



WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

**Best Management Practices of Vegetative Solid Wastes
for Urban Growth Areas of Less Than 5,000 Population**

12/31/07

Publication Number:

07-07-049



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 31, 2007

The Honorable Ken Jacobsen, Chair
Senate Natural Resources, Ocean & Recreation Committee Members

The Honorable Phil Rockefeller, Chair
Senate Water, Energy & Telecommunications Committee

The Honorable Tom Campbell, Chair
House Select Committee on Environmental Health

The Honorable Brian Blake, Chair
House Agriculture & Natural Resources Committee

The Honorable Dave Upthegrove, Chair
House Ecology & Parks Committee

Dear Sirs:

I am please to submit to you the Best Management Practices for Vegetative Solid Waste Management report, required by section 3038 in ESHB 1092, the capital budget bill.

The legislature directed Ecology to:

- “Convene a work group with representatives of affected stakeholders to assess opportunities, other than burning, to manage vegetative solid waste.”
- “Recommend best management practices, consistent with good solid waste management practices that work for smaller communities.”

The Legislature required this report in response to the restriction on open burning that went into effect on December 31, 2006, in all urban growth areas of the state as required by Chapter 70.94 – Clean Air Act.

In order to accomplish this, Ecology held five “Listening Sessions” throughout the state to gather input from communities that were impacted by the outdoor burn ban. We then formed an



December 31, 2007

Page Two

advisory workgroup and held two conference call meetings to vet the findings of the listening sessions and review recommendations.

There was general agreement and support for the potential solutions listed in the report. While we confined our work to "...assess opportunities, other than burning ..." per the proviso, some members wanted to include recommendations related to open burning practices. This group has produced a "minority report" that includes most of what is found in this report. However, their report also includes recommendations that the legislature authorize a permitting program for open burning. This is outside of the direction set by the legislature for Ecology's work and therefore is not included.

The report summarizes the issues aired and provides potential solutions to address the issues. The potential solutions can be summarized as follows:

- The best management practice for vegetative wastes is utilization as a feedstock for products. Barring available infrastructure to process the material for use, disposal remains an option. The material should never be burned in the open.
- Address the funding issues faced by small communities that are financially challenged by providing low or no match grants.
- Understand that one size does not fit all. Communities have unique circumstances that must be addressed individually. While compost or mulch can be made, there may not be a use for the product in the local area.
- Gather additional information related to the scope and cost of alternatives to open burning of vegetative wastes.

Ecology has provided grants to local governments from the \$2 million provided in the capital budget for vegetative waste management project. A summary of those grants is in Appendix C of the report.

These funds did not cover all of the needs. Ecology will continue to make funds available to local governments for vegetative waste management projects through the Local Toxics Account grants.

If you have any questions please contact me at 360-407-6103 or Jay Shepard at 360 407-7040.

Sincerely,



Laurie G. Davies, Program Manager
Solid Waste & Financial Assistance Program

Best Management Practices of Vegetative Solid Wastes for Urban Growth Areas of Less Than 5,000 Population

Prepared by:

Washington State Department of Ecology
Solid Waste & Financial Assistance Program

12/31/07

Publication Number:

07-07-049

If you need this publication in another format, please call the Solid Waste & Financial Assistance Program at (360) 407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Table of Contents

I. Introduction and Executive Summary.....	1
Process	1
Findings	1
Best Management Practices.....	2
Potential Solutions	3
Funding	3
Markets and Uses of Vegetative Solid Wastes	4
Additional Information Needed.....	4
II. Description of the Issue	5
Laws and Background.....	5
III. Review of alternative practices.....	8
Best Management Practices.....	8
Waste Reduction	8
Recycling	8
Incineration, Energy Recovery or Landfill of Source-Separated Wastes	9
Incineration, Energy Recovery, or Landfill of Mixed Waste	10
Examples of Successful Vegetative Waste Best Management Programs	10
Stevens County	10
Franklin County	10
Mesa.....	10
Chelan County - Dryden.....	10
Chelan.....	10
Cashmere	11
Island County	11
Quincy	11
Spokane County.....	11
Odessa.....	11
Kittitas County.....	11
Whitman County.....	11
Other Communities	12
IV. Review of Impacted Communities.....	13
V. Listening session results	15
Current Activities	16
Issues and Concerns Voiced at the Listening Sessions	16
Financing	16
Liability	16
Markets	17
Collection.....	17
Staffing.....	17
Location	17
Quantity and Quality of Material.....	17
Other	17
Summary of Suggested Recommendations Received From Participants at the Listening Sessions	17

Appendices

A. Budget Proviso,2007 Legislative Session Operating Budget A-1
B. Listening Session Summaries..... B-1
C. Funded Projects, Alternative to Burning GrantsC-1
D. Summary of Current and Future PracticesD-1
E. Grants to Local Governments for Vegetative Waste Management Projects Since 2004E-1
F. Advisory Workgroup Members.....F-1

Endnotes..... Endnotes-1

I. Introduction and Executive Summary

In a budget proviso, the 2007 Legislature directed the Department of Ecology to:

- “Convene a work group with representatives of affected stakeholders to assess opportunities, other than burning, to manage vegetative solid waste.”
- “Recommend best management practices, consistent with good solid waste management practices that work for smaller communities.”

The budget proviso provided two million dollars for grants to local governments for alternatives to burning projects.

The Legislature created this proviso in response to the restriction on open burning that went into effect on December 31, 2006, in all urban growth areas of the state as required by Chapter 70.94 – Clean Air Act.

This report summarizes the work Ecology carried out to satisfy that proviso. The recommendations are to be provided to affected cities and to the appropriate standing committees of the legislature. The proviso language is included in Appendix A.

Chapter 70.95 RCW – Solid Waste Management Reduction and Recycling established the need for a comprehensive statewide program for solid waste management that will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of this state. The law assigns primary responsibility for adequate solid waste handling to local government. However, the state is responsible to assure effective programs statewide.¹

Vegetative wastes – yard wastes and land clearing debris – are solid wastes regulated under RCW 70.95.

Process

The Department laid the foundation for this report by gathering information through a series of “listening sessions” with representatives from communities that needed to find alternatives to outdoor burning. Summaries of the listening sessions are included in Appendix B.

We followed the listening sessions by convening a stakeholder work group to help develop and ground truth this report. Work group members participated in two meetings and provided many valuable insights and perspectives. There was general agreement and support for the potential solutions listed below. While we confined our work to “...assess opportunities, other than burning...” per the proviso, some members wanted to include recommendations related to open burning practices. A list of the work group participants is included in Appendix F.

While the budget proviso gave two million dollars for projects, Ecology added three hundred thousand from the local toxics account appropriation earmarked for grants to local governments for organic recycling projects. Finally, while the Legislature directed Ecology to use up to \$75,000 to carry out this work, we chose instead to make that money available to local communities that needed funding for vegetative waste management projects. All of the funds made available in the proviso were directed to local government in the form of grants. A summary of the grants provided is included in Appendix C.

Findings

- The primary finding of the listening sessions is that many small communities and rural counties do not have the financial resources to purchase, operate, insure, and maintain vegetative waste management programs.
- Funding new programs in communities with low or limited revenue sources is challenging.
 - It is difficult for local governments to provide matching funds for the state grants offered.
 - Local government decision-makers face multiple and competing priorities and choices.
 - The costs of ongoing operations can overwhelm local budgets.

- Local citizens may be unable or unwilling to pay for more expensive alternatives, making the problem politically challenging for local elected officials.
- Without additional funding, some communities won't be able to offer their citizens alternatives to burning. This will place some citizens who choose to burn vegetative wastes at risk of being in violation of the law.
- Sustainable funding for solid waste management planning, infrastructure, and operations is not fully available in all communities.
- As the population in the state continues to grow in all areas, demands on public infrastructure become stressed. The solid waste management infrastructure competes poorly with other priorities of government, both at the state and local levels.
- Basic solid waste management infrastructure, such as waste transfer stations, is lacking in some rural counties. Citizens do not have convenient, affordable options by which to dispose of their wastes.
- Community location, quantity of materials, and sources and types of vegetative waste all play a part in determining the best alternatives for use of vegetative wastes. These variables affect the costs of selected systems.
- Many communities in the state already provide services, other than burning, for management of vegetative wastes. These services include collection of yard wastes for composting or chipping. As a result of the grant offering made available in the proviso, many more communities will be offering such services.
- Some communities believe that the ban on open burning in small urban growth areas is an imposition on small cities and towns. They believe that until a low cost solution is found, they should be able to continue to practice open burning under a permit program.
- The state Clean Air Act treats different types of burning uniquely. Agricultural and silvicultural burning are allowed under permit conditions. Outdoor and backyard burning are now prohibited in most areas with dense populations.
- As with all regulatory boundaries, there can be issues identified by those within the boundary and those outside the boundary. Using urban growth boundaries to delineate restrictions on open burning is no exception.
- Solid waste collection services are provided throughout the state. Solid Waste Collection Companies, regulated by RCW 81.77, provide solid waste collection services in all unincorporated areas of the state. Cities contract for services with private companies or operate their own collection programs. Reports are that in some areas of the state, companies do not offer collection of vegetative solid wastes and in fact are refusing to offer the services. A summary of services currently available, along with new services being added and a list of needs, is included in Appendix D. While some services are available, communities don't necessarily take advantage of them. There are many communities with additional and continuing needs.
- Best management practices of vegetative wastes include landfill disposal or incineration at permitted facilities. Though the lowest of waste management priorities, disposal must remain an option for communities that do not have the resources to handle the material in other ways.

Best Management Practices

- The best management practice for vegetative waste is use, either as mulch or compost. Use is beneficial for soil health and stabilization, water conservation, and plant production. The least preferred alternative is disposal, either by burying or incineration in permitted disposal facilities. Disposal of source-separated vegetative wastes for energy recovery or landfill is preferred over

mixed waste disposal. In no case is open burning a best management practice for vegetative waste.

- Basic solid waste management infrastructure is needed in all areas of the state to manage this ever-growing problem.
- One size does not fit all. Implementing best management practices will vary from city to city. Community location, quantity of materials and sources and types of vegetative waste all play a part in determining the best alternatives for use of vegetative wastes. Communities should be encouraged to develop uses that best fit local needs. This can only be done on a case-by-case basis.
- In those areas where alternatives to disposal are NOT readily available and effective, landfill or incineration for energy recovery at permitted solid waste disposal facilities must remain an option. Otherwise, illegal dumping and open burning of vegetative wastes will be continued practices.

Potential Solutions

Funding

- Provide adequate resources through state and local investment to successfully begin practicing beneficial use of vegetative solid waste. Continue to provide dedicated funding to develop the necessary infrastructure and promote new technologies that will make beneficial use of vegetative waste. Allow funding for development of unique local alternatives that will work.
- Give priority to communities that have not received funding for vegetative waste management project in the past. Determine their ability to participate and provide for flexible match requirements.
- Provide funding with little or no match required to low income communities to subsidize disposal of vegetative wastes in permitted solid waste facilities. This should be available during the next three to five years, until the infrastructure for beneficial uses is prepared.
- Additional resources are needed to fund basic solid waste management infrastructure.
- Plan for and identify funding sources for all phases of the vegetative waste management systems: planning, development, and operations.
- Provide a new grant program to fund best management practices for vegetative solid waste. Include a flexible match requirement based on the community's ability to pay, possibly based on the average median income or community size.
- Use existing infrastructure where possible. Develop collection strategies with local solid waste collection companies. In the solid waste management law, the Legislature encouraged local governments to use the expertise of private industry and to contract with private industry to the fullest extent possible to carry out solid waste recovery and/or recycling programs. Local governments should take advantage of these opportunities.
- Review all local comprehensive solid waste management plans to assure that they contain the required financing plan for capital and operating expenses to implement the proposed solid waste management system.ⁱⁱ
- Evaluate the need for additional funding exclusively for solid waste management infrastructure similar to that of Referendums 26 and 39. Also evaluate other methods to secure stable long-term funding.

Markets and Uses of Vegetative Solid Wastes

- Encourage research and private investment in energy and alternative fuels production and bio-products. Look for synergies with other organic waste streams in this effort.
- Explore the opportunity to use composted vegetative wastes on local ranches and farms.
- Make mulch and compost available to local citizens at cost or without charge.
- Use mulch and compost at appropriate rates in local parks and public areas.

Additional Information Needed

The following information is needed in order to find long-term solutions to the overall problem:

- The total need for vegetative waste management alternatives statewide, by jurisdiction, including costs.
- Funding sources for solid waste activities including current and potential sources.
- Efficacy of small biomass energy recovery facilities for small communities.

II. Description of the Issue

Tree and shrub trimmings, leaves, yard clippings and similar organic debris are solid waste. Solid waste is managed according to Chapter 70.95 RCW Solid Waste Management – Reduction and Recycling. This law was created in 1969 when most garbage in the country was sent to open burning pits, or dumps, where it was burned. It was not uncommon to see a black plume of smoke at the edge of most towns that marked the location of the dump.

These open burning dumps were closed due to air pollution concerns. Sanitary landfills became the preferred alternatives for disposal of solid waste. However, people continued to burn their yard wastes as there were no restrictions on the practice. This has been especially true in the fall, when leaves drop from trees, and in the spring when tree debris and tree prunings have accumulated through the winter months. This is a practice that has hung on for years.

In the late 1980s yard and garden waste represented a large portion of the solid waste disposed of in the state. Nearly 20 percent of municipal solid waste disposed of in Washington was yard and garden wastes. This did not include land clearing debris.

Seeing the opportunity, many private entrepreneurs and local governments opened composting facilities. Organic waste streams, including yard waste and land clearing wastes, were diverted from disposal to these composting operations. By the end of the 1990s, yard and garden waste made up less than five percent of municipal solid waste disposal. However, outdoor burning or illegal dumping still remained an option some citizens favored, particularly those without easy access to composting operations or disposal facilities.

Until January 1, 2007, practices in small urban growth areas (UGAs) for handling yard waste and land clearing debris varied. Some communities developed and operated composting programs. Others received an air quality permit to burn the material. Some ignored the issue entirely.

Starting January 1, 2007, communities in small UGAs, like those in larger UGAs before, could no longer burn this material outdoors.

Laws and Background

The Clean Air Act prohibits outdoor burning in urban growth areas. The law set a date of December 31, 2000, for compliance. However, cities with populations of less than 5,000 people were granted an extension until December 31, 2006.

Protecting public health is at the core of air quality regulation. Since the passage of the Clean Air Act in 1991, the state has been seeking to balance the practical uses of fire against the very real need to protect citizens from unnecessary exposure to smoke's dangerous toxins and particulates. Hundreds of studies have shown that exposure to the pollutants in smoke can cause or contribute to significant adverse health effects and result in hundreds of millions of dollars in health care and societal costs each year in Washington. People most at risk are children, the elderly, and people with already-compromised health. People at all ages and health conditions can be affected to different degrees.

Solid waste management has always been the responsibility of local governments. In 1969, Chapter 70.95 RCW Solid Waste Management – Reduction and Recycling responded to the need to manage garbage as solid waste in sanitary landfills. This was done when clean air laws required closure of open burning garbage dumps.

Since then, the solid waste management law has been amended several times. In the 1980s waste management priorities were added and a direction to reduce and recycle solid wastes was set. In the early part of this decade, a goal was set that programs should “be established to eliminate residential or commercial yard debris in landfills by 2012 in those areas where alternatives to disposal are readily available and effective.”

