A G E N D A

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METRO

MEETING: Solid Waste Advisory Committee and Rate Review Committee

DAY: Thursday

DATE: July 22, 1993

TIME: 9:00 to 11:00 a.m.

PLACE: Metro Council Chambers

Joint Meeting of Committees

1. Assessment of Solid Waste Revenue System

   A. Report on the July 6, 1993 Council Solid Waste Committee action regarding Resolution No. 93-1824 establishing a process for evaluating solid waste fees — Terry Petersen

   B. Backgound Information — Metro Staff
      - Metro solid waste programs and services
      - Current revenue requirements
      - Current rate setting methodology

   C. Report on Request for Proposals — Terry Petersen

2. Adjourn Joint Meeting

<< BREAK >>

Meeting of the Solid Waste *Advisory Committee*

1. Approval of Minutes (transmitted via FAX if possible) — Roger Buchanan
2. Citizen Communications — Roger Buchanan
3. Results of Member Survey — Connie Kinney
4. Update on Organic Waste Strategy — Jeep Reid
5. **SWAC Action Item: Approval of Yard Debris Evalauation** — Steve Kraten
6. Adjourn — Roger Buchanan

Attachments

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BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ESTABLISHING A PROCESS FOR EVALUATION OF METRO'S SOLID WASTE FEES, [~~ADOPTION~~] CONSIDERATION AND REVIEW OF A NEW RATE STRUCTURE FOR FY94-95, AND COMPLETION OF CHAPTER 11 (RATES) OF THE REGIONAL SOLID WASTE MANAGEMENT PLAN	RESOLUTION NO. 93-1824A Introduced by Rena Cusma Executive Officer

WHEREAS, Policy 11.0 of the Regional Solid Waste Management Plan (adopted by Ordinance No. 88-266B) states: "The solid waste system shall be developed to achieve stable, equitable and predictable solid waste system costs and rates," and

WHEREAS, Chapter 5.02 of the Metro Code establishes a rate system that is based on per-ton fees for solid waste delivered to designated transfer stations and landfills for disposal; and

WHEREAS, These per-ton fees generate tonnage-dependent revenues that must pay all solid waste costs, regardless of whether those costs are dependent or independent of tonnage; and

WHEREAS, Despite the region's expected population growth, tonnage delivered to designated transfer stations and landfills will decline if regional waste reduction and recycling goals are met; and

WHEREAS, Continuing to pay for all costs of managing and operating the solid waste system entirely through fees assessed on a per-ton basis at transfer stations and

landfills will likely lead to ever increasing per-ton rates that are unstable and inequitable and therefore inconsistent with Policy 11.0; and

WHEREAS, The resolution was submitted to the Executive Officer for consideration and was forwarded to the Council for approval; now therefore,

BE IT RESOLVED, that

1. The Metro Council shall [~~adopt~~] consider and review a new rate structure for FY 94-95 based on a comprehensive review to be completed by January, 1994.

2. The Solid Waste Advisory Committee will review rate alternatives and make recommendations to the Council Solid Waste Committee on a monthly basis for discussion of policy implications. These recommendations will included:

   A. Short-term modifications feasible for rates to be adopted for FY 94-95.

   B. Long-term modifications that would make Metro's rates more consistent with adopted or proposed policies but which require additional work before implementation.

   C. Any other changes in the region's solid waste collection and disposal system that are needed in order to implement short- or long-term recommendations.

3. The Rate Review Committee will consider the recommendations of the Solid Waste Advisory Committee when developing solid waste rates for FY 94-95.

4. Chapter 11 of the Regional Solid Waste Management Plan dealing with solid waste rates will be completed and submitted to the Council for review and adoption by March, 1994.

5. Alternatives to be considered as part of this process will include but are not limited to the following:

A. Broaden the Rate Base. Rates are levied over a broader tonnage base than that which arrives at designated transfer stations and landfills for disposal.

B. Rate Restructuring. Rates are restructured so as to cover tonnage-independent costs with tonnage-independent revenues; and tonnage-dependent costs are covered with per-ton tip fees related to the true costs of handling various waste streams.

C. Diversify the Revenue Base. Fund some solid waste functions from sources other than system-specific user charges (*e.g.* taxes).

6. Criteria used to evaluate alternatives will include the following:

A. Consistency. Consistency with Metro's agency-wide planning policies and objectives, including but not limited to the Solid Waste Management Plan, and the economic opportunity and related objectives of Regional Urban Growth Goals and Objectives (RUGGO).

B. Revenue Adequacy. The generation of sufficient revenues to fund the costs of the solid waste system.

C. Equity. Charges to users of the waste disposal system are directly related to disposal services received. Charges to residents of the Metro service district who may not be direct users of the disposal system should be related to other benefits received.

D. Economic Impacts. The economic effects on the various types of rate payers, including the cost of living on residential waste generators and the cost of doing business on non-residential generators, as well as the economic effect on others in the region.

E. Waste Reduction. The rate structure provides incentives to encourage waste reduction, reuse and recycling.

F. Affordability. The ability of those paying for the program to bear the costs that they are determined to be responsible for.

G. Implementation. The relative cost and effort of implementing and administering the rates. Ensure that the rates can be verified and enforced.

H. Credit Rating Impacts. The effect of the rate structure on Metro's credit rating.

I. Authority to Implement. The legal ability of Metro to implement the rate structure; the relative ease or difficulty of obtaining the authority if such authority is not already held; and the changes needed to Metro Code to implement the new rate structure.

