycling / mulching mower	19	56
Other (vermicomposting, salmon-friendly gardening, choosing the right plants)	4	12

NOTE: The percentages are based on a total of 34 responses, received from 33 of Washington's counties and the City of Seattle.

Table 4-1. Incentives for Individuals, by County and City

County	Disposal Rates ¹	Bans on Yard Debris Disposal	Bans on Outdoor Burning
Asotin	X		
Clallam	X		
Chelan	X		X
Clark			X
Cowlitz			X
Ferry			X
Franklin			X
Garfield			X (summer months)
Grant			
Grays Harbor	X		X (in some areas)
Jefferson			X (summer months)
King		X	X
City of Seattle		X	X
Kitsap	X		X (parts of county)
Kittitas			X
Lewis			X
Mason	X		
Pierce			X
San Juan	X		
Skagit		X (in some cities)	X
Snohomish	X		X (occasional)
Spokane	X		X (in a large portion of the County)
Thurston	X		X
Whitman			X

¹ X = increase is planned.

Table 4-2. Upcoming Changes in Disposal Rate Structure, by County

County	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Date undetermined
Asotin	R,C															
Clallam		R														
Chelan															C	
Columbia			C													
Ferry							C									
Grant	R															
Grays Harbor									C							
Jefferson		C														
Kittitas					C											
Mason																R
Pierce						C										
Skagit								C								
Snohomish								C*								R
Thurston	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
Wahkiakum	C															
Whitman	C															

R = Change in Disposal Rate Structure

C = Collection Contract Renewal

* = Waste export contract

Table 5-1. Barriers to Successful Programs, by County

County	Lack of Funding, Staff, Time	Lack of Public Interest	Home Composting is Handled by Someone Else	Population Density	Lack of Information	Policy	Other Barriers
Adams	X	X		X			Some towns do not allow composting
Asotin			Private compost business				
Benton	X	X	X	X	X		
Chelan	X						
Clallam	X						
Columbia	X	X					Columbia Compost satisfies most residents
Franklin	X						
Garfield	X	X			X		
Jefferson	X	X					No incentive
Lincoln	X	X					
Mason	X						
Okanogan		X		X			Climate
Pacific		X					
Snohomish	X						
Stevens	X						

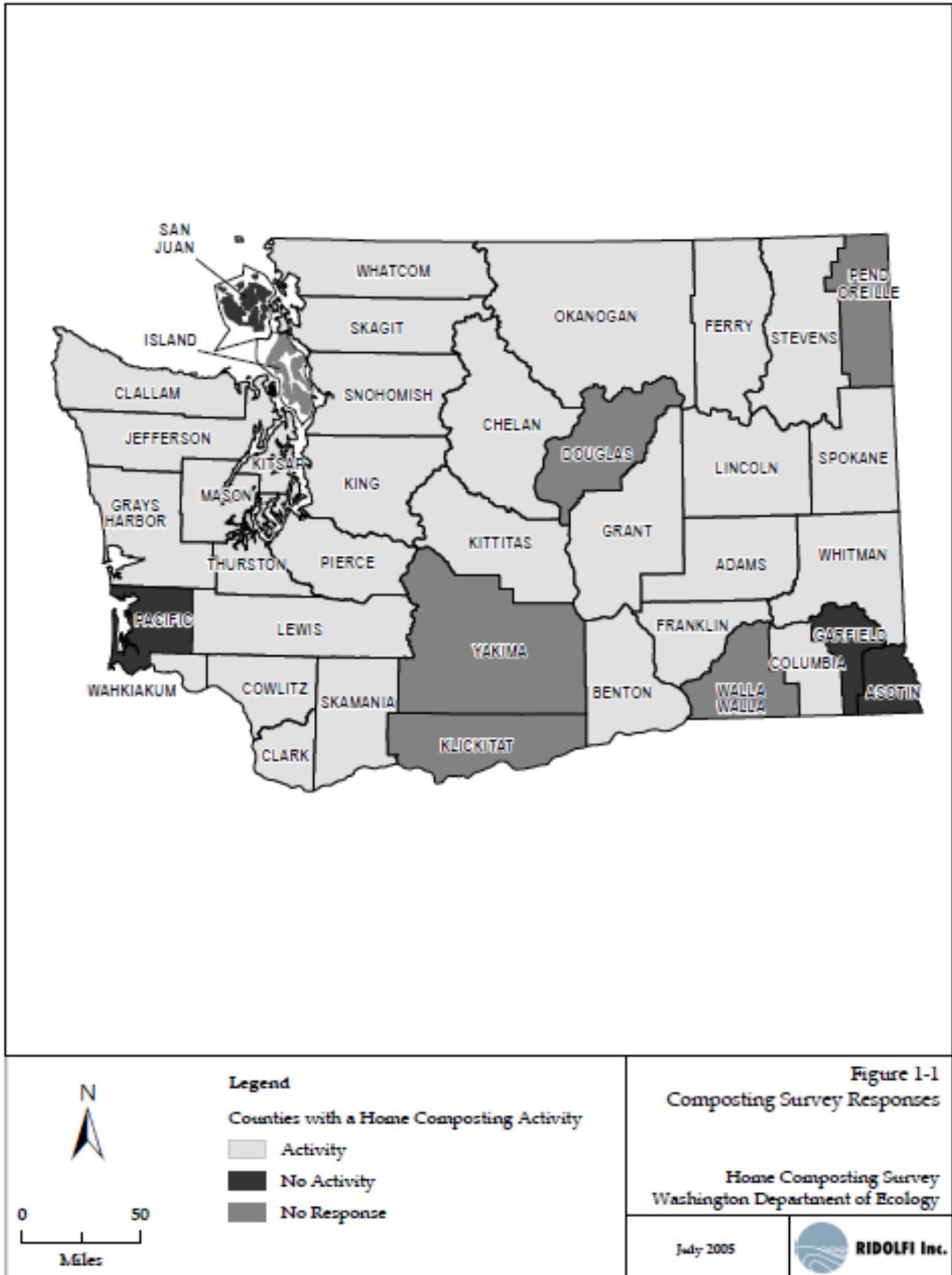
NOTE: Not all counties provided responses to these questions.