It is the responsibility of local governments, primarily counties, to write solid waste management plans for their jurisdiction. Cities either opt into the county solid waste management plan, prepare a joint city-county plan, or opt out and write a city-only plan. Only the cities of Everett and Seattle have chosen to write their own solid waste management plans.

All residential solid waste collection services outside of incorporated cities are regulated by the Utilities and Transportation Commission (UTC) under Chapter 81.77 RCW Solid Waste Collection Companies. The service companies are granted a franchise right to provide services exclusively within a certain geographic area. These franchises are known as certificated solid waste collection companies, but are more generally known as "G-certificated haulers." Once a county determines the solid waste collection services it requires, it works with the certificated solid waste collection company for their area. The service rates that collection companies charge customers are fixed by the Utilities and Transportation Commission.ⁱⁱⁱ

In reports to the UTC, each company details the services required by the county in the solid waste management plan. The UTC examines the costs and fixes a reasonable rate. That rate is applied uniformly to all the rate payers within the service area.

Since vegetative waste is a solid waste, it can be collected for disposal with other mixed wastes at the rates established with the UTC for collection of mixed municipal solid waste. This service is afforded any customer of a G-certificated hauler. The customer pays for these services based on the amount of waste put at the curb for weekly collection. This is generally by can rates – one can, two cans, etc.

Many G-certificated haulers provide collection of source-separated vegetative waste as an added service for composting or other uses. This service generally requires customers to pay an additional fee.

Cities are authorized to provide their own solid waste collection services or contract with a private company to provide services. Most cities in the state have opted to contract for services. The cities can identify the services they require in their requests for proposals for collection services. The services are provided to all residential customers within the city limits, and service rates are distributed equally among the rate payers. Many cities, either through city services or contracted services, offer curbside collection of recyclable materials and yard wastes as well as regular garbage collection. Generally, customers that require more services, such as more waste to pick up, recycling, or yard waste collection, pay an additional fee for those services.

As mentioned, solid waste management has always been the responsibility of local governments. They have either contracted with private service providers for solid waste collection and disposal or have operated those services as local government responsibilities.

Funding has always been a challenge. The cost of disposal increased in 1969 when the shift from open burning pits to sanitary landfills occurred. Because of the statewide need, and seeing that costs for these new facilities was high, the state Legislature brought forth to a vote of the people Referendum 26, which provide capital funding to local governments for solid waste disposal facilities and wastewater treatment plants. When Referendum 26 funds began to diminish without addressing the entire need, the Legislature put forth, and voters approved, Referendum 39 for the same purposes.

These funds continued to be available through the early 1990s.

The Waste Not Washington Act of 1989 significantly amended the solid waste management law, placing emphasis on waste reduction and recycling strategies, rather than disposal. The Solid Waste Management Account was established in these amendments. The account provided funds for Ecology to carry out its responsibilities and grants to local governments to fund their responsibilities, particularly related to waste reduction and recycling. The Act provided funding through Ecology to local governments proposing programs to compost food and yard wastes.^{iv}

The Solid Waste Management Account was sunset in the mid 1990s shortly after the passage of Initiative 601.

In 1988, voters approved Initiative 97, which established the Model Toxics Control Act (MTCA). MTCA provided grant funds for cleanup of hazardous waste sites owned by local government and funds for

implementing local hazardous waste and solid waste management plans and programs. These funds are deposited in the Local Toxics Control Account. MTCA funds continue to be available and are managed by Ecology.^v Cleanup grants are the top priority for these funds. Small rural counties depend on the funds to run their solid waste programs. Funding for these programs has not kept pace with cleanup funding. See Appendix E for a listing of grants made to local governments to fund a variety of vegetative waste management projects through the Local Toxics Account.

III. Review of alternative practices

Yard waste and land clearing debris are solid wastes. Solid waste and solid waste management are regulated by Chapter 70.95 RCW Solid Waste Management – Reduction and Recycling and related administrative rules adopted by Ecology. The solid waste management law established a set of priorities for management of solid waste in section 70.95.010 (8):

“The following priorities for the collection, handling, and management of solid waste are necessary and should be followed in descending order as applicable:

- (a) Waste reduction;
- (b) Recycling, with source separation of recyclable materials as the preferred method;
- (c) Energy recovery, incineration, or landfill of separated waste;
- (d) Energy recovery, incineration, or landfill of mixed municipal solid wastes.”

The law also established a goal to recycle fifty percent of the solid waste generated in the state by 2007 and “a goal that programs be established to eliminate residential or commercial yard debris in landfills by 2012 in those areas where alternatives to disposal are readily available and effective.”

Local governments, particularly counties, are responsible for writing solid waste management plans for their jurisdictions. The plans describe how solid waste management services will be provided throughout the area, based on the waste management priorities.

Best Management Practices

Waste Reduction

Following the waste management priorities, the best management practices for handling yard waste and land clearing debris starts with waste reduction.

There are ways to reduce the amount of yard waste generated. Public education can help here.

Things to consider include:

- Planting native vegetation for landscaping
- Pruning trees regularly, thereby generating smaller prunings
- Weeding and trimming gardens and lawns frequently
- Preserving native vegetation as much as possible during land clearing activities
- Mulch-mowing of lawns

Part of waste reduction includes on-site or backyard composting. Master gardeners or master composters programs can help citizens better manage their own yard wastes. Ecology has provided grants to local governments to promote home composting and support master composter training.

Recycling

For organic material, recycling means chipping, mulching, or composting.

Woody material can be chipped. There are uses for chips such as cover for trails and paths or mulch. Woody waste does not by itself contain enough nutrients to produce good compost that can be used to improve soil performance. However, it does have properties that are useful in gardening applications. Woody wastes can be converted to mulch by grinding or chipping. This material can be used around trees and shrubbery to help retain soil moisture and control weeds.

Composting is the aerobic decomposition of organic material. Good compost blends sources of nitrogen (green matter like lawn clippings, vegetable plant material, etc.) with carbon sources, like woody wastes. Carefully mixed and managed, the result is a good soil supplement that helps plants grow by providing organic-based nitrogen and improved moisture retention properties and soil structure.

Communities throughout the state have started composting programs. Some communities have started publicly operated composting facilities. Others depend on privately owned composting companies.

Incineration, Energy Recovery or Landfill of Source-Separated Wastes

Incineration, energy recovery, and landfill of solid wastes are all considered disposal methods by the solid waste management law. A key element of the law is source separation. Source separation is the concept that wastes can be best managed to meet waste reduction and recycling goals if they are separated by the generator (household or business) before they are set out for collection. It is better to manage wastes separately, keeping recyclable materials, compostable materials, and hazardous materials separate, than to mix them together.

In some areas, no options exist to reduce, chip, mulch, or compost source-separated yard wastes and land clearing debris. In this event, disposal of these materials is the only solution. The law doesn't list or discuss incineration, energy recovery, and landfill disposal options in any preferential order.

Incineration is allowed under solid waste laws and regulations. Facilities that burn waste must meet air pollution standards. A solid waste permit is required for incinerators or energy recovery facilities that burn solid wastes. Units that handle less than 12 tons a day do not need a solid waste permit, but must obtain an air quality permit or be certified to meet Washington State air emissions standards.

These kinds of units, known as outdoor wood-fired boilers and furnaces, or OWBs, are regulated according to size. There are several such units available on the market that burn materials in batch quantities. In Washington, OWB's are solid fuel burning devices and must meet the "particulate air contaminant emission standard" of four and one-half grams an hour. These units may have emission control equipment; some are portable and can be reasonably economical to purchase and operate.

OWBs with a heat input less than one million BTU an hour are subject to Washington State emission performance standards. Currently there is no testing protocol approved for these types of units. Units that have not demonstrated compliance with Washington emission performance standards may not be advertised for sale, offered for sale, sold, bargained, exchanged, or given away in the state of Washington.

OWBs that have heat inputs of one million Btu an hour or more require a notice of construction (NOC) air quality permit. The NOC is a pre-construction permit and must be secured prior to commencing construction. The process of getting an air quality permit is outlined in WAC 173-400-110. Best available emission control technology is required.

Prior to purchase of any OWB, contact the local clean air agency or Ecology Air Quality Program to determine if the unit is legal.

Energy recovery from incineration of solid wastes is possible. However, it costs more than incineration without energy recovery. The benefit is harvesting energy from the burned vegetative wastes. Because the fuel source is a source-separated renewable source, some consider it to be "renewable," "sustainable," or "green" energy. In order to make energy recovery viable, a continuing source of material should be available year round. Since yard waste is generally created in large quantities in the spring and again in the fall, it should not be relied upon as the primary fuel source. Yard waste can be supplemental fuel supply added to ground wood waste, known as hogged fuel, for example. Also, cost-effective energy recovery facilities would likely be large enough to require a solid waste management permit and an air quality permit.

Landfills offer another disposal option. By design, contemporary sanitary landfills are protective of human health and the environment, and most particularly protective of groundwater. These facilities are costly to construct, operate, close, and maintain into the future. Landfills are also very difficult to site and permit. It is important to view them as a resource as conservation of landfill space is crucial. Only wastes that truly can't be reused or recycled should be disposed of in landfills.

It is also important to note that the Legislature did establish a goal to eliminate residential or commercial yard debris in landfills by 2012. While this is a goal, the intent was to push more yard debris to reuse and recycling through composting

Incineration, Energy Recovery, or Landfill of Mixed Waste

Management for disposal of mixed solid waste is the least desirable option. Mixed solid waste includes all types of material combined together—paper, plastic, yard waste, household hazardous waste, food waste, and so on. Large permitted landfills and energy recovery facilities in Washington handle this kind of waste mostly because it is difficult to manage materials for recycling if they have been contaminated by other materials. In addition, organic wastes disposed of in landfills can result in methane gas production, which can be a problem if not managed properly.

That said, landfill disposal is still an option in some areas. A well-organized waste collection, transfer, and disposal system exists throughout the state. Generally, all citizens can dispose of their wastes through this system. However, some disposal facilities won't accept yard waste for disposal. Rather, they require customers to separate the material from the garbage. This is generally done at an added cost.

In most rural areas, drop boxes or transfer stations are available. Citizens must bring their solid waste to these locations for disposal. The material is transported from these locations to disposal facilities. Today it is very rare that citizens do not have options to dispose of solid wastes. They must, however, avail themselves of those options.

Examples of Successful Vegetative Waste Best Management Programs

Stevens County

The Stevens County Fire District #1 partners with the Department of Natural Resources (DNR), Ecology, and local booster groups to provide collection and chipping services. DNR provides a chipper and correctional-facility labor to operate it. Local volunteers collect material and charge a small fee for this service, as a fund raiser. Material is taken by ABCO Wood Recycling for hog fuel and also for composting.

Franklin County

Franklin County owns a chipper that it brings to the cities of Mesa, Kahlotus, Connell, and Pasco. Annually in the spring and fall, the cities usually keep the chipper for about a week. If cities need the chipper at other times, they call the Franklin County Solid Waste Coordinator to make arrangements. Residents can drop off yard debris at no cost. The chips are used by residents (no charge for the chips), in parks, where road work is performed, and on trails. It is estimated that a day's worth of chipping produces approximately 12,000 pounds of wood chips. The chipper, which is maintained by the county, was purchased with Coordinated Prevention Grant (CPG) funds in 1998.

Mesa

The City of Mesa owns and operates a compost facility. The facility arose from the city's need to dispose of leaves, branches, and other natural debris collected from streets, alleys, and other areas. The facility is located on the backside of a local park. Residents can drop off or arrange for the city to pick up yard debris. There is no cost for residents for disposal of yard debris. When enough larger material has been dropped off, the city chips the material in a chipper the county owns. When the compost is ready, residents can pick up the compost free of charge. Mesa recently received Coordinate Prevention Grant funds from the Department of Ecology to purchase a tractor, trailer, and a sprinkler system for the compost facility.

Chelan County - Dryden

In Dryden, a compost facility receives yard and garden debris, brush, and grass clippings at a reduced tipping fee. The materials are stockpiled and chipped every three to six months. Chips are available to the public or mixed with biosolids from Leavenworth and composted. Compost is sold at about \$15 a pickup load and sells quickly. Yard debris fees are \$16.89 a yard.

Chelan

The City of Chelan operates a free brush drop-off site next to the North Chelan Recycling Project. No grass clippings are allowed. The brush is chipped and offered to the public. The chips are generally used

up in a timely fashion. Surpluses are taken to a local vineyard that willingly accepts them. Some problems with trash dumping have occurred.

Cashmere

The City of Cashmere has an active program for collecting and processing yard debris. Residents can sign up for yard waste collection twice monthly; this collection is separate from garbage pickup. A special collection route for brush and yard waste is also conducted twice per year. Materials are stockpiled at a city-owned site and ground annually using the county chipper. An average of 80 ten-yard truckloads of debris is collected by the city each year, not including material the public hauls in. Self-haul tipping fee was \$10 per pickup load in 2004. Process material is given away or spread out at the site. Currently there is a surplus of material due to low demand for it in the area. The health district considers this a solid waste permit-exempt [activity as long as material isn't stockpiled for more than a year.

Island County

Island County accepts woody debris for a fee at its closed landfill. The material is chipped quarterly by a contractor. Chipped material is then hauled to a Kimberly-Clark paper mill where it is used as a low-grade hog fuel. The county chips between three and four thousand cubic yards of material quarterly.

Quincy

The City of Quincy in Grant County owns and operates a compost facility. It is free to drop off yard waste (sod, certain weeds and food wastes are not accepted). Finished compost is sold. The program is advertised on the city website.

Spokane County

For three years, Spokane County Air Pollution Control Authority, DNR, Spokane Regional Solid Waste System, and Spokane County Fire District #4 have held a North Spokane County Chipping and Composting Day near Highway 395 and Monroe County Road. The 2007 event included free yard debris drop-off, composting training, and informational booths. Atlas Tree Chipping provided the chipping, collection, and hauling of the collected debris. Other costs, including compost bins, print ads, radio remote broadcasts, and flyers, totaled \$2,823. In three hours, the event collected 130 cubic yards of natural yard debris.

In 2007 at the request of the towns of Spangle, Waverly, Latah, Fairfield, and Rockford, Spokane Regional Solid Waste System held the first South County Chipping Event. The event was located at a gravel pit near Waverly, a central location for the five towns. Advertisements appeared in the North Palouse Journal and in flyers. Citizens dropped off yard debris for free. The costs were paid by Spokane County Air Pollution Control Authority and Spokane Regional Solid Waste System. Sunshine Recycling and Disposal hauled the collected material to a processor in Post Falls, Idaho.

Odessa

In Odessa, yard debris containers are placed in neighborhoods around town. Any yard debris smaller than half an inch in diameter is accepted. There is no fee for residents.

Kittitas County

Kittitas Solid Waste Program accepts yard waste at each of the county-owned transfer stations at a reduced fee if the yard waste is separated from garbage. The material is chipped and then offered to the public at no charge. Yard waste fees are \$35.92 per ton plus the refuse tax with a minimum charge of \$2.00 plus the refuse tax. Regular tipping fees are \$72.64 per ton plus the refuse tax with a minimum charge of \$4.00 plus refuse tax.

Whitman County

Whitman County provides free disposal of yard debris to residents at the transfer station. The county contracts with a private firm to chip the material, and the county sells the chipped material as hog fuel.

Other Communities

Additional cities and towns that operate compost facilities include Dayton, Port Angeles, Royal City, Palouse, Port Townsend, Cheney, and Garfield. Ritzville offers yard waste collection containers. Other counties that operate composting facilities include Cowlitz County and Walla Walla County. Cities that have purchased chippers include Chewelah and Colfax.