J. Reliability. The extent to which anticipated revenues are stable and unlikely to deviate from financial plan expectations.

K. Predictability. Metro rate adjustments will occur in a predictable and orderly manner such that local governments, haulers, and rate payers will be able to perform effective business planning.

ADOPTED by the Metro Council this _____ day of _____, 1993.

_____
Judy Wyers, Presiding Officer

Attest:

_____
Clerk of the Council

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Background Information for System Financing Study

Planning & Technical Services Division
Solid Waste Department
Metro
600 N.E. Grand Avenue
Portland, Oregon 97232

July 15, 1993

Summary

Metro's policies require that financing of the solid waste system (waste reduction and disposal) be done in an economical and prudent manner; and that solid waste disposal rates be stable, predictable, and equitable. Recent events have made these policies difficult to achieve under the current rate structure for financing the solid waste system.

Accordingly, Metro has initiated a comprehensive review of system financing alternatives with the objective of recommending a new rate structure to Metro Council by January 1994.

This report contains introductory materials for persons involved and interested in this study. Organized into three sections, it describes:

- Solid Waste Department Overview and Program Synopsis
- Budgeting and Rate Setting Procedure
- Recent Trends and Implications of the Current Rate Structure

Department Overview and Program Synopsis. Metro's Solid Waste Department is organized into an administrative division and six functional divisions. This section provides overview of the programs for which each division is responsible.

Budget and Rate Setting. Metro's solid waste system costs are allocated among four rate components identified to cover:

- fixed regional costs of solid waste programs,
- fixed costs of Metro disposal operations,
- transfer station variable costs,
- transportation and disposal variable costs.

Metro's current rate structure relies on a variable revenue base -- solid waste tonnage disposed -- to cover both its fixed and variable costs.

Recent Trends and Implications. Metro's tonnage revenue base has been shrinking due to success of reduction and recycling programs, and price responses to rising disposal rates by users of the system. Reliance on a shrinking tonnage revenue base to cover fixed costs puts upward pressure on disposal rates and threatens the financial stability of the system. The shrinking tonnage base also puts an inequitable burden on the diminishing group of users who are forced to pay the cost of the whole system through charges on disposal alone.

Department Overview & Program Synopsis

Department Overview

Metro's Solid Waste Department is responsible for regional solid waste management. The department goals are:

1. To reduce the amount of solid waste disposed and increase recycling and waste reduction activities, working in close partnership with local governments, the collection industry, businesses, regulatory agencies, and the public;

2. To develop a regional solid waste management system that is efficient, economical and environmentally responsible; and

3. To operate Metro solid waste facilities in an environmentally sound, safe, and financially prudent manner.

Basic objectives of the entire department, as supported by the Solid Waste budget are as follows:

- Rate administration and scalehouse procedures will equitably recover revenue from users of the waste management system.

- Full monitoring and compliance with long-term contract commitments.

- Waste reduction plan schedules and DEQ waste reduction order will be fully complied with.

- Fiscal programs and activities will ensure greater accountability; optimize decision-making through improved budget and rates development and improve financial reporting; and maintain the financial integrity of the overall department.

- Waste flow will be monitored and controlled consistent with financing commitments and prudent system management.

- Evaluate and implement as required proposals to design and construct a high grade disposal facility in eastern Washington County and to purchase and install a fiber-based fuel system (or pellitizer) at the Metro Central Transfer System; and upgrade the Metro South Transfer Station;

- Expand hazardous waste collection and management capacity through completion of the Metro Central household hazardous waste facility and implementation of a satellite collection program.

- Increase maintenance and environmental monitoring associated with closure of the St. Johns Landfill.

The Department's annual budget for FY 1993-94 is based on the assumption that tonnage will be approximately 689,000 tons of waste delivered to Metro facilities and about 1.04 million tons disposed region-wide. It is made up of two funds: the Solid Waste Revenue Fund and the Rehabilitation and Enhancement Fund.

The Rehabilitation and Enhancement Fund is used to fund local rehabilitation and enhancement projects in the vicinity of transfer stations. Projects are funded in Oregon City (Metro South), at Metro Central, Forest Grove, and North Portland (St. Johns Landfill). This fund is financed by a 50¢ per ton charge, collected in addition to Metro's disposal rate. Revenues are allocated to projects by committees of local representatives.

The Solid Waste Revenue Fund is supported primarily by revenues collected from disposal operations. The fund-financed activities are organized into six functional divisions: Budget and Finance, Engineering and Analysis, Planning and Technical Services, Public Affairs Operations and Waste Reduction,. In addition, the Administration Division provides management and clerical support services.

Administration Services - consists of the Director's office and support services staff. This division works closely with Public Affairs, overseeing promotion and education for solid waste/recycling programs and media contacts. It is responsible for coordinating development of the regional Solid Waste Management Plan, inventorying solid waste facilities in conjunction with the department's planning function, as well as managing community enhancement committees. It serves as the department's liaison for legislative coordination, facilities management, transportation planning, and the office of construction management.

Budget and Finance - is responsible for development and administration of the department's annual budget, disposal rate development, financial policies, contracts management, and franchise administration.

Engineering and Analysis - oversees development of major waste disposal system facilities and projects, from the planning stage through operations. In general, its program activities center on maintaining system facilities and streamlining its disposal components. Engineering and Analysis also oversees the coordination of transport services to ensure the transfer, transport and disposal of the region's waste in a timely and efficient manner; works to minimize the risks posed by significant quantities of hazardous waste entering the municipal waste stream through the development of new programs and supporting existing efforts; and provides assistance to all department staff. Additionally, it is responsible for closing the St. Johns Landfill in a cost-effective manner, mitigating short and long term negative impacts on health, safety, and the environment.