Table 5-2. Bin Ranking

	Bin Name/Type	Number of Responses	Highest	Lowest	Average
Bin types listed in the survey	Earth Machine Classic	13	1	5	3
	Home Composter	5	1	3	2
	The Cascadia	4	1	3	2
	The Presto Bin	7	2	5	4
	Urban Compost Tumbler	2	2	4	3
	Worm Tower	1	2	2	2
	Bokashi Kitchen Composter	0	-	-	-
	Garden Gourmet	6	1	4	2
	Down Under Worm Farm	0	-	-	-
Other Bins mentioned by the respondents	Green Cones	1	1	1	1
	John Roulae Bins ¹	1	1	1	1
	Biostack	1	2	2	2
	Can-O-Worms from Rubbermaid boxes	2	1	2	2

NOTE: Rank 1=best, 5 = worst; not all counties provided responses
¹ built for Snohomish County in mid-1990s

FIGURES



APPENDIX A
Composting Survey Form

Washington State Department of Ecology Composting Survey

This survey is being conducted on behalf of the Washington State Department of Ecology. The objective of the survey is to provide a basis for assessing home composting at the local community level, which will aid Ecology in implementing elements of Washington State's "Beyond Waste" plan. The assessment will be used in part to direct efforts in assisting interested communities to expand their home composting activities. Please take the time to answer the questions in as much detail as possible. This survey should be completed by a person affiliated with your city or county who is knowledgeable about home composting at the community level.

In general, check all answers that apply to each question. If you have additional materials related to composting, organic waste or solid waste, you are welcome to attach them when you return the survey.

Please return the survey by May 25, 2005 to: RIDOLFI Inc, 1011 Western Ave., Suite 1006, Seattle, WA 98104. If you have any questions, please contact Jina Chan or Hazel Galang at (206) 682-7294.

If you have any questions for the Department of Ecology, please contact Peter Lyon at (360) 407-6107.

Contact Information

Name: _____
Title: _____
Agency/Organization: _____
Address: _____

Phone Number: _____
Email Address: _____
Web site: _____
Compost-related job responsibilities: _____

Organic Waste Management

1. What options for managing organic materials are available in your local community?
- Yard waste curb-side pickup for composting
 - Yard waste accepted at transfer station or landfill for disposal
 - Yard waste accepted at transfer station or landfill for composting
 - Private composting facilities accepting organic materials from self-haul or collection service
 - Other (please specify): _____

Activities to Promote Home Composting

2. Has your local community had any of the following activities to promote home composting? (Please check all that apply.)

	Year and frequency:
<input type="checkbox"/> Composting classes	_____
<input type="checkbox"/> Other educational events	_____
<input type="checkbox"/> Other educational materials or resources such as brochures, Web site	_____
<input type="checkbox"/> Demonstration sites	_____
<input type="checkbox"/> Bin distribution	_____
<input type="checkbox"/> Other (please specify): _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> None of the above	

If none of the above, continue with question 16.

3. What materials are residents encouraged to compost? What other materials do households generate that could potentially be composted? Please check all appropriate columns:

	Encouraged To Compost	Could Be Composted
Grass clippings	_____	_____
Other yard waste	_____	_____
Sawdust	_____	_____
Other wood waste	_____	_____
Kitchen scraps	_____	_____
Soiled paper (such as pizza boxes)	_____	_____
Livestock manure and bedding	_____	_____
Other (please specify): _____	_____	_____
_____	_____	_____
<input type="checkbox"/> Don't know		

Activities to Promote Home Composting

4. What types of composting are encouraged? (Check all that apply.)

	Yard Waste	Kitchen Scraps	Livestock Manure
In compost bin	_____	_____	_____
Compost pile	_____	_____	_____
Worm bins	_____	_____	_____
Grass clippings left on lawn	_____	_____	_____
Direct application to yard/garden w/ or w/o tilling	_____	_____	_____
Buried in yard	_____	_____	_____
Other (please specify): _____	_____	_____	_____
__ Don't know			