IV. Review of Impacted Communities

The January 1, 2007, ban on burning in urban growth areas with 5,000 in population or less affects 121 communities in 26 counties. Seventy-three communities are in Eastern Washington. The remaining 48 are west of the Cascade Crest.

County	Communities Affected by January 1, 2007, Burn Ban	County	Communities Affected by January 1, 2007, Burn Ban
Benton	Prosser	Pend Oreille	Cusick
	Benton City		Ione
Chelan	Cashmere		Metaline
	Chelan		Metaline Falls
	Entiat		Newport
	Leavenworth	San Juan	Friday Harbor
	Manson		East Sound
	Sunnyslope		Lopez Island
Clallam	Carlsborg	Skagit	Bay View
	Clallam Bay/Seki		Concrete
	Forks		Hamilton
	Joyce		La Conner
	Sequim		Lyman
Clark	LaCenter		March Point
	Ridgefield	Snohomish	Darrington
	Yacolt	Spokane	Deer Park
Columbia	Dayton		Medical Lake
	Starbuck		Fairfield
Cowlitz	Castle Rock		Rockford
	Woodland		Spangle
Douglas	Bridgeport		Latah
	Mansfield		Waverly
	Rock Island	Stevens	Addy
	Waterville		Clayton
Ferry	Republic		Chewelah
Franklin	Connell		Colville
	Kahlotus		Hunters
	Mesa		Kettle Falls
Garfield	Pomeroy		Lake Spokane
Grant	Coulee City		Marcus
	Coulee Dam		Northport
	Electric City		Springdale
	George		Valley
	Grand Coulee	Thurston	Bucoda
	Hartline		Grand Mound
	Krupp		Rainier
	Lakeview Park		Tenino
	Mattawa		Yelm
	Quincy	Walla Walla	Attalia
	Royal City		Burbank
	Soap Lake		Prescott
	Warden		Waitsburg
	Wilson Creek	Whatcom	Birch Bay

County	Communities Affected by January 1, 2007, Burn Ban	County	Communities Affected by January 1, 2007, Burn Ban
Island	Coupeville		Blaine
	Langley		Cherry Point
Kittitas	Cle Elum		Columbia Valley
	Kittitas		Everson
	Roslyn		Nooksack
	South Cle Elum		Sumas
Lewis	Pe Ell	Yakima	Grandview
	Winlock		Granger
	Vader		Mabton
	Toledo		Moxee
	Mossyrock		Naches
	Morton		Selah
	Napavine		Tieton
Mason	Allyn		Union Gap
	Belfair		Zillah
Pacific	Raymond		
	South Bend		
	Long Beach		
	Ilwaco		
	Seaview		

V. Listening session results

Ecology held five listening sessions throughout the state. The purpose of the listening sessions was to hear concerns about compliance with the 2007 burn ban from interested parties, particularly local governments.

These listening sessions took place in Waterville, Grandview, Deer Park, Forks, and Darrington. Excluding Ecology personnel, 44 people attended the sessions.

Below is a snapshot summary of the comments received. Each listening session summary is included in Appendix B.

LISTENING SESSION SNAPSHOT

Listening Session Held:

Air Regulatory Authority	Session Location & Date	
Dept. of Ecology Air Quality Program	Waterville	September 20, 2007
Dept. of Ecology Air Quality Program & Spokane Regional Clean Air Agency	Deer Park	October 2, 2007
Olympic Regional Clean Air Agency	Forks	October 4, 2007
Dept. of Ecology Air Quality Program, Yakima Clean Air Authority & Benton County Clean Air Authority	Grandview	October 17, 2007
Dept. of Ecology Air Quality Program & Northwest Air Pollution Authority	Burlington	November 1, 2007

Urban Growth Counties Attending:

Central Washington Region - Chelan, Douglas, Kittitas, Benton

Eastern Washington Region - Ferry, Stevens, Grant, Franklin, Garfield

Southwest Washington Region – Clallam

Northwest Washington Region - Whatcom, Skagit, Island, San Juan, Kitsap

Urban Growth Counties Not Attending:

Central Washington Region - Yakima

Eastern Washington Region - Pend Oreille, Walla Walla, Columbia

Southwest Washington Region - Jefferson, Mason, Thurston, Pacific, Lewis, Clark

Northwest Washington Region - Snohomish, King, Pierce

Air Authorities Not Represented:

Puget Sound Clean Air Agency

Southwest Clean Air Agency

Most jurisdictions wanted local solutions/alternatives that are affordable, cost effective and sustainable.

Identified Challenges: (Number of sessions where this was mentioned)

- 5 Financial – Developing alternatives all take money that local jurisdictions do not have.
- 3 Markets – Lack of local markets/demand for the chips/compost generated.
- 2 Liability – Potential liability associated with the operating of a chipper.
- 2 Staffing – Inadequate staff available to offer/sustain a program.
- 2 Transportation – Remote locations, distance to travel make programs costly.
- 2 Contamination – Drop off/unstaffed facilities can encourage contamination/illegal dumping.
- 2 Program Costs – Costs of collection program prohibits participation, encourages illegal dumping or disposal of materials into landfills.
- 1 Urban Growth Boundaries – even/odd house numbers may be only division.
- 1 Burning Exemptions – Slash burning, crop burning, agricultural burning, and forest fires.
- 1 Miscellaneous – Small volumes, pine needles, pesticides/herbicides, shortage of water, enforcement not local and costly if local.

Recommendations: (Number of sessions where this was a recommendation)

- 5 Financial – Need dedicated, long-term funding for program sustainability, not one-time infusion of grant funds.
- 1 Variance – Clarify the legislative intent of RCW 70.94.181: Variances.
- 1 Best Management Practices – Allow outdoor burning using approved *Best Management Practices* under permit.
- 1 Technologies – Develop new technologies (biomass) for products, thus creating a demand.
- 1 Markets – Develop local markets for the materials produced.
- 1 Partnerships - Encourage partnerships and joint agency cooperation; i.e., DNR, State Parks, WSDOT, etc.
- 1 Public Outreach – Develop a public education program that informs the public about existing programs/alternatives and the requirements of the law.

Current Activities

Management of yard waste and land clearing debris is currently a mix of several options. Some communities have initiated city-run composting and chipping programs. While demand for the chips and compost has not been high in all communities, many cities and citizens have used what these programs have produced.

Other communities are just getting started. They have received grant funds from the state to establish collection, composting, and chipping programs.

Still others would prefer that they could still burn yard waste and land clearing debris. One community openly defied the law and burned material knowing that it was against the law. This community is facing potential civil and criminal penalties.

Issues and Concerns Voiced at the Listening Sessions

Financing

- Ongoing cost of operating a composting or chipping program will place an undue burden on small communities, competing with other essential services.
- Match requirements for grants is a challenge for some communities to provide.

Liability

- Some communities face added costs for required liability insurance related to worker safety when operating chippers and grinders.

Markets

- Making compost and chips is one thing. Community leaders are concerned that the material won't be used. Viability of compost markets is in doubt in some communities, and contamination is a concern.

Collection

- Communities that don't operate their own garbage collection services may not have a contract with a collection company that includes yard waste collection. Land clearing debris is not collected by commercial waste collection companies.

Staffing

- Most rural areas rely on self-haul and drop boxes for collection. Staffing to maintain quality control (no contaminants) can be an issue.
- Small communities rely on a small staff that performs multiple duties, or on volunteers, to accomplish their municipal responsibilities.

Location

- Small communities are often in remote locations. It may not be cost-effective to haul material to a large compost facility out of town.
- People don't understand the impact of smoke from outdoor burning in sparsely populated areas.

Quantity and Quality of Material

- Some communities don't generate enough material to justify an investment in a composting facility and staffing to operate it.
- Some materials generated in large quantities make poor compost.
- If drop-off is not monitored, material can be contaminated by garbage.

Other

- Streets sometimes form the boundary line between burn and no-burn areas. It's hard to support that or explain to citizens why the odd numbered houses can burn and the even numbers can't when the smoke from the burners crosses into no burn UGA. There are stories of people taking their yard waste next door to burn "legally."
- There was sentiment that the burn ban would be overturned, and some cities and UGAs have not acted because of this. These cities have lost out on the opportunity to fund programs from state grants.

Summary of Suggested Recommendations Received From Participants at the Listening Sessions

Ecology received many suggestions to solve the problems faced by the affected communities. These suggestions are summarized as recommendations below.

- Continued dedicated funding is needed to develop the necessary infrastructure and to promote new technologies that will make beneficial use of yard waste. Funding is also needed for staffing.
- Reduce the grant match requirement for Alternatives to Burning Grants.
- Continued dedicated funding is needed to develop the necessary infrastructure and to promote new technologies that will make beneficial use of yard waste. Encourage research and private investment in energy and alternative fuels production and bio-products. Look for synergies with other organic waste streams. Look for agricultural applications and other local applications for using wood chips or compost.

- Some would like to see eligibility for funding marketing and developing local uses for composted yard waste and chipped material. The costs of transportation make it difficult to do much with materials from rural areas. Local solutions work best and should be developed.
- Develop compost facilities that can also take other organic wastes.
- Keep the public informed. The city of Sumas put burn ban information in their newsletters and questions virtually stopped when they did. Provide public information about alternatives to disposal such as mulching mowers and backyard composting.
- Consideration should be given for community-specific conditions. Communities want solutions that are affordable and practical.
- Look into the variance provision provided in the Clean Air Act.
- Partner with other government agencies such as the Department of Natural Resources or State Parks. They may have equipment that could be made available for chipping and grinding.
- Look for partnerships with private companies. Work with private companies such as tree removal services for chipping or solid waste collection companies. Use chips for animal bedding at dairies.
- Provide small communities technical assistance unique to their geographic area and biomass that is generated.

APPENDIX A

Budget Proviso

**2007 Legislative Session
Operating Budget**

NEW SECTION. **Sec. 3038. FOR THE DEPARTMENT OF ECOLOGY**

1 (3) Up to \$75,000 of the appropriation shall be used by the
2 department to convene a work group with representatives of affected
3 stakeholders to assess opportunities, other than burning, to manage
4 vegetative solid waste and recommend best management practices,
5 consistent with good solid waste management practices, that work for
6 smaller communities. The department shall provide the recommendations
7 to affected cities and to the appropriate standing committees of the
8 legislature. The work group recommendations must be completed by
9 December 31, 2007.

APPENDIX B

Listening Session Summaries

Alternatives to Burning Listening Session
 Summary from the Waterville Meeting
 September 20, 2007

Attendance – 24 people attended

<u>Name</u>	<u>Affiliation</u>	<u>Telephone No. & Email Address</u>
Jean Hardie	City of Bridgeport	509-686-4041 bportcty@nwi.net
Ron Draggoo	Countywide Solid Waste Programs of Douglas Co.	509-886-0899 rdraggoo@co.douglas.wa.us
Wallace Bushman	City of George	509-785-5081 geopwd@smwireless.net
Don Jensen	City of Waterville	509-745-8329
Linda Hall	City of Republic	509-775-3554 rcouncil@rabletv.com
Shirley Couse	City of Republic	509-775-3535 sac@rcabletv.com
Russell Clark	City of Rock Island	509-884-1261 mayorri@nwi.net
Barney Berg	City of Soap Lake	bberg@televar.com
Kary Peterson	Dept. of Ecology AQP-Spokane	509-329-3523 kape461@ecy.wa.gov
Wayne Horde	Mayor of Soap Lake	509-246-1211
Tim Skinner	Councilman of Waterville	509-745-8223
Mary Hunt	Douglas Co. Commissioner	509-745-8537 mhunt@co.douglas.wa.us
Kathy Bohnet	Mayor of Wilson Creek	509-345-2498 kathybohnet@hotmail.com
LeRoy Allison	Grant County	lallison@co.grant.wa.us
Cullen Stephenson	Dept. Of Ecology SW&FAP-Olympia	360-407-6103 cste461@ecy.wa.gov
Cindy Carter	Grant County BOCC	509-745-2001 Ext. 428 ccarter@co.grant.wa.us
Joan Melvin	Grant Co. Solid Waste	509-754-6082 janmelvin@co.grant.wa.us
Richard Stevens	Grant Co. BOCC	

Patti Johnson	Kittitas Co. Solid Waste	509-962-7070 patti@co.kittitas.wa.us
Royal J. DeVaney	Mayor of Waterville	509-745-8871 waterville@nwi.net
Shiloh Burgess	Office of Senator Parlette	509-663-9702 Burgess.shiloh@leg.wa.gov
Brenda Harn	Chelan Co. Solid Waste	509-667-6631 Brenda.S.Harn@co.chelan.wa.us
Mike Hibbler	Dept. of Ecology SW&FAP - Spokane	509-329-3466 mhib461@ecy.wa.gov
Darlene M. Frye	Dept. of Ecology SW&FAP-Yakima	509-457-7123 dfry461@ecy.wa.gov

Todd R. Perry of Royal City could not attend but sent written comments (509-346-2263).

Past Yard Waste Handling Approaches

Yard Waste Collection Site & Managed Burn – Citizens would bring yard waste (only natural materials) to a collection site managed by the local government. The pile was allowed to dry completely. A special burn permit was obtained from Ecology and the pile was burned once a year using best management practices so the smoke would go straight up and have the least effect possible on the community. This approach is no longer allowed by law.

Add Yard Waste to Permitted Outdoor Burn Sites – Yard waste has been centrally collected or hauled by citizens to an area allowed to conduct outdoor burning because they fall under an agricultural exemption or are outside a UGA. Transporting yard waste outside a UGA or to an agriculturally exempt burn site is not allowed under the law.

Some Current Yard Waste Handling Approaches

Yard Waste Collection & Disposal at the Landfill – Cities pay waste hauling companies to deliver dumpsters for centralized yard waste collection and then haul the material to the landfill for disposal. Some counties have yard waste collection at their transfer stations. The yard waste is hauled and disposed of at a landfill. Self-haul is the only alternative for most rural residents that have large quantities of vegetative wastes. Cost and distance to the transfer station or disposal facility are limiting factors that govern whether those facilities will be used or not.

Yard Waste Collection & Chipping – Cities collect yard waste during collection events or at transfer stations. The woody debris is chipped using a purchased or locally shared chipper. Some give the chips to whoever wants them while others contract with companies that use the chips for hog fuel. A few do both. At least one mixes the wood chips with the grass clipping and leaves they also collect and haul it to a local commercial compost facility. Wilson Creek and Soap Lake said their service provider, ABCO Wood Recycling, placed unreasonable limitations on contaminants (garbage) in the containers.

Major limiting factors with regard to this approach are lack of staffing, unsupervised drop boxes, material contamination, container costs, hauling costs, and operational and equipment maintenance costs.

Compost Bin Give Away Programs – Cities have given away compost bins as part of a campaign to get people to turn in burn barrels or as a backyard composting promotion program.

Curbside Yard Waste Collection: Currently curbside collection is offered only in large cities. A couple smaller towns have negotiated either curbside yard waste collection or centralized yard waste pickup at drop-off sites as part of the MSW hauling contract with private haulers. It should be noted that if this service is provided it is at an additional cost which can limit participation.

Proposed Yard Waste Handling Approaches

Yard Waste Collection & Chipping Programs – The Cities of Soap Lake and Wilson Creek have partnered to apply for Alternatives to Burning Grants to develop a project where they will collect woody yard waste to be placed in 8'x8'x30' dumpsters and transported to ABCO Wood Recycling. Pallets and old lumber can also be placed in these dumpsters.