Planning and Technical Services - is responsible for tonnage and other solid waste forecasting; developing maps and other data products needed for solid waste management and planning; analyzing planning and policy issue; and drafting ordinances regarding franchises, illegal dumping, recycling and similar topics. As the region grows, management of solid waste/recycling continues to become more complex.

Public Affairs - beginning FY 92-93, this function, once part of the Waste Reduction Division, was made a separate division within the Solid Waste Department. It includes the following programs: Promotion and Advertising; Education; and Recycling Information. The objective of these programs is to provide information to Metro constituents about solid waste facilities, programs, and activities and to let constituents know how they can participate in these programs and services.

Operations - is responsible for management and operation of solid waste disposal facilities, including Metro South and Metro Central Transfer Stations, the Metro South and Metro Central Household Hazardous Waste facilities, and the St. Johns Landfill (maintenance and monitoring activities during closure). The division is further responsible for computer database management for these facilities, hazardous waste monitoring at the transfer stations, and waste transport operations to the Columbia Ridge Landfill in Gilliam County

Waste Reduction - is responsible for the department's recycling and market development programs, alternative technology and other activities that reduce waste. Programs are separated into two major categories, recycling (supply) and marketing (demand). The annual waste reduction program for local governments is implemented as part of the Regional Solid Waste Management Plan (SWMP). The plan establishes a 50% regional waste reduction goal by the year 2000 (56% by 2010), to be achieved through a variety of programs, including source-separation, post-collection material recovery and alternative technology.

Each of these divisions and their programs is described in detail in the next section.

Program Synopsis

Programs of the Solid Waste Department are organized in six functional divisions, plus the Administration Division: Budget & Finance, Engineering & Analysis, Planning & Technical Services, Public Affairs, Operations, and Waste Reduction.

In this section, programs are described under each functional division responsible for its administration.

Administration Division

The Administration Division is the office of the Director of Solid Waste and is responsible for the overall administration and management of the department, which is comprised of six divisions. The Administration Division includes three sections: Support Services, providing support to all six division; Records Administration; and the Community Enhancement programs. The Records Administration section was created in 1990; the Community Enhancement program was created in 1987, and has grown in that time from one program to five programs, three of which are staffed and managed by Metro and two of which are pass-through funds managed by a committee of the city in which the facility is located.

Historically, the Administration Division has filled the role of coordinator for the Solid Waste Department, handling all special projects, interdepartmental liaison activities, legislative and intergovernmental contact, visiting delegations and facility tours, coordination of space planning and moving, scheduling and coordinating workshops, training and conferences, and other one-time only projects.

Director's oversight and administrative work related to specific projects was conducted in the following areas in 1992-93:

- Executive and Council/Council committee liaison responsibilities;
- St. Johns Landfill closure and related construction activities;
- Metro South expansion contracts, related intergovernmental coordination;
- Construction, opening, and operation of the Household Hazardous Waste (HHW) facility at Metro South;
- Commencement of construction, opening, and operation of HHW facility at Metro Central, April 1993;
- Operation and temporary closure of Metro Solid Waste composter and related issues of contractor performance, regulatory compliance, citizen involvement, and financial negotiations;
- Waste reduction and related activities;
- Washington County system development;
- Program cost management and development of five-year financial plan for solid waste system;
- Public information activities (meetings, hearings, public inquiries, document distribution);
- Support Services activities and Records Administration;
- Community Enhancement programs;
- Oregon Legislative Session, 1993
- Coordination of the department's move to the new Metro Regional Center

Budget & Finance Division

Budget Program

This program has historically been, and continues to be, responsible for developing, monitoring, and evaluating the financial activities of the Solid Waste Department. This includes preparation and control of the Department's annual budget; analyzing, recommending, and implementing financial policies and procedures; performing financial analyses; preparing financial reports; and otherwise ensuring Solid Waste's compliance with applicable legal and administrative requirements.

Ongoing activities include providing technical assistance to staff in preparing and managing their division and program budgets and developing and tracking "special account" budgets, i.e. debt service, reserves, etc. Other functions involve handling accounts payable for the entire department, periodic review of financial and accounting records for completeness and accuracy, and preparation of a monthly financial report that compares budgeted versus actual revenues, expenditures, and tonnage and other reports as required by the Finance and Management Information Department, Solid Waste managers, or Metro's Council.

Other activities include assisting with development of the Department's Five Year Plan and other long-term forecasting of revenues and expenditures related to facilities development.

Rates Program

This program is responsible for analyzing and developing Solid Waste disposal rates. This program has also been responsible for managing rates through logical applications of cost coverage within a framework of fluctuating tonnage and defined contractual obligations.

Disposal rates are an especially important topic for FY 1992-93, requiring in-depth analyses and monitoring throughout the year. This program is critical to Metro's ability to equitably apply the principles governing rate setting that were adopted in FY 1989-90. The need to generate sufficient revenues is being emphasized so that rates can be structured to prevent "revenue dislocation" that occurs when tonnage fluctuates between facilities in the region. Policy implications demand thorough, ongoing analyses. Developments in the disposal system affecting rates include new or enhanced solid waste facilities, curbside collection material changes, recycling incentives, flow control and other policies. This program is undertaking a contractual review of Metro's current solid waste setting practices to determine compliance with Council policies and to ascertain the effectiveness of certain rate related waste reduction programs.