5. What potential opportunities for uses of home compost are there (such as gardens, P-Patches)?

6. Who implements these activities? (for example, your staff, Master Gardeners, Master Composters, WSU extension, nonprofit organization, volunteers, local gardening groups)

Composting classes	_____
Other educational events	_____
Other educational materials or resources such as brochures, Web site	_____
Demonstration sites	_____
Bin distribution	_____
Other (please specify): _____	_____

7. What partners assist with these activities?

Composting classes	_____
Other educational events	_____
Other educational materials or resources such as brochures, Web site	_____
Demonstration sites	_____
Bin distribution	_____
Other (please specify): _____	_____

Activities to Promote Home Composting

8. What is/was the yearly total cost of these activities? (Please record subtotals if available.)

Total: \$ _____

Bin distribution: \$ _____

Educational outreach: \$ _____

Administrative: \$ _____

Other (please specify): _____ \$ _____

9. Did you measure the success of the home composting activities? If so, please answer the following questions below (or attach information separately):

a) What was measured?

Participation rates

Diversion (amount of material diverted from solid waste)

Other (please specify): _____

b) What were the results?

(Attach other sheets if necessary.)

Compost Education

10. Do you provide education to the local community on the following? (Check all that apply.)

How to compost

Compost's use as organic fertilizer

Compost's use to keep plants moist/reduce need for watering

Compost's use to reduce use of pesticides, herbicides

Natural gardening or stewardship gardening

Benefits of healthy soils

Natural pest, weed and disease management

Protecting water quality

Grass cycling / mulching mower "Cut it high, let it lie" campaign

Other (please specify): _____

None

Composting Bins

11. What type of composting bins are used and most effective?

	Used	Rank (1=best, 5=worst)
Earth Machine Classic	—	—
Home Composter	—	—
The Cascadia	—	—
The Presto Bin	—	—
Urban Compost Tumbler	—	—
Worm Tower	—	—
Bokashi Kitchen Composter	—	—
Garden Gourmet	—	—
Down Under Worm Farm	—	—
Other (please specify): _____	—	—

12. Are/were bins always available, or only at periodic events?

- Event
- Continuously available

13. Is/was there a fee for bins?

- Yes (how much: \$ _____)
- No

14. Are/was the bin cost subsidized?

- Yes (what percentage subsidized: _____%; rest paid by whom: _____)
- No

15. If education was provided with bin distribution, who provides/provided it and how is/was it provided?

Who	How
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Attach other sheets if necessary.)

Continue with question 20.

Potential for Activities to Promote Home Composting

16. Is your local community currently planning to start any activities to promote home composting?
__ Yes (please list activities planned: _____)
__ No
17. Is there a desire to decrease organics disposal?
__ Yes
__ No
If yes, has your local community considered home composting?
__ Yes (reason: _____)
__ No (reason: _____)
18. Does your local community have the resources to start and operate activities to promote home composting?
__ Yes
__ No
If no, what resources are needed?

19. If there are barriers to starting and operating composting-related activities in your local community, please check all that apply and describe:
__ Financial: _____
__ Policy: _____
__ Other (please specify): _____

The rest of the questions are for everyone, whether or not they have compost-related activities:

No Current Compost-Related Activities

20. If your local community does not currently have any activities to promote home composting (either activities have stopped or the community never had them), please check all reasons why.
- Population too spread out
 - Curbside yard waste pickup is cheap
 - Lack of information
 - Lack of public interest
 - Lack of funding
 - Home composting is handled at another level (e.g. by a city instead of the county)
 - Internal policy change
 - Other (please specify): _____

Solid Waste

21. Who collects household wastes? (Please check all that apply.)
- Private collector
 - City/county collector
 - Contract collector (Name: _____)
 - Other (please specify): _____
 - No collection available
22. What are the costs to the ratepayer?
- _____
23. Are there any upcoming changes to the disposal rate structure? Please list what they are and when they are scheduled to occur:
- _____
24. When are your solid waste collection contracts due for renewal?
- _____
25. Are there any goals in your local community's Solid Waste Management Plan related to home composting or organic materials recycling? Please list them (or attach separately).
- _____
- _____
- _____
- _____

Incentives and Policies

26. Has your local community conducted a survey on community attitudes or interest regarding home composting?

Yes (please list year: _____)

No

If yes, what were the conclusions? (If insufficient space, please attach a separate sheet.)

27. Are there any incentives for home composting of organic materials? (Check all that apply.)

Ban on organics in the trash

Ban on outdoor burning

Higher charge for disposal/pickup of organics

Other (please specify): _____

None

28. Are there any disincentives that would deter people from composting organic materials at home? (Check all that apply.)

Inexpensive yard waste disposal

Cost of bins

Other (please specify): _____

None

29. Thank you for participating in the survey; if you have any additional comments, please add them here.

APPENDIX B
Composting Survey Results Database

Contains a Microsoft Excel Spreadsheet, which is not included here due to its length.

For more information, contact Chery Sullivan at (360) 407-6915.