Compost Facilities – Kittitas County has applied for an Alternatives to Burning Grant to construct and equip a countywide compost facility and to market the compost. Yard waste that is collected curbside in the City of Ellensburg and at the transfer stations in the county will be composted. Educational programs and collection events will encourage further participation the program. This large scale project is possible because yard waste has already been collected at the transfer stations for eight years and hauled away by Waste Management, so many citizens are already using the service. Growth in the area is primarily people from Seattle who are accustomed to paying for services and demand them. Since the burn ban, more and bigger materials are already coming to the transfer stations. Not having to pay the \$30/ton tipping fee for disposal of the yard waste will help pay for long-term maintenance of the facility.

The Town of Entiat has applied for an Alternatives to Burning Grant to create a citywide compost facility that will compost woody debris along with other organics and biosolids. The compost will be used for habitat restoration projects in the watershed.

Yard Waste Collection by Private Haulers - Curbside yard waste collection is only offered in the large cities. The local haulers will not pick up yard waste in most other areas. When small towns are negotiating garbage hauling contracts, some type of yard waste pickup should be negotiated as part of the contract.

Challenges of Yard Waste Management

Financial – Small communities and rural counties do not have the financial resources to purchase, operate, insure, and maintain yard waste management programs. Even if equipment and facilities are covered by a Coordinated Prevention Grant, long-term funding of the project is an issue. Funding these projects competes with funding for programs already in place. There is no guarantee that funds will be available in the Local Toxics Account or that the Legislature will appropriate additional funds to maintain alternative to burning projects on top of existing programs. Many communities cannot come up with the funds or sufficient in-kind contributions to meet the required 25 percent match.

Yard waste collection and disposal programs are too costly for small communities. Waste companies charge at least \$300 per dumpster and three dumpsters can easily be filled in one day of a collection event. Although the response from the public demonstrates success of this type of program, small communities do not have the funds needed to pay for it.

Insurance for chipping programs is very high due to the potential liability for injury. The cost of the insurance has been the death knell for running chipping programs in some communities. In one community, it became a choice of whether to insure a chipper or their fire truck.

The rural nature of the area makes collection of yard wastes costly due to transportation costs. People are not willing to self-haul for long distances either. In addition, they are not willing to pay \$5 to dispose of yard wastes. There are too many ravines or other illegal dumpsites closer to their property. Several people commented that they have seen illegal dumping increase since the burn ban went into affect.

Manpower – Small communities depend on a few employees to handle multiple, unrelated duties or rely on volunteer services. Diverting even four hours a week to yard waste management programs will cause other services to suffer. Volunteers are already being tapped to a full extent. Projects such as collection events require oversight to make sure the public is not dumping garbage in addition to actually managing the material collected. Manpower limitations mean facilities could only be open on a limited basis.

Soap Lake bought a small, used chipper but it now sits unused because the city doesn't have the manpower to operate it and an effective program. The city is willing to sell it.

The question of who will be policing to prevent illegal burning or dumping was raised. Local enforcement agencies are already stretched beyond capacity. They do not have the funds to hire more people. Some communities will tell callers to call Ecology if they see someone burning yard waste.

Feedstocks - Many small communities do not have enough yard waste generated to make composting or other organics management operations feasible.

Fence lines and vacant lots are a big problem with tall grass and weeds that are not easily managed. Small towns don't have the money to buy mowers to mow the lots. The potential for fires to spread to structures is high. Even if other organic wastes are collected, fence lines and vacant lot vegetation will still be a problem. Several people commented that they are concerned about how much more tall grass and weeds have been left unmanaged in their towns this year.

Pine needles are a big waste stream in some towns. Concerns were raised about the inability to compost pine needles and that they have a negative impact on plant growth if they are included in compost or are used as mulch. It was claimed that authorities have confirmed this negative impact. Pine needles are viewed as being nearly impossible to deal with other than disposal or burning.

Grass clippings will contain pesticides that won't make good compost.

More than 50 percent of the yard waste generated is not suitable for chipping. If a town is running a chipping program, that still leaves a lot of problem yard waste without a solution.

Water Supply for Composting - Some small communities have reached the limits of their water rights and don't see an easy solution to get more water for domestic supplies. They would not have the water needed to run a compost facility even if they wanted to start one.

Markets - Concerns were expressed that markets for the compost or chips may not or are not there to make a yard waste management facility successful. The City of Quincy cannot handle and market all the materials it is getting. The city ends up with piles of chips that could spontaneously combust.

Concern was expressed that if a city buys a chipper, chips the yard waste, and then cannot find a use for the chips, the city will be told it's their problem to deal with.

The Washington Department of Transportation's use of roadside mulch is a very good market in western Washington, but the same market does not exist in eastern Washington. Due to the arid summer conditions, the mulch becomes dry and easily ignited by illegally tossed cigarettes or other ignition sources.

Distance to compost facilities, hog fuel boilers, or other potential markets usually makes hauler costs greater than the value of the organic matter.

Contamination - People use yard waste collection sites to dispose of their garbage. The cost sorting out the garbage and disposal costs can be a significant expense. This requires sites to be fenced and supervised to minimize this problem. The result is added expenses and likely limited hours when the facility will be open.

Wilson Creek and Soap Lake said they were told by ABCO Wood Recycling that even one piece of contamination in a dumpster load will classify that load as garbage and they will need to pay disposal fees.

Misc. Comments - One person said the cities invested a lot into educating the citizens about the burn ban. Ecology's educational attempts had not reached many people.

During the legislative hearings, one committee member allegedly commented that dumping yard waste in ravines isn't a problem because that's organic matter like compost, which is a good thing. Concern was expressed that such misconceptions interfere with making good decisions.

A comment was made that it is difficult to see the problem with properly managed yard waste burning when the valley is full of smoke all summer from wild fire.

A comment was made that the attempt to clean the air has resulted in dirty land.

Attendees at this session had numerous concerns: 1) lack of funding; 2) lack of priority; 3) predominance of grass and pine needles; 4) differing material acceptance policies at different locations; 5) lack of staff for collections or enforcement; 6) liability concerns for chippers; and 7) maintenance costs for chippers or other equipment.

Recommendations

- A one-time input of money will not solve the problem. Sustainable projects cannot be developed without sizable start-up costs. Considerable money will be needed to cover start-up costs for new projects in the future. In addition, funds to maintain programs will be needed. Current CPG funding levels cannot cover existing waste reduction, recycling, and MRW programs and maintain newly developed alternative to burning programs. Continued dedicated funding is needed.
- Finding a 25 percent match for CPG funds is a problem for small communities and for some counties. The following suggestions were made to help address that problem.
 - Lower the match requirement for offset cycle grants or Alternatives to Burning Grants.
 - Allow private funds to qualify as match.
 - Allow volunteer labor or service club contributions to qualify as match.
- Until alternatives can be found, allow yard waste to be collected for a one-time burn using best management practices under a permit.
- Consideration should be given for community-specific conditions. The burn ban is a one-size-fits-all program with small communities being treated the same as large communities. The small communities don't want to be illegal, but they cannot afford to do what is expected under the current program. They want solutions they can afford and are looking to Ecology and the Legislature to help them.
- Some questions regarding the air quality regulations remain. In particular, there are questions about the legislative intent of the variance provision. It was suggested that the language in the regulations should be revisited to clarify the intent of the variance.

Alternatives to Burning Listening Session Summary from the Deer Park Meeting October 2, 2007

Attendance

Curt Kelling	City Administrator	City of Chewelah
Gary Wagner	Councilmember	Town of Rockford
John Kokinda	Councilmember	Town of Springdale
Shirley Couse	Mayor	City of Republic
Linda Hall	Councilmember	City of Republic
Brenda Smits	Air Quality Specialist	Spokane Regional Clean Air Agency
Tony Delgado	County Commissioner	Stevens County
Susan Lattin	Board Member	Town of Springdale Planning Commission
Bill Wedlake	Solid Waste Coordinator	Spokane County Public Utilities
Dee Cragun	Councilmember	City of Deer Park
Russell Armstrong	Lieutenant	Stevens County Fire District #1

Past and Current Yard Waste Handling Approaches

County Owned Chipper Program – Lt. Armstrong of the Stevens Co. Fire Department presented a very good chipper program. They partner with DNR, Ecology, and local booster groups. DNR provides correctional labor to run their own DNR chipper, with crews funded through Ecology's CLCP dollars. The local band boosters volunteer to collect material, and charge a small fee for this service. It has taken a few years to get the kinks ironed out, but the program is a huge success. Material is taken by ABCO Wood Recycling for hog fuel and also for composting. The project has tangible results—one community that used to burn was called Smoke Crest—but since this program provided burning alternatives, the community has reverted to its true name: Sun Crest. Stevens Fire Dept. staff also issue tickets to offenders of the burn ban. (FORM ATTACHED.) Use of the form has changed behavior in 95 percent of cases. Further, the Fire Dept. believes it is actually saving money because the alternatives program has led to less complaint responses.

City Cleanup Events – Deer Park has a clean green collection system which has been successful, but costly for them. Material goes to Sunshine Co. for hog fuel. Springdale is looking for solutions for large lots with existing slash piles. Chewelah encourages pine needles to be put in with garbage (which is legal).

Burning – No one at this meeting admitted to burning.

Proposed Yard Waste Handling Approaches

Yard Waste Collection & Chipping Programs – Several attendees will be in touch with Stevens County to learn more about that program.

Compost Facilities – Benton County is starting the planning stages for developing a regional

Challenges of Yard Waste Management

Financial – Developing compost facilities or other technologies all take money. Funding these projects and getting private investment in developing new technologies or markets will be a challenge. Grant programs to consider are the Coordinated Prevention Grant Program, the Public Participation Grant Program, and the Community Litter and Cleanup Program.

Recommendations

- Continued dedicated funding is needed to develop the necessary infrastructure and to promote new technologies that will make beneficial use of yard waste. Encourage research and private investment in energy and alternative fuels production and bio-products. Look for synergies with other organic waste streams.
- DNR has two chippers, so attendees were encouraged to look for partnerships with DNR. Some other communities are considering chippers, but will likely work more with private chipper companies.
- For large lots, we should look to see about programs where landowners can get material to the road, and then have a system to collect material (especially pine needles) from the roadside piles. (A recent trip to Chicago revealed that they collect leaves in this manner.)

**Alternatives to Burning Listening Session
Summary from the Forks Meeting
October 4, 2007**

Attendance –

<u>Name</u>	<u>Affiliation</u>
Nedra Reed	Mayor, Forks
Rod Fleck	City Attorney and City Planner, Forks
Dave Zellar	PW Director, Forks
Jennifer Garcelon	Clallam County Health Department
Cullen Stephenson	Dept. of Ecology, SWFAP-HQ
Laurie Davies	Dept. of Ecology, SW&FAP - Lacey
Robert Moody	Olympic Region Clean Air Authority

Past and Current Yard- and Wood- Waste Handling Approaches

City Cleanup Events – This session was a discussion entirely about the City of Forks (pop. 3100) and its issues. We did not intend that, but no one else came. So, we got a very detailed view of the unique challenges faced by Forks. Note that this is just another example of what we heard all around the state – one size does not fit all! While Forks fully believes that they should be allowed to burn yard and wood wastes, they understand the law, and they also have developed some very innovative potential solutions. Their current practice is to burn yard and wood wastes, and they plan to look at emergency declarations to continue the practice.

Proposed Yard- and Wood- Waste Handling Approaches

Compost Facility – Forks estimates that it would cost at least \$250,000 to construct a new composting facility due to their weather and climate. Subsequent cost of operation is also a significant concern. They are looking at possibilities of co-composting with their biosolids.

Wood to Bio-Fuel – Forks has gotten preliminary estimates for a facility to convert wood into energy to power schools and other facilities. Cost is about \$1 million. For roughly the same amount a similar facility could be built at the Clallam Bay Correctional Facility for the north part of the county. It was looked at previously and rejected due to lack of interest.

Timber Harvest Site Options – Forks is investigating how to use slash materials left at logging sites that were traditionally scattered or burned. However, studies have shown that it is necessary to leave at least 30 percent of the woody material on the ground after harvest. The remaining 70 percent could be converted to methanol or other energy forms. Forks is looking into partnerships with the timber industry – which could actually make money by converting unused woody material.

Challenges of Yard- and Wood-Waste Management

Financial – Developing compost facilities or other technologies all take money. Funding these projects and getting private investment in developing new technologies or markets will be a challenge. Grant programs to consider are the Coordinated Prevention Grant Program, the Public Participation Grant Program, and the Community Litter and Cleanup Program. Forks is concerned that a small community cannot compete for large grant awards, but we encouraged them to apply. They tell us that their discretionary city budget is \$1.5 million, half of which is needed for police.

Location – Forks is a fairly remote location. On the other hand, there is abundant woody material close by. So, many good solutions may actually be in Forks or nearby to make transportation effective. Also, woody material in Forks is BIG. So a routine chipper won't work. A tub-grinder (more expensive) is probably needed for many options. Forks is on the peninsula, where air quality is quite good. They have difficulty understanding why the burn ban needs to be implemented there. The city is comprised of a growing number of senior citizens – this leads to challenges in considering curbside options.

Recommendations

- Continued dedicated funding is needed to develop the necessary infrastructure and to promote new technologies that will make beneficial use of yard waste. Look for ways to help with design and possible permitting of their good potential solutions. Encourage research and private investment in energy and alternative fuels production and bio-products. Look for synergies with other organic waste streams.
- Stay in touch with Forks to assist them in implementing solutions.
- Consider state and federal legislative support.
- Use the state Biomass inventory to help Forks determine the size of their wood waste supply for planning purposes.

**Alternatives to Burning Listening Session
Summary from the Grandview Meeting
October 17, 2007**

Attendance – 8 people attended

<u>Name</u>	<u>Affiliation</u>
Larry Turner	City of Connell
Tim Bemis	City of Pomeroy
Keith Martin	Benton County Solid Waste
L. J. Da Corsi	City of Prosser
David A. Lauer	Benton Clean Air Authority
Kary Peterson	Dept. of Ecology, AQP-Spokane
Mike Hibbler	Dept. of Ecology, SW&FAP - Spokane
Darlene M. Frye	Dept. of Ecology, SW&FAP-Yakima

Past and Current Yard waste Handling Approaches

County-Owned Chipper Program – Franklin County owns a chipper that is circulated around the county for the cities to use in conjunction with yard waste collection events or at their collection sites.

City Cleanup Events – The City of Prosser holds two yard cleanup events a year. A waste contractor takes the leaves and grass clippings and the city chips the woody debris. The chips are available for citizens to use.

The City of Connell cleans up its alleys. Garbage is sorted out for disposal. Kochia and other weeds are put in a pile.

Burning – Citizens in Pomeroy burn trash in barrels and yard waste, especially on weekends. The town becomes full of haze on weekends. Garfield County advises citizens that don't want to burn to take the yard waste to the landfill located forty miles away.

Lush growth along irrigation ditch banks is burned rather than using herbicides that can get into the water and move downstream. Piles of tumbleweeds have also been burned. Although these are exempt practices, some local jurisdictions have made these practices illegal.

Proposed Yard Waste Handling Approaches

Yard Waste Collection & Chipping Programs – Use a contractor that can grind the woody debris into chips that have a market. Markets could include using the chips for hog fuel, lowering soil pH for growing blueberries (new crop coming into Benton County), and composting. Rough chips created by some chippers could be used to improve roads associated with center-pivots and even in wheel tracks for the pivots (straw is now used for this purpose).