Franchise Administration Program

The Franchise Administration Program administers existing franchises and agreements; participates in waste flow policy development and enforcement; and processes franchise applications and non-system license applications under the "flow control" ordinance. Franchise administration has been a departmental responsibility since the inception of franchises within Metro's disposal system, however, formal designation of its functions as a discrete element of departmental functions did not occur until 1989.

Major changes occurred when out-of-system disposal facilities were allowed to receive certain types of waste. This has been an outgrowth of the closure of St. Johns Landfill, which had provided disposal for a wide range of materials, many of which are not suitable for or easily managed by a transfer station. Additionally, increased tip fees at Metro facilities has provided incentive for generators and haulers to seek alternative disposal opportunities that may be inconsistent with Metro's policies. These flow control issues are closely tied to system revenue issues.

Additionally, this program assists in coordinating implementation and enforcement of Metro's flow control ordinance to assure appropriate flows of waste to the various Metro facilities, ensuring a comprehensive approach to control of waste flows that are being disposed in compliance wth Metro policies and/or ordinances. Flow control enforcement activities have taken significant steps forward in securing professional investigator assistance and investigating complementary ordinance enforcement services.

Contracts Compliance Program

The Contract Compliance Program is responsible for ensuring that contract documents comply with Metro's Code, general policies and financial accounting procedures as well as state law thus minimizing Metro's liability exposure. Compliance is assured by reviewing contract documents and advising staff accordingly. The program manages contracts for waste transport, disposal, and for operation of the Metro Central and Metro South Transfer Stations. Staff work is the primary interface between the Solid Waste Department and other Metro departments concerning contractual matters, including legal, risk management, or competitive selection issues. Contracts are tracked through the approval process; and staff provides technical assistance in resolving contract problems and disputes for the department.

Engineering & Analysis Division

Disposal Systems Development

The purpose of this program is to procure services and facilities within Metro's solid waste disposal system, including general and limited purpose landfills, waste transport services, material recovery facilities, household hazardous waste facilities (HHWF) and transfer stations. In addition the program provides technical assistance in coordinating the different contractual obligations between contractors for major system contracts. Contractual expenses for design and construction of projects are budgeted in the Construction, General, and Renewal & Replacement Accounts.

The major change that has occurred within this program was the closure of the St. Johns Landfill to general purpose waste in January 1991. It had been a major focal point of the staff efforts as new facilities and service contracts were required to replace the landfill.

The primary goal or objective of the program is to take facility development projects from the planning stage to an operational stage.

This program's many accomplishments over the last five years include contracting for twenty years of disposal services at the Columbia Ridge Landfill, a twenty-year waste transport services agreement with Jack Gray Transport, design and construction of renovations to Metro South Transfer Station, design and construction of a Household Hazardous Waste Facility at Metro South and procurement of the Metro Central Transfer Station.

Administration/Technical Services Program

This program is responsible for planning and developing the Division's budget and provides administrative and technical support to the Division's project managers on RFBs, RFPs, contracts, change orders, and field work. The program's technical support services are also available to the entire Solid Waste Department to ensure intra-departmental program coordination and communication and provide technical review and assistance as requested.

The program also provides technical assistance to the public; Metro Council; other departments within Metro; and to local, state, and federal government units.

The Engineering Division endeavors to respond quickly and effectively to all requests for technical assistance. The program's goal is to support the originator of the request in completing their work products by their targeted dates. Identification of specific products and targets is generally the responsibility of those requesting assistance. Those services supplied to staff within the Engineering Division will generally be of an ongoing nature not identifiable to specific products and targets.

St. Johns Landfill Closure Program

The purpose of the program is to close the St. Johns Landfill using cost effective methods to responsibly manage short and long term negative impacts on health, safety, and the environment. During the closure process Metro's aims are to (1) close the landfill properly, (2) positively integrate the landfill into the surrounding wetland, (3) provide technical assistance to Operations for post closure maintenance, (4) provide opportunities for research about closure methods and results and (5) provide opportunities to recycle wastes.

Metro submitted a revised Closure and Financial Assurance Plan to DEQ in September 1989. Since the closure plan was a conceptual design Metro contracted with the design firm Parametrix, Inc. in May 1990 to complete the final closure construction design.

Hazardous/Special Waste Reduction Program

The purpose of the program is to minimize the risks posed by significant quantities of hazardous waste entering the municipal waste stream. Tasks focus on developing new programs and supporting and assisting existing efforts in four areas: household hazardous waste facilities and collection events; conditionally-exempt, small-quantity hazardous waste generators; transfer station load checking programs; and special wastes such as petroleum-contaminated soils and sludges.

The program was developed because hazardous materials in the waste stream represent a significant health risk to both Metro employees and employees of Metro's contractors. Metro also has significant contractual liabilities and regulatory responsibilities in the area of hazardous and special waste.

The program has been responsible for conducting the Household Hazardous Waste (HHW) Collection Events in prior years. It supported the development of the permanent HHW collection facilities at the transfer stations, and assisted in the development and implementation of Metro's overall plan for household hazardous waste management. The program's special wastes efforts included development and coordination of programs for inspection and testing of wastes, and the development of rules for the transfer, transport and disposal of special waste.

The program is expected to continue to assist in the development of both existing and new programs for the management of hazardous and special wastes focusing on the following tasks:

- Technical support for the household hazardous waste collection facilities at Metro South and Metro Central;

- Technical support to the Operations Division for the satellite collection events to be held in areas not supported by a permanent HHWF.

- Investigate the development of a waste exchange program to promote the use of an existing multi-state waste exchange through the distribution of free exchange newsletters to waste generators identified by the special waste permit program;

- Investigate the development of a technical assistance program to provide special waste generators with up to date technical information relevant to recovery methods, treatment systems and waste minimization techniques;

- Coordination with Metro's Planning and Technical Services and Operations Divisions, the Department of Environmental Quality (DEQ) and the City of Portland on hazardous waste management plans for conditionally exempt small quantity generators;

- Determination of appropriate free fill material that can be accepted at the St. Johns Landfill to achieve final grades.

Planning & Technical Services Division

Planning & Policy Evaluation Program

The purpose of the Planning & Technical Services Division is to conduct the planning, policy analysis, and related functions needed for solid waste management. This Division was created July 1992 by consolidating the planning functions previously conducted by the Urban Services Division of the Planning Department with related activities conducted by the Solid Waste Department's Divisions of Waste Reduction and Budget and Finance.

The Planning and Policy Evaluation Program is responsible for conducting solid waste planning and policy evaluation. Metro solid waste planning was expanded in 1987 at the beginning of the development of the Regional Solid Waste Management Plan (RSWMP). Metro staff working on the RSWMP were subsequently reduced as much of the RSWMP was completed. The current solid waste planning and policy evaluation program will: (1) continue to finish remaining chapters of the RSWMP; (2) update and revise existing chapters of the RSWMP as scheduled; (3) provide technical assistance to local governments, haulers, and others on the implementation of Metro solid waste plans and policies; and (4) perform other policy analyses as needed related to solid waste management.

Technical Services Program

This program provides technical assistance to other Metro staff, local governments, haulers, and private industry. Services that are provided include: (1) forecasting the demand for disposal service, (2) reporting disposal and recycling tonnages needed for budgeting, flow control, contract compliance, rate setting, and evaluating progress towards recycling goals, (3) Publication of Solid Waste Information System (SWIS) reports, (4) computer modeling of solid waste policies and management options, and (5) Regional Land Information System (RLIS) mapping needed for solid waste planning and management. Prior to the creation of the Division in July 1992 these functions were performed by staff in the Budget and Finance and Waste Reduction Divisions.

System Measurement Program

The objective of this program is to collect and analyze basic solid waste data needed for solid waste planning and management in the Metro region. Examples are: (1) waste characterization studies, (2) establishment of a long-term "panel" survey of household solid waste behavior, and (3) a cooperative study with Metro haulers to determine the quantity of waste generated by different types of businesses.

Public Affairs Division

Program Description. The Promotion and Advertising Program provides the following services to support waste reduction and household hazardous waste projects:

- Communication planning
- Advertising development and placement
- Media relations
- Community outreach
- Support materials development

In 1983, the Oregon legislature passed the Opportunity to Recycle Act, which mandated curbside recycling in communities with more than 4,000 residents. In the same time frame, the Department of Environmental Quality (DEQ) charged Metro with responsibility for waste reduction and recycling promotion in the Portland metropolitan area.

The Public Affairs Department, with Solid Waste Department funding, has directed the resulting advertising and promotion program since it began in 1986. The objective of the program is to develop and implement effective communication programs to support Metro's solid waste programs and services. While the program develops some independent promotional programs, it acts primarily as a communications support service for solid waste and waste reduction programs.

The DEQ directive initiated two significant projects: an annual telephone survey of area residents and a contract with an advertising agency. Results from the initial survey, which measured solid waste and recycling attitudes and reported behavior, and similar studies conducted annually thereafter, have been used to develop public education recycling campaigns.

Advertising agency campaigns, developed between 1986 and 1991, enabled Metro to communicate waste reduction messages using mass media tools such as television, radio, newspaper, billboard and direct mail. Campaigns have focused on developing awareness of and participation in curbside recycling, yard debris recycling, office paper recycling and recycled paper purchasing. Due to budget cuts for FY 1992/93, the advertising agency contract was eliminated.

In addition to advertising agency campaigns, Public Affairs staff have developed a variety of promotional and advertising programs. Promotional priorities include publicizing Metro Recycling Information services, Metro's home composting workshop program, household hazardous waste minimization, construction waste recycling and reuse, multifamily recycling, commercial waste reduction, recycled products and a host of special projects.

Services provided through the program include communication planning, advertising, media relations, community outreach and support materials development. Communication plans are developed for major projects to maximize promotion budgets and program impact. When appropriate, advertising is developed and placed. The program works with the ;media to generate coverage of specific projects, enhance public awareness of program and issues and develop promotional sponsorships. The program carries its messages into the community through a variety of public events and trade shows, a speakers bureau and retail displays and booths. Support materials created include brochures, displays, signs, banners, slide shows and presentations.

Advertising and promotion program contributes to the success of recycling and waste reduction programs in the region are demonstrated by the following:

- **Increased recycling levels.** Since the program began, the recycling level in the region has increased from 22% in 198f6 to 38% in 1991. The 1991 level contrasts with a national average of 17%. Of particular note, paper recycling increased from 23% in 1989 to 49% in 1990.

- **Increased recycling participation and awareness.** Annual surveys have shown a steady increase in residential recycling. Reported participation increased from 28% in 1986 to 61% in 1990. Since weekly collection with recycling bins was implemented in January 1991, participation has increased to nearly 75%.

- **Increased Recycling Information calls.** Calls to Metro Recycling Information grew from 13,916 in 1986 to 81,084 in 1991. Call tracking shows that nearly all advertising or promotion campaigns result in measurable call increases. For example, the 1990 office paper recycling campaign created a 500% increase in office paper recycling calls.