Compost Facilities – Benton County is starting the planning stages for developing a regional compost facility. The feasibility of partnering with either Yakima or Franklin County will be considered.

It was suggested that the City of Connell look into the potential to partner with the Department of Corrections on a compost facility.

Mulching Mowers – Mulching mowers can be used effectively in eastern Washington and even leaves can be incorporated. A comment was made that the vigor of the grass is improved so that chemicals may not even be needed. Promotional programs are grant eligible. People need to be shown how to use the mowers or replacement blades in existing mowers to overcome the misconception that thatch will become a problem.

Challenges of Yard Waste Management

Financial – Developing compost facilities or other technologies all take money. Funding these projects and getting private investment in developing new technologies or markets will be a challenge.

Benton County stated that they want to make alternative to burning programs free for the people so that they will take advantage of them.

Markets

Some chipping programs have not been able to give the chips away. One potential use was thought to be animal bedding, especially for the horses in the area. WSU Agricultural Extension expressed concerns about this use. The wood chips may contain chipped walnut which is toxic to horses.

The City of Prosser has tree-lined streets (961 trees) plus the yards have lots of trees. The quantity of wood waste collected each year is huge. Since they have not been able to get anyone to take the chips, the piles of chips have grown until the Benton-Franklin Health District required the city to decrease the size of the piles. Many truckloads of chips were hauled to the landfill for disposal.

Recommendations

- Continued dedicated funding is needed to develop the necessary infrastructure and to promote new technologies that will make beneficial use of yard waste. Encourage research and private investment in energy and alternative fuels production and bio-products. Look for synergies with other organic waste streams.
- Seriously look at mulching mower programs for eastern Washington and overcoming misconceptions.
- Look for agricultural applications for using wood chips. Develop compost facilities that can also take other organic wastes. Anaerobic digesters might be a good fit with the large dairy industry in the valley. Look for partnerships to make these alternatives happen.

Alternatives to Burning Listening Session Summary from the Burlington Meeting November 1, 2007

Attendance – 8 people attended

<u>Name</u>	<u>Affiliation</u>
Dave Peters	Kitsap County Solid Waste Division
Rick Holt	City of Everson
Rollin Harper	Senior Planner, Nooksack and Sumas
Julie O'Shaughnessy	Northwest Clean Air Agency
Laura Curley	Northwest Clean Air Agency
Kary Peterson	Dept. of Ecology, AQP - Spokane
Peter Christiansen	Dept. of Ecology, SW&FAP - Bellevue
Jay Shepard	Dept. of Ecology, SW&FAP - Lacey

Peter Christiansen also talked individually with staff from San Juan County and Island County who could not attend the meeting.

Past and Current Yard Waste Handling Approaches

The Cities of Sumas, Nooksack, and Everson combined to apply for a grant from Ecology to purchase a chipper. The application was approved.

The City of Concrete has a chipper. They dump the chips in a central site and there has been no problem getting rid of them.

One of the large generators of woody debris in Whatcom and Skagit County are flood events. Often this material isn't suitable for chipping or reuse because of contamination. Chipping companies are also reluctant to chip material from floods because they fear their blades will wear out and metals and other debris are a safety hazard.

Island County has designated an area of their closed landfill to accept woody debris for a fee. The area is paved. The county contracts to have the material chipped quarterly. The material is then hauled to a Kimberly-Clark paper mill where it is used as a low-grade hog fuel. The county chips between three and four thousand cubic yards of material quarterly. Hauling off-island, however, is very expensive. Because the chips are low quality, the value of the hog fuel does not offset the cost of hauling.

Island County has in the past offered backyard compost workshops. Also, there is now a thriving privately operated compost facility in South Whidbey. Business is booming.

In Skagit County, the cities of Burlington, Mount Vernon, and Sedro Woolley have yard waste drop-off locations for their residents only. There are several compost companies in the county that accept yard waste for a fee. The county has a master composter program that periodically offers workshops. San Juan County had compost workshops on three islands attended by 75 people in March 2007.

In Snohomish County, the Monroe Prison Farm operated a compost facility. The farm as since been sold, so that option is gone.

Proposed Yard Waste Handling Approaches

Yard Waste Collection -

Compost Facilities – There are a number of private compost facilities in both Whatcom and Skagit Counties. Island County just recently changed their land use ordinances to allow for compost facilities. The one that opened in South Whidbey is already near capacity.

Local governments could set up their own small-scale composting operations at their shops and yards if they have a hard-surfaced area. There is an exemption from permitting for small compost facilities.

Chipping Programs – With a number of hog fuel burners in the area, good quality wood chips shouldn't be hard to get rid of. The problem with smaller programs is quality control and providing the volume to interest the burners. There is uncertainty as to the willingness of the operators of hog fuel burners would be to taking a sporadic volume of chips.

To date, there has been no problem giving away chips from local programs. The question was asked what to do if the pile of chips grew because of lack of market. At what point would they have to dispose of the chips?

Backyard Composting – There is knowledge of programs out there, but uncertainty about how well they work. Backyard composting programs will not take care of the woody debris, but could handle all other yard wastes – grass clippings, leaves, plants, and vines.

Challenges of Yard Waste Management

Liability – Whatcom County backed off helping some of their smaller communities with a chipping program because of concerns with liability.

Financial – Developing compost facilities or other technologies takes money that most small cities don't have access to. Even meeting the 25 percent match is a challenge for small cities. Funding these projects and getting private investment in developing new technologies or markets will be a challenge.

Markets – Are there markets to absorb the material produced and at what cost? If you have to pay to have material chipped, then pay to have it transported, you're facing a huge loss compared to the cost of just burning it onsite.

Collection – Cost differential between garbage container and yard waste container is negligible. Even though the yard waste container is three times the size, people don't recognize that. They only see the price.

Most rural areas rely on self-haul and drop boxes for collection. Staffing to maintain quality control (no contaminants) can be an issue.

Other – Streets sometimes form the boundary line between burn and no-burn areas. It's hard to support that or explain to citizens why the odd numbered houses can burn and the even numbers can't when the smoke from the burners cross into no-burn territory. There are stories of people taking their yard waste next door to burn "legally."

There was sentiment that the burn ban would be overturned, and some cities and UGAs have not acted because of this. These cities have lost out on the opportunity to fund programs from state grants.

Recommendations

- Continued dedicated funding is needed to develop the necessary infrastructure and to promote new technologies that will make beneficial use of yard waste. Funding is also needed for staffing.

- Some would like to see eligibility for funding marketing and developing local uses for composted yard waste and chipped material. The costs of transportation make it difficult to do much with materials from rural areas. Local solutions work best and should be developed.
- Keep the public informed. The City of Sumas put burn ban information in their newsletters and questions virtually stopped after that.

Appendix C

Funded Projects Alternatives to Burning Grants

Funded Projects: Alternatives to Burning Grants

Name of applicant	Cities covered	County	Project Title	Outcome (annually tons diverted)	What is being done with material? Additional costs and revenues	Project Cost	State share
Kittitas County Solid Waste Department	All in Kittitas County: Roslyn (a), Cle Elum (a), Kittitas (a), South Cle Elum (a), Ellensburg (b), Snoqualmie (c), Easton (c), Ronald (c), Thorp (c), Vantage (c)	Kittitas County	(1) Kittitas County Centralized Compost Facility (2) Kittitas County Compost Resale Program (3) Kittitas County Yard Debris Collection, Education and Outreach Effort	2000	Compost	\$1,071,982	\$803,987
Snohomish County	Darrington	Snohomish	Sustainable yard waste infrastructure for Darrington and vicinity	175	hog fuel and composting	\$92,765	\$69,574
Sumas	Sumas, Everson, Nooksack	Whatcom	Community Chipping	320	Chips to residents and used in parks	\$22,305	\$16,729
Snohomish County	Sultan, East Monroe, Goldbar, Startup	Snohomish	Sultan and East County Project +	1500	Backyard compost and hog fuel	\$60,862	\$45,647
Franklin County	City of Kahlotus and Franklin County residents	Franklin	City of Kahlotus-Community Compost site	6	Compost to citizens or used in parks	\$9,000	\$6,750
Walla Walla County	Newly affected UGAs - Waitsburg, Prescott, Burbank, Wallula (Alitalia). Previously affected UGAs - Cities of Walla Walla and College Place and surrounding UGA. Other affected areas - rapidly developing Rural Activity Centers (Touchet, Lowden, Dixie)	Walla Walla	Community Chipping and backyard composting	100	mulch, compost feedstock, hog fuel	\$13,600	\$10,200
City of Quincy	Grant and Douglas County	Grant	City of Quincy Compost Facility Expansion	2520	Compost	\$280,000	\$210,000
City of Entiat	Entiat	Chelan	Entiat's sustainable co-composting and organics project	30	Compost	\$155,000	\$116,250
Lewis County	Mossyrock, Morton, Randle, Mineral	Lewis	Yard Waste Composting	1000	Taken home by residents or composted	\$100,000	\$75,000
Walla Walla County	Newly affected UGAs - Waitsburg, Prescott, Burbank, Wallula (Alitalia). Previously affected UGAs - Cities of Walla Walla and College Place and surrounding UGA. Other affected areas - rapidly developing Rural Activity Centers (Touchet, Lowden, Dixie)	Walla Walla	Regional Compost Facility	15000	Compost feedstock, hog fuel	\$200,000	\$150,000
Mason CO PW	All county including UGA of Belfair	Mason	Alternatives to Burning	372	Compost	\$109,730	\$82,298

Name of applicant	Cities covered	County	Project Title	Outcome (annually tons diverted)	What is being done with material? Additional costs and revenues	Project Cost	State share
Town of Coulee Dam	Cities of Electric City, Grand Coulee and the Town's of Coulee Dam and Elmer City	Grant	Regional Compost Facility	500	Distributed to public parks, topsoil backfill for PW projects	\$10,000	\$7,500
Town of Coulee Dam		Grant	Leaf Loader and Mulcher		Same outcomes as regional compost facility?	\$115,000	\$86,250
Whitman County	16 cities and towns within Whitman County	Whitman	Community Chipping program	613	Taken home by residents or composted (each community compost operation)	\$167,180	\$125,385
Stevens County PW	Stevens County	Stevens	Home/Backyard Composting Workshops		Same outcomes as above?	\$10,000	\$7,500
City of Toledo	Toledo	Lewis	Yard Waste collection & chipping	25	Chips to residents and used in parks	\$15,000	\$11,250
City of Soap Lake	City of Soap Lake	Grant	Soap Lake Green Waste Collection Project	300	ABCO wood recycling for hog fuel	\$42,100	\$31,575
Town of Washtucna	Town of Washtucna	Adams	Town of Washtucna compost program	60	Compost to citizens or used in parks	\$57,000	\$42,750
Columbia County	Dayton, City of Starbuck, Garfield County, Columbia Compost Facility	Columbia	Burn Ban Alternatives Project	25	To residents, composted, hog fuel	\$191,603	\$143,702
Stevens County PW	Stevens County	Stevens	Community Yard Waste/Chipper Events	20	Citizens, access to compost	\$50,000	\$37,500
Town of Wilson Creek	Town of Wilson Creek	Grant	Yard Waste Disposal	180	ABCO wood recycling for hog fuel	\$44,500	\$33,375
Spokane County Solid Waste System	Fairfield, Latah, Rockford, Spangle, Waverly	Spokane	Spokane Regional Solid Waste System	10000	Composted	\$163,400	\$122,550
Yakima County Public Services-Solid Waste Division	The 14 cities in Yakima County that signed onto the 2003 Solid Waste plan (9 UGAs under 5,000)	Yakima	Backyard Composting Development and Education Program and Market Development for Chipped yard waste	1000	Feedstock for composting or backyard compost	\$146,500	\$109,875
TOTALS				35746		\$3,127,527	\$2,345,646