- **Expanded program support.** As solid waste and waste reduction programs have changed and expanded, the advertising and promotion program has made an effort to keep pace. Primary emphasis on curbside and yard debris recycling has shifted to focus on commercial recycling, home composting, multifamily recycling, "Buy Recycled," household hazardous waste minimization, construction & demolition waste recycling and special projects such as phone book recycling.

Operations Division

The Operations Division is responsible for management and operation of solid waste disposal facilities, including Metro South and Metro Central Transfer Stations, Metro South and Metro Central Household Hazardous Waste facilities, and the St. Johns Landfill (maintenance and monitoring during closure activities). The division is further responsible for computer database management for these facilities, hazardous waste monitoring at the transfer stations, and waste transport operations to the Columbia Ridge Landfill in Gilliam County.

The Operations Division was originated in 1980, when Metro assumed operation of the St. Johns Landfill from the City of Portland. The landfill was closed as a general purpose landfill on January 13, 1991. The Metro South Station began operating in April 1983, and Metro Central opened on January 14, 1991. The compost facility originally commenced operation in April 1991, closing in January 1992. The Metro South Household Hazardous Waste facility began operation February 6, 1992. The division goal is to operate Metro solid waste facilities in an environmentally sound, safe, legal and financially prudent manner.

FY 1992-93 reflects the first full year of operation for the Metro South Household Hazardous Waste facility. The Metro Central Household Hazardous Waste facility is expected to begin operation in July 1993. The compost facility did not operate during fiscal year 1992-93, and there are no plans to operate the facility in the future.

New programs are proposed for FY 1993-94 to better reflect the actual organization and management functions of the division. The new programs are: Management Services, Scalehouse Services, Disposal Services, and Environmental Services. The previous programs were :Metro South Station, Metro Central Station, St. Johns Landfill, Metro South Household Hazardous Waste facility and Metro Central Household Hazardous Waste Facility. Scalehouse operations, transfer station operations, waste transport operations and disposal operations were under those programs.

Major changes for FY 1993-94 include the first year of operation for the Metro Central Household Hazardous Waste facility, development of a pilot project for technical assistance to hazardous waste conditionally exempt generators (CEG) and an intergovernmental agreement with the Multnomah County Sheriff's Department for flow control and illegal dump site cleanup. The division will continue to manage and operate the Metro South and Metro Central transfer stations, the Metro South Household Hazardous Waste facility, maintain and monitor closure of the St. Johns Landfill, monitor hazardous waste at the transfer stations, and monitor waste transport operations to the Columbia Ridge Landfill.

Management Services

Management Services is responsible for providing central coordination for the preparation, monitoring and implementation of the Operation Division's annual budget and budget amendments; providing training and assistance to site staff in the preparation and monitoring of their budgets; ensuring conformance to established procedures and compliance with Federal, State and local requirements; monitoring and administering all division contracts; and developing research and analysis of current programs.

The Operations Division was originated in 1980, when Metro assumed operation of the St. Johns Landfill. The addition of two transfer stations and a household hazardous waste facility have made it necessary to increase the Management staff from one to four full-time employees over a period of twelve years.

Scalehouse Operations Program

The Scalehouse Operations program is responsible for the operation of the scalehouses at both Metro South Station in Oregon City, and Metro Central Station in northwest Portland. Prior to the closures of the St. Johns Landfill and the compost facility, Metro also operated scalehouses at those facilities. Metro assumed operation of the St. Johns Landfill from the City of Portland in 1980. The landfill operated as a general purpose landfill until January 13, 1991, and as a limited purpose landfill from January 14, 1991 to October 11, 1991. The compost facility was in operation during the period of April 1991 to January 1992.

The scalehouses at Metro South Station began operating in April 1983; the scalehouses at Metro Central Station on January 14, 1991.

The program included the operation of the scalehouses at the Metro South and Metro Central transfer stations. The goal of the program is to operate the scalehouses in a sound, safe, legal, and financially prudent manner. Program tasks included providing daily transfer services to over 200 commercial and 400 public customers at the Metro South Station and to over 200 commercial and 300 public customers at the Metro Central Station. The program is further responsible for computer database management of the transfer stations and waste transport operations to the Columbia Ridge Landfill, the Marion County waste-to energy facility, and other landfills as appropriate.

Environmental Services Program

Metro has been involved with the management of household hazardous waste (HHW) since 1986, when a pilot HHW collection event was conducted. Between 1988 and 1991, Metro sponsored a series of collection events, generally held twice a year, and usually staged simultaneously at four different locations in the Metro area. These events each serviced between 1,000 and 3,600 participants. In 1989, the Oregon legislature mandated that Metro establish permanent depots for the collection of household hazardous waste.

Early planning for compliance with the legislature's mandate included several key decisions. It was decided that two facilities would be built, to be located at each of Metro's solid waste transfer stations; that the facilities would be designed and built from scratch, without using existing structures or prefabricated buildings; and that Metro would operate and staff the facility, using an outside contractor only for transportation and disposal of wastes.

The Environmental Services program is responsible for the operation of the Metro South and Metro Central Household Hazardous Waste Facilities; maintenance and monitoring of the St. Johns Landfill during closure activities; and the hazardous and unacceptable waste, CEG, and medical waste load-checking operations at the Metro South and Metro Central Transfer Stations. The Metro South Household Hazardous Waste Facility in Oregon City began operation on February 6, 1992.

FY 1992-93 reflected the first full year of operation for the Metro South Household Hazardous Waste Facility. Construction of the Metro Central Household Hazardous Waste Facility began this year on the site of the Metro Central Transfer Station in Northwest Portland, and will begin operation in July 1993.

Disposal Services Program

The Disposal Services program is responsible for the disposal and transportation of municipal sold waste from the Metro South and Metro Central Transfer Stations; the disposal of hazardous waste from the Metro South and Metro Central Household Hazardous Waste Facilities; the transportation and processing of waste tires from Metro South and Metro Central Transfer Stations; and the hauling and processing of yard debris from the transfer stations. Prior to FY 1992-93, the program also included the operation of the St. Johns Landfill and the compost facility. The landfill operated as a general purpose landfill until January 13, 1991, and as a limited purpose landfill from January 14 to October 11, 1991. The compost facility was in operation during the period of April 1991 to January 1992.

The Metro South Station began operating in April 1983; the Metro Central Station on January 14, 1991. Transportation to and disposal of municipal solid waste at the Columbia Ridge Landfill began on January 2, 1990.

Waste Reduction Division

Management and Administration Program

In 1986, Metro adopted a Waste Reduction Program; the program was updated in 1989. The program incorporated findings from a technology assessment study Metro conducted in 1988 called the System Measurement Study. In November 1989, Metro passed Ordinance No. 89-315 incorporating this updated Waste Reduction Program as Chapter 1 of the Regional Solid Waste Management Plan. This Chapter forecasts the potential of reaching a 50% recycling level by the year 2000, and a 56% recycling level by the year 2010.

The 1991 Oregon Recycling Act designates Metro as the wasteshed responsible for the tri-county area reaching a 45% recovery level by the year 1995 (40% without the MSW compost facility). In 1986 the Metro region recycling level was 22%, in 1987 25%, in 1988 26%, in 1989 28%, in 1990 32%, in 1991 38%. The 45% recovery level targeted in state law for the Metro region continues to look reasonable, based on market conditions and advances in collection systems, technology and regulation.

In March 1989, the Environmental Quality Commission issued a Unilateral Order requiring Metro to implement the Regional Waste Reduction Program. Four new FTE were hired to accomplish this task.

Beginning in FY 89-90, and continuing through the current fiscal year, substantial grant funds were provided to local governments, to neighborhood groups, and to entrepreneurs who applied for assistance through the 1% for Recycling grant program to introduce new recycling ventures. The final report to the Department of Environmental Quality on Metro's compliance with the Unilateral Order, submitted January 15, 1993, shows compliance with all elements of the Order.

FY 92-93 marked the third of a five year "Metro Challenge" grant program designed to help local governments accelerate reduction and recycling program implementation. To date, over $1.7 million has been allocated for this purpose, and used successfully, without exception, throughout the region. This also marked the third year Metro co-sponsored a "Buy Recycled" conference with the Clean Washington Center.

In FY 93-94 the focus of the Division will be to collaborate with local governments, haulers, industry, recycling advocates, and other interested groups in producing the next five year regional waste reduction program. The new program will be far thinking, visionary in its scope. The goal will be to set a new course to reduce and divert the most waste with the most efficient techniques from 1994 to 2000. The program will be based on an a 'recycling program assessment' conducted in FY 92-93 that will gauge results of programs implemented since 1989.

In addition, the Division will turn its focus more to the commercial sector. Attention will continue to be given to salvage, reduction and recycling of construction/demolition/land clearing debris. This constitutes 17% of the waste stream, and has significant recovery potential. Waste generator groups will begin to receive more tailored assistance in evaluating what's in their waste, and best techniques to reduce and recycle it. Potential new business that could use recycled material as feed stock for manufacture of goods will receive from Metro information about quantity, quality, cost and availability of secondary materials. Rather than another "Buy Recycled" conference, outreach will be designed to targeted audiences.

Market Development Program

The market development section was formed in FY 88-89 to address the issue of inadequate markets for recyclable materials. Up to that time waste reduction efforts had concentrated on collection and promotion/ education. The early program included yard debris compost testing and institutional purchasing. It has expanded to include a more comprehensive buy-recycled campaign and market development strategies for particular commodities, such as glass, paper, plastic, oil, and compost.

The goal of the market development section is to increase the use of recycled and recyclable materials, improve markets and close the recycling loop. The second goal is to develop programs with quantifiable results, significant market impacts, and strong cost benefits. Significant progress has been made towards achieving this

goal. Institutional purchasing policies have been developed and are being implemented at Metro; local governments have adopted policies; and many businesses are buying recycled.

Demonstration projects and testing have helped increase the demand for yard debris compost. Staff analysis and research has contributed to improved markets for paper, glass, paint, tires and motor oil. Work continues on finding solutions to the poor market conditions for recycled plastics and green glass.

In fiscal year 1992-93, the market section implemented programs to increase the use of recycled office products and building materials. Specific audiences with the best potential to utilize products were identified. These groups were offered technical assistance through personal visits, information-sharing and workshops. Staff is working with new businesses to promote the use of recycled feed stock in manufacturing processes. A demonstration project to test yard debris compost for erosion control is underway.

The section also manages the home composting demonstration centers at three community colleges and Fulton Community Gardens. Work is in progress to build a fifth mini-site at the Washington Park Zoo. Staff manages the Compost Corps volunteer program as part of the home composting outreach activities.