Appendix D

Summary of Current and Future Practices

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
Benton	Prosser	5,075	Basin Disposal	*ABCO Wood Recycling	Horn Rapids Landfill			Benton County for a regional composting facility. Up to \$500,000 (estimate).	
	Benton City	2,860	Ed's Disposal	ABCO Wood Recycling	Horn Rapids Landfill				
Chelan	Cashmere	2,980	CITY		City collection service provided during the summer months. Chelan County Composting Facility			Chelan County for a regional composting facility Up to \$15,000 Potential to develop a regional compost facility \$500,000 or more.	
	Chelan	3,835	CITY		North Chelan County Recycling Brush drop-off site – chipped and given away			Unknown	
	Entiat	1,130	WMI		North Chelan County Recycling available.	Sustainable Co-Composting and Organics Project \$116,250	Composting with other organic materials and bio-solids. Use compost for watershed restoration.	Unknown	
	Leavenworth	2,225	CITY		City collects brush twice a year for disposal at Dryden transfer station, Chelan County Composting Facility			Unknown	
	Manson	Unincorp.	WMI		North Chelan County Recycling			Unknown	
	Sunnyslope	Unincorp.	WMI		Chelan County Composting Facility			Unknown	
Clallam	Carlsborg	Unincorp.	Murrey's Murra y's Disposal		Port Angeles Landfill Composting Facility			Unknown	
	Clallam Bay/Sekiu	Unincorp.	West Waste and Recycling		West Waste Transfer Station			Unknown	
	Forks	3,175	West Waste and Recycling		West Waste Transfer Station			Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
	Joyce	Unincorp.	West Waste and Recycling		West Waste Transfer Station			Unknown	
	Sequim	5,330	WMI		City of Sequim Maintenance Yard			Unknown	
Clark	LaCenter	2,440	Waste Connections	Triangle Resources H & H Wood Recyclers Inc	West Vancouver Material Recovery Facility			Unknown	
	Ridgefield	3,680	Waste Connections	Triangle Resources H & H Wood Recyclers Inc				Unknown	
	Yacolt	1,370	Waste Connections	Triangle Resources H & H Wood Recyclers Inc				Unknown	
Columbia	Dayton	2,720	Basin Disposal	ABCO Wood Recycling	Columbia Compost	Columbia County ATB Project \$143,702	Chipper and community events with Dayton, Starbuck, Garfield County	Unknown	
	Starbuck	130	Empire Disposal	ABCO Wood Recycling	Columbia Compost	Columbia County ATB Project		Unknown	
Cowlitz	Castle Rock	2,135	Waste Control	Swanson Bark & Wood Products	Waste Control Recycling Inc			Unknown	
	Woodland	4,885	Waste Control	Swanson Bark & Wood Products	Waste Control Recycling Inc			Unknown	
Douglas	Bridgeport	2,090	Zippy Disposal	ABCO Wood Recycling Northwest Mulching AGS Earthworks Bremmer Construction (all for fee)				Unknown	
	Mansfield	330	Consolidated Disposal	ABCO Wood Recycling Northwest Mulching AGS Earthworks Bremmer Construction (all for fee)				Unknown	
	Rock Island	865	WMI	ABCO Wood Recycling Northwest Mulching	Waste management offers 4 free dump days within city			Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
				AGS Earthworks Bremmer Construction (all for fee)	limits				
	Waterville	1,180	Consolidated Disposal	ABCO Wood Recycling Northwest Mulching AGS Earthworks Bremmer Construction (all for fee)				Unknown	
Ferry	Republic	985	Couse's Sanitation and Recycling	ABCO Wood Recycling				Unknown	
Franklin	Connell	3,205	Basin Disposal		Chipping/mulching			Unknown	
	Kahlotus	220	Basin Disposal			City of Kahlotus Community Compost Site \$6,750	Compost for community use	Unknown	
	Mesa	440	Basin Disposal		Mesa Compost Facility			Unknown	
Garfield	Pomeroy	1,520	Naslund Disposal		Chipping/mulching			Unknown	
Grant	Coulee City	600	Consolidated Disposal	ABCO Wood Recycling				Unknown	
	Coulee Dam		Sunrise Disposal	ABCO Wood Recycling		Regional Compost Facility \$7,500 Leaf Loader and Mulcher \$86,250	Provide Services to Electric City, Grand Coulee, Coulee Dam and Elmer	Chipper to complement the previously funded project - \$29,618	
	Electric City	970	Sunrise Disposal	ABCO Wood Recycling		Regional Compost Facility		Unknown	
	George	530	WMI	ABCO Wood Recycling				Unknown	
	Grand Coulee	930	Sunrise Disposal	ABCO Wood Recycling		Regional Compost Facility		Unknown	
	Hartline	145	Consolidated Disposal	ABCO Wood Recycling				Unknown	
	Krupp	60	Consolidated Disposal	ABCO Wood Recycling				Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
	Lakeview Park	Unincorp.	Consolidated Disposal	ABCO Wood Recycling				Unknown	
	Mattawa	3,340	Consolidated Disposal	ABCO Wood Recycling				Unknown	
	Quincy	5,455	Consolidated Disposal	ABCO Wood Recycling	Quincy Compost	City of Quincy Compost Facility Expansion \$210,000	Improve facility environmental compliance. Compost	Grinder is needed. \$40,000	
	Royal City	1,885	Consolidated Disposal	ABCO Wood Recycling	Royal Organics Composting			Fencing, equipment, water line to composting facility - \$41,950	
	Soap Lake	1,750	CITY	ABCO Wood Recycling	ABCO Wood Recycling	Soap Lake Green Waste Collection Project \$31,575	Green waste collection – public private project with ABCO	Unknown	
	Warden	2,575	Consolidated Disposal	ABCO Wood Recycling				Site set-up and fencing - \$21,600	
	Wilson Creek	245	Consolidated Disposal	ABCO Wood Recycling	ABCO Wood Recycling	Yard Waste Disposal \$33,375	City collection and transfer to ABCO	Unknown	
Island	Coupeville	1,855	Island Disposal	Island County Solid Waste Complex Maillaird's Landing	Island County Solid Waste Complex Maillaird's Landing			Unknown	
	Langley	1,060	Island Disposal	Island County Solid Waste Complex Maillaird's Landing				Unknown	
Kittitas	Cle Elum	1,835	WMI	ABCO Wood Recycling Kittitas County transfer stations (Ellensburg & Cle Elum) accept segregated yard waste	Kittitas County transfer stations (Ellensburg & Cle Elum) accept segregated yard waste	Kittitas County Centralized Compost Facility \$803,987	Will serve all Kittitas County Communities from Snoqualmie to Vantage	Unknown	
	Kittitas	1,135	WMI	ABCO Wood Recycling	Ellensburg transfer station collects segregated yard waste, less than 20 miles away	Kittitas County Centralized Compost Facility		Unknown	
	Roslyn	1,020	WMI	ABCO Wood Recycling		Kittitas County Centralized Compost Facility		Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
	South Cle Elum	580	WMI	ABCO Wood Recycling		Kittitas County Centralized Compost Facility		Unknown	
Lewis	Pe Ell	670	LeMay	Little Hanaford Farms				Unknown	
	Winlock	1,370	LeMay	Little Hanaford Farms				Unknown	
	Vader	620	Jeffery Cummins	Little Hanaford Farms				Unknown	
	Toledo	685	LeMay	Little Hanaford Farms		Yard Waste Collection and Chipping \$11,250	Chips for community use	Unknown	
	Mossyrock	485	LeMay	Little Hanaford Farms		Yard Waste Composting \$75,000	Yard waste collection for composting or chipping	Unknown	
	Morton	1,140	LeMay	Little Hanaford Farms		Yard Waste Composting		Unknown	
	Napavine	1,492	LeMay	Little Hanaford Farms				Unknown	
Mason	Allyn	Unincorp.	WMI	North Mason Fiber Bill McTurnal Enterprises Mason County Wood Recyclers		Alternatives to Burning – Composting Infrastructure \$82,298	County-wide composting services	Unknown	
	Belfair	Unincorp.	WMI	North Mason Fiber Bill McTurnal Enterprises Mason County Wood Recyclers		Alternatives to Burning – Composting Infrastructure		Unknown	
Pacific	Raymond	3,005	CITY					Unknown	
	South Bend	1,770	CITY					Unknown	
	Ilwaco	1,040	Peninsula Sanitation					Ilwaco and Long Beach - Composting facility coordinating with fish processors \$30,000	
	Long Beach	1,460	Peninsula Sanitation					Unknown	
	Seaview	Unincorp.	Peninsula Sanitation					Ilwaco and Long Beach - Composting facility coordinating with fish processors \$30,000	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
Pend Oreille	Cusick	210	Excess Disposal	ABCO Wood Recycling				Unknown	
	Ione	420	Nichols	ABCO Wood Recycling				Unknown	
	Metaline	165	Nichols	ABCO Wood Recycling				Unknown	
	Metaline Falls	286	Nichols	ABCO Wood Recycling				Unknown	
	Newport	1,990	Excess Disposal	ABCO Wood Recycling				Unknown	
San Juan	Friday Harbor	2,220	CITY					Unknown	
	East Sound	Unincorp.	San Juan Sanitation					Unknown	
	Lopez Island	Unincorp.	San Juan Sanitation					Unknown	
Skagit	Bay View	Unincorp.	Disposal Services	Sun Land Bark & Topsoil Co. T & T Recovery Ovenell Transfer & Recycle Station Skagit Soils Dykstra Composting Facility	Ovenell Transfer & Recycle Station Dykstra Composting			Unknown	
	Concrete	845	WMI	Sun Land Bark & Topsoil Co. T & T Recovery Ovenell Transfer & Recycle Station Skagit Soils Dykstra Composting Facility	Ovenell Transfer & Recycle Station Dykstra Composting Facility			Unknown	
	Hamilton	330	WMI	Sun Land Bark & Topsoil Co. T & T Recovery Ovenell Transfer & Recycle Station Skagit Soils Dykstra Composting Facility	Ovenell Transfer & Recycle Station Dykstra Composting Facility			Unknown	
	La Conner	900	WMI	Sun Land Bark & Topsoil Co. T & T Recovery Ovenell Transfer & Recycle Station Skagit Soils	Ovenell Transfer & Recycle Station Dykstra Composting Facility			Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
				Dykstra Composting Facility					
	Lyman	450	WMI	Sun Land Bark & Topsoil Co. T & T Recovery Ovenell Transfer & Recycle Station Skagit Soils Dykstra Composting Facility	Ovenell Transfer & Recycle Station Dykstra Composting Facility			Unknown	
	March Point	Unincorp.	WMI	Sun Land Bark & Topsoil Co. T & T Recovery Ovenell Transfer & Recycle Station Skagit Soils Dykstra Composting Facility	Ovenell Transfer & Recycle Station Dykstra Composting Facility			Unknown	
Snohomish	Darrington	1,485	WMI			Sustainable Yard Waste Infrastructure \$69,573	Hog fuel and composting	Unknown	
Spokane	Deer Park	3,235	WMI	ABCO Wood Recycling	North County Recycling & Transfer Station (Yard waste to Royal Organics Composting)			Spokane Reg. SW System – West collection and chipping events \$50,000	
	Medical Lake	4,695	WMI	ABCO Wood Recycling Diversified Wood Recycling	Medical Lake Recycling Center Busy Bee Landfill Wood Recycling Waste To Energy Facility Diversified Wood Recycling Yard waste to Cheney Compost			Spokane Reg. SW System – Composting Facility Siting Study - \$150,000	
	Fairfield	627	Empire Disposal	ABCO Wood Recycling	Valley Recycling & Transfer Station (Yard waste to Royal Organics Composting)	Spokane Regional Solid Waste System \$122,550	Collection, chipping, operation, and master composter and waste reduction training	Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
	Rockford	504	Empire Disposal	ABCO Wood Recycling	Valley Recycling & Transfer Station (Yard waste to Royal Organics Composting)			Unknown	
	Spangle	275	Empire Disposal	ABCO Wood Recycling	Waste To Energy Facility (Yard waste to Royal Organics Composting)			Unknown	
	Latah	192	Empire Disposal	ABCO Wood Recycling	Valley Recycling & Transfer Station (Yard waste to Royal Organics Composting)			Unknown	
	Waverly	120	Empire Disposal	ABCO Wood Recycling	Waste To Energy Facility Valley Recycling & Transfer Station (Yard waste to Royal Organics Composting)			Unknown	
Stevens	Addy	Unincorp.	Torre Refuse and Recycling	ABCO Wood Recycling		1.Stevens County Home/Backyard Composting Workshops \$7,500 2.Community Yard Waste/Chipper Events \$37,500	Promote home composting Community chipping days using county owned chipper	Unknown	
	Clayton	Unincorp.	Torre Refuse and Recycling	ABCO Wood Recycling		1.Stevens County Home/Backyard Composting Workshops 2.Community Yard Waste/Chipper Events		Unknown	
	Chewelah	2,350	WMI	ABCO Wood Recycling		1.Stevens County Home/Backyard Composting		Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
						Workshops 2. Community Yard Waste/Chipper Events			
	Colville	5,020	Torre Refuse and Recycling	ABCO Wood Recycling	City provides limited yard and garden debris pick up.	1. Stevens County Home/Backyard Composting 2. Community Yard Waste/Chipper Events Workshops		Unknown	
	Hunters	Unincorp.	Torre Refuse and Recycling	ABCO Wood Recycling		1. Stevens County Home/Backyard Composting Workshops 2. Community Yard Waste/Chipper Events		Unknown	
	Kettle Falls	1,610	CITY	ABCO Wood Recycling		1. Stevens County Home/Backyard Composting Workshops 2. Community Yard Waste/Chipper Events		Unknown	
	Lake Spokane	Unincorp.	Torre Refuse and Recycling	ABCO Wood Recycling	4 days a year community yard waste chipping	1. Stevens County Home/Backyard Composting Workshops 2. Community Yard Waste/Chipper Events		Unknown	
	Marcus	175	CITY	ABCO Wood Recycling		1. Stevens County Home/Backyard Composting Workshops		Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
						2. Community Yard Waste/Chipper Events			
	Northport	290	NONE	ABCO Wood Recycling		1. Stevens County Home/Backyard Composting Workshops 2. Community Yard Waste/Chipper Events		Unknown	
	Springdale	275	WMI	ABCO Wood Recycling		1. Stevens County Home/Backyard Composting Workshops 2. Community Yard Waste/Chipper Events		Unknown	
	Valley	Unincorp.	Torre Refuse and Recycling	ABCO Wood Recycling		1. Stevens County Home/Backyard Composting Workshops 2. Community Yard Waste/Chipper Events		Unknown	
Thurston	Bucoda	655	LeMay	Thurston County Waste & Recovery Center Silver Springs Organics Yelm Earthworm & Castings Farm	Thurston County Waste & Recovery Center			Partnering with Tenino – building infrastructure for chipping operation - \$8,000	
	Grand Mound	Unincorp.	LeMay	Thurston County Waste & Recovery Center Silver Springs Organics Yelm Earthworm & Castings Farm	Thurston County Waste & Recovery Center			Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
	Rainier	1,705	CITY	Thurston County Waste & Recovery Center Silver Springs Organics Yelm Earthworm & Castings Farm	Thurston County Waste & Recovery Center			Unknown	
	Tenino	1,520	LeMay	Thurston County Waste & Recovery Center Silver Springs Organics Yelm Earthworm & Castings Farm	Thurston County Waste & Recovery Center			Partnering with Bucoda – building infrastructure for chipping operation - \$8,000	
	Yelm	4,845	LeMay	Thurston County Waste & Recovery Center Silver Springs Organics Yelm Earthworm & Castings Farm	Thurston County Waste & Recovery Center			Bins for curbside collection of yard waste - \$25,000	
Walla Walla	Attalia	Unincorp.			Sudbury Road Landfill- Regional Composting	1.Community Chipping and Backyard Composting \$10,200 2.Regional Yard Waste Composting \$150,000	Expansion of services to newly impacted areas. Mulch, compost, hog fuel	Unknown	
	Burbank	Unincorp.	Basin Disposal		Sudbury Road Landfill - Regional Composting	1.Community Chipping and Backyard Composting 2.Regional Yard Waste Composting			
	Prescott	315	Dahl-Smith		Sudbury Road Landfill - Regional Composting	1.Community Chipping and Backyard Composting		Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
						2.Regional Yard Waste Composting			
	Waitsburg	1,230	Basin Disposal		Sudbury Road Landfill - Regional Composting	1.Community Chipping and Backyard Composting 2.Regional Yard Waste Composting		Unknown	
Whatcom	Birch Bay	Unincorp.	Sanitary Service	Clean Green Transfer Station Recomp of Washington	Clean Green Transfer Station			Unknown	
	Blaine	4,650	Blain Bay Refuse	Clean Green Transfer Station Recomp of Washington	Clean Green Transfer Station			Unknown	
	Cherry Point	Unincorp.	Sanitary Service	Clean Green Transfer Station Recomp of Washington	Clean Green Transfer Station			Unknown	
	Columbia Valley	Unincorp.	Sanitary Service	Clean Green Transfer Station Recomp of Washington	Clean Green Transfer Station			Unknown	
	Everson	2,165	Nooksack Valley Disposal	Nooksack Valley Disposal Green Earth Technology Recycling & Disposal Services	Green Earth Technology Recycling & Disposal Services Nooksack Valley Disposal	Community Chipping With Everson, Nooksack and Sumas \$16,725	Chips for community use.	Unknown	
	Nooksack	1,075	Nooksack Valley Disposal	Nooksack Valley Disposal Green Earth Technology Recycling & Disposal Services	Nooksack Valley Disposal Green Earth Technology Recycling & Disposal Services	Community Chipping		Unknown	
	Sumas	1,191	Nooksack Valley Disposal	Nooksack Valley Disposal Green Earth Technology Recycling & Disposal Services	Nooksack Valley Disposal Green Earth Technology Recycling & Disposal Services	Community Chipping		Unknown	

County	Communities Affected by January 1, 2007, Burn Ban	Pop.	Solid Waste Collection Service Provider	Yard Waste Recycling Services Available to Local Government	Yard Waste Recycling Services Currently Provided to Community Residents	ATB Grant Title / \$ Amount	Scope of Grant Project	Additional Needs Currently Identified with Costs Is this need identified in the current local solid waste management plan?	Cost of Additional Needs – Planning, Capital and Operations
Yakima	Granger	2,955	CITY	Lower Valley Transfer Station	Lower Valley Transfer Station	Yakima County-wide Organics Collection, Composting and Education		Unknown	
	Mabton	2,080	Yakima Waste Systems (YWS)	Lower Valley Transfer Station YWS Curbside Collection	Lower Valley Transfer Station YWS Curbside Collection	Yakima County-wide Organics Collection, Composting and Education		Unknown	
	Moxee	2,065	Yakima Waste Systems	Terrace Heights Landfill YWS Curbside Collection	Terrace Heights Landfill YWS Curbside Collection	Yakima County-wide Organics Collection, Composting and Education		Unknown	
	Naches	805	Yakima Waste Systems	Terrace Heights Landfill YWS Curbside Collection	Terrace Heights Landfill YWS Curbside Collection	Yakima County-wide Organics Collection, Composting and Education		Unknown	
	Tieton	1,200	Yakima Waste Systems	Terrace Heights Landfill YWS Curbside Collection	Terrace Heights Landfill YWS Curbside Collection	Yakima County-wide Organics Collection, Composting and Education		Unknown	
	Zillah	2,660	Yakima Waste Systems	Cheyne Landfill YWS Curbside Collection	Cheyne Landfill YWS Curbside Collection	Yakima County-wide Organics Collection, Composting and Education		Unknown	

*Costs for ABCO Wood Recycling services vary widely, depending upon the distance traveled between their facilities and the location of the community served.

Appendix E

Grants to Local Governments for Vegetative Waste Management Projects Since 2004

County	Grant Number	Recipient	Project Title	Project Description
Adams	G0400308	Adams County	Waste Reduction & Recycling Activities	Grant funds were used to hire a consultant to study the feasibility, planning and design of a yard waste collection site in Ritzville and Othello.
Benton	G0400230	Benton County	Waste Reduction and Recycling Activities (WRR)	Grant funds were used to conduct 16 collection events for garbage, household hazardous waste and yard waste for chipping. They conduct education and outreach through composting clinics, school program, fair displays and community events.
Ferry	G0400314	Ferry County Waste Management, Solid Waste Division	Waste Reduction and Recycling Activities	Grant funds were used to provide information to Ferry County residents and schools to encourage waste reduction and recycling. Recycled products collected in the county included aluminum cans, paper, glass and metal. Activities included a class for residents on backyard composting, participation in community clean-up events, and a booth at community clean-up days to provide information and offer workshops to residents.
Franklin	G0400329	Franklin County Solid Waste	Waste Reduction & Recycling Information & Education	Grant funds were used to conduct four semi-annual backyard composting workshops.
King	G0400191	City of Enumclaw	City of Enumclaw Compost Bin Distribution	The City used grant funds to hold one Compost Bin Distribution Event in 2004 and one in 2005, providing residents with the opportunity to start home composting yard debris. The bin distribution events were held in conjunction with Enumclaw Residential Recycling Collection Events. Also, included an educational manual on grasscycling and backyard composting.
King	G0400228	City of Kent	Compost Bin Distribution	Grant funds were used to increase waste reduction and recycling in the City of Kent by providing the means for residents to purchase low-cost compost bins to recycle and reuse compostable yard debris at their residence. The bins are made of 100% recycled content plastic, providing a market for reusing recycled plastic and promoting the use of recycled content products. Three distribution events were held.
King	G0400313	City of Tukwila	Compost, Worm Bin & Rain Barrel Distribution	Grant funds were used to conduct worm and compost bin distributions at an event in conjunction with neighboring cities. Rain barrel distribution was also conducted.
King	G0400206	City of Normandy Park	Compost/Worm Bin Sales	The City used grant funds to hold two Compost/Worm Bin Sales in 2004. The City distribution of compost bins provided residents with the opportunity to start home composting yard debris and remove this material from the City waste stream.
King	G0400253	Seattle Public Utilities	Natural Soil Building	The Natural Soil Building Program utilizes grant funds to provide volunteer outreach and Master Composting/Soil Builder training (primarily on composting and soil building issues) to Seattle residents. Also, provides environmentally-sound gardening answers to questions from residents in King County.
King	G0400245	City of Shoreline	Natural Yard Care Events & Workshops	Grant funds were used to promote Natural Yard Care Events and the City offered one series of 3 Natural Yard Care Workshops. The target audience for this regional workshop series was residents in the Lake Ballinger watershed, which includes the City of Shoreline, Mountlake Terrace and Edmonds. Landscape design and native plants, watering, soil, lawn care, insects, etc. were all addressed.
Kittitas	G0400207	Kittitas County Solid Waste Department	Waste Reduction & Recycling Activities	Grant funds were used to conduct various waste reduction and recycling activities including providing trainings for citizens to become master composters and recyclers so they can assist in furthering waste reduction and recycling activities in their community.

County	Grant Number	Recipient	Project Title	Project Description
Klickitat	G0400247	Klickitat County Solid Waste	Waste Reduction and Recycling (WRR)	Grant funds were used to construct a xeriscape demonstration site to increase public awareness in xeriscape landscaping aspects and benefits. Also, to increase participation in curbside recycling including yard waste.
Mason	G0400320	Mason County	Composting	Grant funds were used to host a reduced compost bin sale and informational workshops.
Mason	G0400319	City of Shelton Public Works	Composting	Grant funds were used to host a reduced-rate compost bin sale and provide informational workshops.
Pacific	G0400323	Pacific County Dept of Community Development	Waste Reduction and Recycling (WRR)	One portion of this grants activities included the purchase and distribution of compost bins.
Snohomish	G0400151	City of Edmonds	Education & Outreach Activities	Grant funds were used for the general education and outreach of schools and residents about the Waste Prevention and Recycling program which provides continual public information and assistance on waste prevention, reduction, recycling and other solid waste-related issues. Promoted water and energy conservation, watershed stewardship and storm water pollution education. Assisted the city with proposed solid waste collection areas for multi-family or commercial properties.
Snohomish	G0400150	City of Lynnwood	Public Education & Outreach - Activities	Grant funds were used for general education and outreach to schools, businesses & residents about the Waste Prevention and Recycling program which provides continual public information and assistance on waste prevention, reduction, recycling and other solid waste-related issues. Collection events included diverting and recycling Christmas trees, scrap metal, major appliances, and yard debris. Also, assisted with worm bin distribution, and in-house recycling of computer electronics and CRTs.
Snohomish	G0400175	City of Everett	Waste Reduction & Recycling - Public	A worm bin distribution and education program was conducted at a City sponsored garden & garden art fair. A City website "Worm World" was developed to provide worm bin composting information on-line to support the City's vermicomposting programs. Compost demonstrations with live worm bins were provided to participants by Master Recycler Composter Volunteers and local recycling coordinators.
Spokane	G0400342	Spokane Regional Solid Waste System	System Public Information Programs	Grant funds were used to conduct master composting presentations, providing 500 compost bins to participants.
Walla Walla	G0400315	Walla Walla County Community Development Dept.	Regional Compost Facility	Grant funds were used to compost the volume of green/brown waste and food waste generated in Walla Walla County. Waste included food, wood/brush, grass/yard debris, leaves and manure/bedding.
Whatcom	G0400167	Whatcom County Public Works	Composting Education	Grant funds were used to increase waste reduction, reuse, recycling and proper disposal by educating the public about organic waste problems and the opportunities in the community to reduce, reuse and recycle organic waste. A compost bin distribution event and Master Composter & Gardener classes were offered.
Clark	G0500066	Clark County Public Works	Chipping and Home composting	The RECIPIENT shall develop and implement a community chipping day, once or twice per year, in the unincorporated communities (Amboy, Yacolt) which are more than fifteen miles from the nearest yard debris facility. The RECIPIENT shall arrange for and subsidize the sale or distribution to the public of at least one thousand home composting bins.
Snohomish	G0500003	City of Sultan	HHW and Wood Chipping Collection events	Conducted wood collection and chipping events. They also partnered with Snohomish County to provide HHW collection events.
Chelan	G0600151	Chelan County	Compost Screen	The compost operations at the Dryden Transfer station have run successfully for 2 years, however, it is extremely burdensome and inconvenient to acquire screens for rent or use. The screen will remove the large wood chips from the compost. The compost processes grass clippings, biosolids, wood chips, and, occasionally, fruit waste.

County	Grant Number	Recipient	Project Title	Project Description
Chelan	G0600151	Chelan County	Waste reduction and recycling collection and operation	The Christmas Tree Recycling Event is conducted in the Wenatchee area, where all residents may bring Christmas trees to a central site for chipping. The chips are used on a County park for mulch. The event is coordinated by the local Boy Scout troops and Chelan County Public Utility District.
Clallam	G0600218	City of Port Angeles	Organics public education and outreach	The RECIPIENT will partner with the local Master Gardener Foundation to continue education and outreach to the community about backyard composting and other organic waste diversion methods. For convenience and accessibility, the RECIPIENT will have backyard compost bins available for public purchase through the Master Gardener's office throughout the year as well as at community events and workshops.
Ferry	G0600335	Ferry County Waste Management	Public education and outreach	This project will also provide funding for purchase and distribution of compost bins to residents who successfully complete a composting workshop. The RECIPIENT will purchase supplies to implement or aid in ongoing activities for this project.
Franklin	G0700092	Franklin County Solid Waste	Christmas tree recycling	The recipient will continue to provide an annual Christmas tree recycling event where residents are free to bring their Christmas tree and have it chipped.
Franklin	G0700092	Franklin County Solid Waste	Organic public education and outreach	This project will be a coordinated effort with Benton County, WSU Cooperative Extension, Benton Clean Air Authority, and local cities to provide bi-annual community backyard composting workshops available to local residents. Successful graduates will be provided a free composting bin and home composting book.
Grant	G0600359	Grant County Public Works	Compost Feasibility Study	The RECIPIENT will hire a consultant to conduct a feasibility study for establishing an organic waste composting operation in Grant County.
Grant	G0600359	Grant County Public Works	Organic public education and outreach	This project will continue education to county residents on backyard composting. Each participant who completes the workshop will receive a compost bin.
Grays Harbor	G0600213	Grays Harbor Public Works	Organics public education and outreach	The RECIPIENT will partner with the local Master Gardener Foundation to continue education and outreach to the community about backyard composting and other organic waste diversion methods. A pool of Master Gardener volunteers will be trained, of which ten are expected to provide 100 hours of community outreach and workshop leadership. In addition, the Master Composter/Recycler (MR/C) program will begin where ten volunteers are expected to assist at County and Master Gardener events. For convenience and accessibility, the RECIPIENT will have backyard compost bins available for public purchase through the Master Gardener's office throughout the year as well as at community events and workshops.
King	G0600189	Seattle Public Utilities	Natural Soil Building	The RECIPIENT's Natural Soil Building activities are the foundation for Seattle's home organics management program and include: Yard and food waste bin distribution events Maintenance of the Natural Lawn and Garden Hotline Home organics education and media promotion Master Composter/Soil Builder volunteer training and support program
King	G0600162	Shoreline	Natural Yard Care event tools	The RECIPIENT will hold an annual event for city residents, where they can learn about behaviors, techniques, tools, skills, and community resources that support and motivate residents to participate in natural yard care. The RECIPIENT will use CPG funds to purchase compost bins.

County	Grant Number	Recipient	Project Title	Project Description
King	G0600223	King Co. SWD	NW Natural Yard days	The RECIPIENT will conduct two seasonal natural yard care campaigns annually – spring and fall. The RECIPIENT will promote the appropriate behaviors and products for each respective season. There are five basic messages to natural yard care that the RECIPIENT will promote: Build healthy soils, Plant right for, our site, Practice smart watering, Think twice before using pesticides, Practice natural lawn care
King	G0600202	Federal Way	Special Recycling Collection event	The RECIPIENT will promote and coordinate four special collection events in the spring and fall of each year of the grant cycle. The events will serve to collect household hazardous waste (HHW) and hard-to-recycle solid waste including bulky yard debris
King	G0600216	Woodinville	Tree chipping event	The RECIPIENT will conduct a Tree Chipping Event in the spring of 2006 and 2007. The city will collect woody debris from residents and process them using a contracted chipper. Chips collected at the event will be used as mulch and spread by volunteers along the Sammamish River as part of the native planting and habitat restoration program.
Kitsap	G0600177	Kitsap County Public Works	Yard waste management survey	The project will help implement the 2005 Kitsap County Organic Wastes Management Plan. In the “Immediate Recommendations” section, recommendation # 5 is: Survey residents and businesses to determine current yard waste behaviors, what they would like in a system, and what is needed to convince more of them to sign up for curbside yard waste collection. This project will implement this recommendation and lay the foundation for future organics diversion strategies.
Kittitas	G0600145	Kittitas Co.	Waste Reduction and Recycling Programs	This project will divert organics from the waste stream providing recycling services for yard waste and Christmas trees along with other recyclable materials. Each spring, Kittitas County residents will have the opportunity to learn about backyard composting and recycling through the master composter/recycler classes. Educational materials on waste reduction and recycling will be provided to the community through the schools and special interest groups
Lincoln	G0600344	Lincoln County Public Works	Waste reduction and recycling activities	This project will provide for the operation and maintenance costs for all recycling projects the RECIPIENT is undertaking. Operation and maintenance costs for the chipper and installation costs for the bailer are included in this project. The RECIPIENT will provide educational opportunities at local schools and provide Composting/Vermicomposting Workshops for county residents, upon request. This project also includes the purchase of compost/vermicomposting bins.
Spokane	G0700066	Spokane Regional Solid Waste System	Master Composter, Green Zone, Buy recycled directory	The recipient will have three full time employees dedicated to administering and implementing regional waste reduction, reuse, and recycling programs. In addition, two other part-time employees will spend a significant portion of their time assisting with waste reduction and recycling education activities. The recipient uses a variety of informational materials and advertising media, including a web site, and hands-on presentations and activities to promote its programs, including: publications, advertising, youth activities, recycling hotline, 2good2toss.com, Master Composters, the Green Zone, America Recycles Day, Collection bins, Buy Recycled Directory, and Educational material.
Stevens	G0700063	Stevens County Public Works	Composting workshops	This project will provide for composting workshops, including a compost bin, for county residents who complete the workshop.
Stevens	G0700063	Stevens County Public Works	Yard waste collection	The recipient will combine efforts with the Stevens County Fire Protection District No. 1 and the Department of Natural Resources at the Suncrest Fire Hall. The recipient will provide education and outreach programs to support the program and provide a chipper and the use of a front-end loader, as well as staff support.

County	Grant Number	Recipient	Project Title	Project Description
Walla Walla-Columbia	G0600325	Walla Walla County Regional Planning & Columbia County	Public education and outreach	This project will provide for year round promotion of the Walla Walla Regional Compost Facility, composting workshops and home compost bin distribution.
Whatcom	G0600154	Whatcom County Public Works	Composting/ recycling education	This project will use classes in Master Composting/Recycling, rain barrel making, and community workshops on composting and gardening to promote the message of reduce, reuse and recycle. The project will partner & collaborate with other organizations & agencies to reach a broad range of residents.
Whitman	G0600373	Whitman County Public Works	Yard waste grinding	This project provides for a free year round residential yard waste disposal program at the Transfer Station. The yard waste is collected onsite and chipped 2-3 times per year and then used for hogged fuel
Mason	G0600219	Mason Co Public Works	Organics Public education and outreach	This project entails three means to achieve residential education and diversion of household organics: annual compost bin sale, semi-annual curbside yard waste collection event (Spring and Fall Cleanup), and outreach at community events about composting, vermicomposting, and existence of local wood recycling facilities for self-haulers.
Mason	G0600149	City of Shelton	Organics Public education and outreach	This project entails three means to achieve residential education and diversion of household organics: annual compost bin sale, annual curbside yard waste collection event (Spring Cleanup), and outreach at community events about composting, vermicomposting, and existence of local wood recycling facilities for self-haulers.
Clark	G0600270	Clark County Public Works	Master Composter/Recycler Program	This project will train volunteers and educate citizens through training classes, community events, classroom presentations, and free workshops. Participants will gain an understanding that recyclable materials and organic debris are assets to be used rather than waste to be discarded.
Clark	G0600270	Clark County Public Works	Woody Debris Chipping/Home Compost Bin Distribution	This Bin Distribution program will encourage composting and mulching as an alternative to open burning in rural areas of the county. This will be accomplished by providing free chipping events in selected areas and sponsoring annual sale events for home composting bins.
Cowlitz	G0600261	Cowlitz County Public Works	Compost bin purchase and distribution	The recipient shall purchase 500 backyard compost bins for sale to county residents. Bins will be available to the public at the landfill during operating hours
Lewis	G0600251	Lewis County Community Development	Organics Public education and outreach	With partnership with the WSU/Lewis County Cooperative Extension office and the Master Recycler Composter (MRC) program, approximately 15 newly trained volunteers will provide assistance to staff in community outreach and education. Also, these volunteers will assist with the annual Christmas tree recycling program, maintain a composting demonstration site, and conduct workshops on composting, vermiculture, and environmentally friendly lawn and garden care.
Pierce	G0600264	City of Tacoma	NW yard days	The RECIPIENT will partner with the NW Natural Yard Days (NNYD) program headed by King County Solid Waste and the City of Seattle to promote natural yard care and water conservation in the City of Tacoma.
Pierce	G0600264	City of Tacoma	Backyard compost bin program	The RECIPIENT shall provide backyard compost bins at a subsidized price to City residents.
Pierce	G0600264	City of Tacoma	Mulching mower/grasscycling	The RECIPIENT shall provide to City residents a mulching mower distribution program, providing education and reduced cost mowers that will result in an increased number of residents using mulching mowers.
Cowlitz	G0700181	City of Kelso	Waste reduction program-Yard Waste Recycling	Plan and implement a curbside and/or drop box recycling program for yard waste
Franklin	G0700226	Franklin County Public Works	City of Mesa Community Compost Site	Expand the City of Mesa's community compost site and yard debris diversion (Purchase tractor to enlarge site, build fence, install frost free water line, purchase trailer for compost distribution and provide chipping events in the community)

County	Grant Number	Recipient	Project Title	Project Description
Grant	G0700241	Grant County - City of Royal City	Royal City Composting Project	Purchased a chipper and leaf vacuum for yard debris collection. Provide 3 acre site to collect and process yard waste (including food waste). They chip the material and it is sent to a local hauler for composting.
King	G0700141	Seattle Public Utilities	Seattle Residential Food Waste Education Campaign	In partnership with Kitsap and Snohomish counties, develop a mass media campaign similar to "Recycle, Why waste a good thing" to promote diverting organics.
Pierce	G0700257	Tacoma-Pierce County Health Dept.	Natural Yard Care total package	Coordinate Natural Yard Care efforts among numerous agencies and departments, conduct market and audience research, conduct a regional advertising campaign, provide technical assistance to natural yard care professionals and conduct an enhanced campaign (workshops, one on one consultations and work with home and garden retailers.)
San Juan	G0700142	San Juan Public Works	Residential Food and Yard Waste Reduction Project	Provide composting workshops and sell subsidized composters.
Stevens	G0700186	Stevens County Public Works	Green Zone Project	Develop, build and maintain a new "Green Zone" project to educate residents on environmentally sustainable lifestyle practices and educate about alternatives to outdoor burning.
Walla Walla	G0700160	Walla Walla Co. Regional Planning	Green Waste and Recycling Transfer Station	Design and construct a transfer station at Sudbury Landfill that will allow drop off of green/yard waste and recycling materials.
Whitman	G0700239	Whitman County Public Works	City of Palouse Public Compost Facility	Create a facility for the city and residents to compost yard waste
Adams		Adams County	Organic Public Education & Outreach	Provide backyard composting education and outreach in partnership with master gardeners. Participants will receive backyard composting bins.
Clallam		City of Port Angeles	Public Outreach - Composting	A continuation of a partnership with WSU Master Gardeners will produce a series of workshops, school assemblies, and education exhibits to educate and assist residents about backyard composting.
Franklin		Franklin County Solid Waste	Christmas Tree Recycling	The Division will continue to provide an annual Christmas tree recycling event where residents are free to bring their Christmas trees and have it chipped rather than disposed of in the regular waste stream.
Franklin		Franklin County Solid Waste	Organics Public Education & Outreach	This project will be a coordinated effort with Benton County, WSU Cooperative Extension, Benton Clean Air Authority, and local cities to provide bi-annual community backyard composting workshops available to local residents.
Grant		Grant County Public Works	Public Education & Outreach	The county will continue backyard composting education. We hope to have at least one compost class each spring in Moses Lake. The coordinator will maintain the compost pile at the Moses Lake Community Garden. If feasible, Grant County will support backyard composting classes in individual towns and cities. Each household will receive one compost bin when attending a workshop.
King		Seattle Public Utilities	Natural Soil Building	Home organics management continues to be a cost-effective way for the City to divert organic materials from the solid waste stream. This project provides the underpinnings for Seattle's home organics management program: yard and food waste bin distribution; the Natural Lawn and Garden Hotline; and Master Composter/Soil Builder volunteer support.
Lewis		Lewis County	Rural Community Yard Waste Chipping Events	Lewis County purchased a mobile yard waste chipper and are holding chipping events throughout the county. Rural cities are given the opportunity to borrow the chipper.
Mason		Mason County	Organics Diversion	Maintain and operate an organics diversion collection facility
Mason		City of Shelton	Public Education & Outreach	This project entails three means to achieve residential education and diversion of household organics: annual compost bin sale, semi-annual curbside yard waste collection event (Spring/Fall Cleanup), and outreach at community events about composting, vermicomposting, and existence of local wood recycling facilities for self-haulers. Entrance into school awareness through initiation of garden composting process and likely

County	Grant Number	Recipient	Project Title	Project Description
				facility model schools.
Snohomish		City of Lake Stevens	Park Department Compost Program	There is currently space available at Lundeen Park that would be ideal for a composting site. The Parks department would like to utilize this area to 'recycle' seasonal grass clippings, leaves and chipped branches. There will be a need for some site preparation employee training and the initial purchase of large composting containers. However, the composted materials will be used for fertilizing and mulching within our parks and trails, eventually eliminating the need to purchase commercial landscape products.
Snohomish		City of Woodinville	Tree Chipping/Yard Waste Mulching Event	The City of Woodinville will conduct a Tree Chipping/Yard Waste Mulching Event in the Spring of 2008 and 2009. Promotional advertising will be conducted via the website, local paper, postings at local businesses, the Carol Edwards Community Center and City Hall, and placement of a banner prior to the event. Debris will be chipped and used as mulch during Citywide planting projects. The program should result in greater resource efficiency, provide an alternative to, or complement, curbside collection of yard debris, and help change behavioral habits.
Whitman		Whitman County Public Works	Yard Waste Grinding	Free yard waste disposal at County Transfer Station, collected on site and chipped 3-4 times per year

APPENDIX F
ADVISORY WORKGROUP MEMBERS

Advisory Workgroup Members

Royal DeVayne, Mayor
Town of Waterville

Ron Draggoo
Douglas County Solid Waste

Rod Fleck, City Attorney
City of Forks

Darlene Frye
Solid Waste and Financial Assistance Program
Washington Department of Ecology

Matt Holmquist, Compliance Administrator
Spokane Regional Clean Air Agency

Mary Hunt, Commissioner
Douglas County

Steven D. Jenkins, Mayor
City of Bridgeport

Eric Johnson - Assistant Executive Director
Washington State Association of Counties

Bill Lamphere
Lamphere Environmental Services
Washington Organics Recycling Council

Marc Marquis
Environmental Health Director
Chelan-Douglas Health District

Senator Linda Evans Parlette
12th Legislative District

Kary Peterson,
Air Quality Program
Washington Department of Ecology

Richard Stedman, Director
Olympic Region Clean Air Agency

Dave Williams, Municipal Policy Associate
Association of Washington Cities

END NOTES

ⁱ RCW 70.95.020 Purpose.

The purpose of this chapter is to establish a comprehensive statewide program for solid waste handling, and solid waste recovery and/or recycling which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of this state. To this end it is the purpose of this chapter:

- (1) To assign primary responsibility for adequate solid waste handling to local government, reserving to the state, however, those functions necessary to assure effective programs throughout the state;
- (2) To provide for adequate planning for solid waste handling by local government;
- (3) To provide for the adoption and enforcement of basic minimum performance standards for solid waste handling, including that all sites where recyclable materials are generated and transported from shall provide a separate container for solid waste;
- (4) To encourage the development and operation of waste recycling facilities needed to accomplish the management priority of waste recycling, to promote consistency in the requirements for such facilities throughout the state, and to ensure that recyclable materials diverted from the waste stream for recycling are routed to facilities in which recycling occurs;
- (5) To provide technical and financial assistance to local governments in the planning, development, and conduct of solid waste handling programs;
- (6) To encourage storage, proper disposal, and recycling of discarded vehicle tires and to stimulate private recycling programs throughout the state; and
- (7) To encourage the development and operation of waste recycling facilities and activities needed to accomplish the management priority of waste recycling and to promote consistency in the permitting requirements for such facilities and activities throughout the state.

It is the intent of the legislature that local governments be encouraged to use the expertise of private industry and to contract with private industry to the fullest extent possible to carry out solid waste recovery and/or recycling programs.

ⁱⁱ 70.95.090

County and city comprehensive solid waste management plans — Contents.

Each county and city comprehensive solid waste management plan shall include the following:

- (1) A detailed inventory and description of all existing solid waste handling facilities including an inventory of any deficiencies in meeting current solid waste handling needs.
- (2) The estimated long-range needs for solid waste handling facilities projected twenty years into the future.
- (3) A program for the orderly development of solid waste handling facilities in a manner consistent with the plans for the entire county which shall:
 - (a) Meet the minimum functional standards for solid waste handling adopted by the department and all laws and regulations relating to air and water pollution, fire prevention, flood control, and protection of public health;
 - (b) Take into account the comprehensive land use plan of each jurisdiction;
 - (c) Contain a six year construction and capital acquisition program for solid waste handling facilities; and
 - (d) Contain a plan for financing both capital costs and operational expenditures of the proposed solid waste management system.
- (4) A program for surveillance and control.
- (5) A current inventory and description of solid waste collection needs and operations within each respective jurisdiction which shall include:

(a) Any franchise for solid waste collection granted by the utilities and transportation commission in the respective jurisdictions including the name of the holder of the franchise and the address of his or her place of business and the area covered by the franchise;

(b) Any city solid waste operation within the county and the boundaries of such operation;

(c) The population density of each area serviced by a city operation or by a franchised operation within the respective jurisdictions;

(d) The projected solid waste collection needs for the respective jurisdictions for the next six years.

(6) A comprehensive waste reduction and recycling element that, in accordance with the priorities established in RCW [70.95.010](#), provides programs that (a) reduce the amount of waste generated, (b) provide incentives and mechanisms for source separation, and (c) establish recycling opportunities for the source separated waste.

(7) The waste reduction and recycling element shall include the following:

(a) Waste reduction strategies;

(b) Source separation strategies, including:

(i) Programs for the collection of source separated materials from residences in urban and rural areas. In urban areas, these programs shall include collection of source separated recyclable materials from single and multiple family residences, unless the department approves an alternative program, according to the criteria in the planning guidelines. Such criteria shall include: Anticipated recovery rates and levels of public participation, availability of environmentally sound disposal capacity, access to markets for recyclable materials, unreasonable cost impacts on the ratepayer over the six-year planning period, utilization of environmentally sound waste reduction and recycling technologies, and other factors as appropriate. In rural areas, these programs shall include but not be limited to drop-off boxes, buy-back centers, or a combination of both, at each solid waste transfer, processing, or disposal site, or at locations convenient to the residents of the county. The drop-off boxes and buy-back centers may be owned or operated by public, nonprofit, or private persons;

(ii) Programs to monitor the collection of source separated waste at nonresidential sites where there is sufficient density to sustain a program;

(iii) Programs to collect yard waste, if the county or city submitting the plan finds that there are adequate markets or capacity for composted yard waste within or near the service area to consume the majority of the material collected; and

(iv) Programs to educate and promote the concepts of waste reduction and recycling;

(c) Recycling strategies, including a description of markets for recyclables, a review of waste generation trends, a description of waste composition, a discussion and description of existing programs and any additional programs needed to assist public and private sector recycling, and an implementation schedule for the designation of specific materials to be collected for recycling, and for the provision of recycling collection services;

(d) Other information the county or city submitting the plan determines is necessary.

(8) An assessment of the plan's impact on the costs of solid waste collection. The assessment shall be prepared in conformance with guidelines established by the utilities and transportation commission. The commission shall cooperate with the Washington state association of counties and the association of Washington cities in establishing such guidelines.

(9) A review of potential areas that meet the criteria as outlined in RCW [70.95.165](#).
[1991 c 298 § 3; 1989 c 431 § 3; 1984 c 123 § 5; 1971 ex.s. c 293 § 1; 1969 ex.s. c 134 § 9.]

Notes:

Finding -- 1991 c 298: See note following RCW [70.95.030](#).
Certain provisions not to detract from utilities and transportation commission powers, duties, and functions: RCW 80.01.300.

ⁱⁱⁱ RCW 81.77.030 Supervision and regulation by commission.

The commission shall supervise and regulate every solid waste collection company in this state,

(1) By fixing and altering its rates, charges, classifications, rules and regulations;

(2) By regulating the accounts, service, and safety of operations;

(3) By requiring the filing of annual and other reports and data;

(4) By supervising and regulating such persons or companies in all other matters affecting the relationship between them and the public which they serve;

(5) By requiring compliance with local solid waste management plans and related implementation ordinances;

(6) By requiring certificate holders under chapter [81.77 RCW](#) to use rate structures and billing systems consistent with the solid waste management priorities set forth under [RCW 70.95.010](#) and the minimum levels of solid waste collection and recycling services pursuant to local comprehensive solid waste management plans. The commission may order consolidated billing and provide for reasonable and necessary expenses to be paid to the administering company if more than one certificate is granted in an area.

The commission, on complaint made on its own motion or by an aggrieved party, at any time, after providing the holder of any certificate with notice and an opportunity for a hearing at which it shall be proven that the holder has willfully violated or refused to observe any of the commission's orders, rules, or regulations, or has failed to operate as a solid waste collection company for a period of at least one year preceding the filing of the complaint, may suspend, revoke, alter, or amend any certificate issued under the provisions of this chapter.

^{iv} [70.95.810 Composting food and yard wastes — Grants and study.](#)

(1) In order to establish the feasibility of composting food and yard wastes, the department shall provide funds, as available, to local governments submitting a proposal to compost such wastes.

(2) The department, in cooperation with the department of community, trade, and economic development, may approve an application if the project can demonstrate the essential parameters for successful composting, including, but not limited to, cost-effectiveness, handling and safety requirements, and current and potential markets.

[1998 c 245 § 132; 1995 c 399 § 191; 1989 c 431 § 97.]

^v [RCW 70.105D.070 Toxics control accounts](#)

(3)(a) Moneys deposited in the local toxics control account shall be used by the department for grants or loans to local governments for the following purposes in descending order of priority:

(i) Remedial actions;

(ii) Hazardous waste plans and programs under chapter 70.105 RCW;

(iii) Solid waste plans and programs under chapters 70.95, 70.95C, 70.95I, and 70.105 RCW;

(iv) Funds for a program to assist in the assessment and cleanup of sites of methamphetamine production, but not to be used for the initial containment of such sites, consistent with the responsibilities and intent of [RCW 69.50.511](#); and

(v) Cleanup and disposal of hazardous substances from abandoned or derelict vessels, defined for the purposes of this section as vessels that have little or no value and either have no identified owner or have an identified owner lacking financial resources to clean up and dispose of the vessel, that pose a threat to human health or the environment.