Finally, the markets section is involved in Northwest regional planning and market development activities. Staff works with the Environmental Protection Agency (Region X), and the Clean Washington Center to analyze regional strategies to improve recycling markets. The section also monitors the activities of the Oregon Recycling Markets Development Council and participates in development of legislative proposals.

In FY 93-94 the market development section's goals shall be achieved through four major program areas. These are Procurement, Business Assistance, Markets Information and Analysis, and Composting Programs. The approach and work plan for targeted materials will vary depending on the nature of market development barriers and opportunities for each material. For example, market development for plastics and green glass requires policy analysis and research while efforts for paper products and yard debris will focus on marketing and public education.

Reduce, Reuse, Recycle, Recover

Local Government Recycling Program The Reduce, Reuse, Recycle, Recover Program provides leadership and regional coordination to Metro area cities and counties. The program targets single-family residential, multi family residential, and commercial waste generators.

"Metro Challenge" grant funding is available to local governments to administer their programs. Regular meetings are held to coordinate, plan, and exchange information and ideas. Each year, the local government programs are evaluated by staff and grants awarded accordingly.

During FY 93-94 this program will serve as liaison between Metro and local governments as regards waste reduction and recycling programs, provide technical assistance to local governments and track region's compliance with the 1991 Oregon Recycling Act. Administer "Metro Challenge" grant appropriation of $350,000.

Curbside Recycling Curbside recycling accounts for approximately four percent of the region's recycling. It is the most visible recycling program in terms of involving the region's residents. Containers have been funded over a four-year period. In FY 1989-90, Clackamas County was the first local government to distribute containers. Gresham, Wood Village, Troutdale, and Fairview went next with their "Curby" promotion in FY 1990-91. In 1991-92, Washington County and the City of Portland distributed their containers.

Coordinate initiation of curbside yard debris collection programs. Examine the feasibility of adding new materials such as mixed scrap paper to curbside collection programs. Monitor adequacy of yard debris processing capacity as region's yard debris recycling program starts up.

Examine the feasibility of adding new materials to curbside collection programs. Adding milk jugs and magazines region-wide plus mixed scrap paper, if feasible, can potentially increase the curbside recovery rate from four to five percent.

Yard debris comprises 18%-20% of MSW and about 10.5% of the waste being disposed from the Metro region. Its diversion can contribute significantly to achieving the region's recovery goals. Prior to the summer of 1992

when many of the curbside collection programs were first put in place, about 32% of the region's yard debris was being recycled. The objective of these programs is a yard debris recovery rate of 80%. If 80% recovery of yard debris is achieved, the 1991 38% recycling rate would increase by approximately five percentage points to 43%.

Provide standards and criteria for evaluating the operations of a yard debris processing facilities. Determine parameters for operation, equipment, and mitigation of environmental effects.

Multi-Family Recycling Throughout the Tri-County area, multi-family housing generates approximately 105,994 tons of material each year. This accounts for nearly 20% of the residential waste stream, and 7% of the total waste stream. Approximately 60,000 tons of this material is technically recoverable, though 20% is probably a more practical figure. If 20% recovery from multi-family is achieved, the 1991 38% recycling rate would increase by about half a percent.

Metro provided $252,000 in matching grant funds for multi-family recycling containers in FY 1989-90. In FY 90-91 $43,574 was appropriated for workshops and recycling container decals. In FY 1992-93 $100,000 was appropriated for containers and $17,000 for handbooks and workshops.

Local governments had originally set a target for all multi-family units to be served with recycling by June of 1994. Recently that target has been reassessed and moved back to June of 1995. This program needs to be funded and promoted throughout the region to become a more visible and popular element of waste reduction and recycling efforts.

In FY 93-94 this program will provide local governments with technical assistance and partial funding for recycling systems in multi-family dwellings; and develop and coordinate an education/promotion campaign to encourage owners, managers, and tenants to recycle. At present about one third of apartment complexes are served with recycling stations. If all apartments are served, the region's recycling rate can potentially be boosted by another two percent.

Commercial Recycling The commercial sector accounts for about half of the region's solid waste generation. Office paper and cardboard comprise most of the material currently being recycled. It is estimated that of the total amount of commercial waste generated, approximately half may be technically recoverable (excluding fiber based fuel). At present, about 16 percentage points of the region's recovery rate are attributable to commercial recycling. If the percentage of commercial waste recycled were doubled, the regional total would rise from 38% to 54%.

Metro has developed a number of promotional materials dealing with commercial sector recycling. These materials range from posters, to deskside recycling boxes, to coffee mugs.

- Conducted numerous waste audits. Hosted a seminar on recycled paper and a workshop on how to perform commercial waste audits.
- Facilitated a dialogue between Fire Marshals and the recycling community on the issue of bag-and-rack systems.
- Completed a video on commercial recycling.
- Organized collection of phone books for large businesses in downtown areas.

In Fy 93-94 this program will continue to motivate the commercial sector to recycle and reduce waste, focussing on waste minimization and the application of reduce, reuse and recycle:

Recycling Recognition Award Program: Develop a "Recycling is Good Business" commercial recognition recycling award in cooperation with local governments. This award program will establish standards for waste minimization that businesses must meet for recognition.

Intern Program: Metro, on average, provides technical assistance to 125 businesses per year. The internprogram will also provide Metro with the opportunity to focus on industry specific waste generators. The on-going objective for FY 92-93 will be to provide comprehensive waste minimization assistance to targeted industries.

Waste Minimization in the Work Place (Consultation Assistance Program): Utilize the 1992 waste comp study to identify waste generators for recycling and waste reduction assistance. A CAP team will provide on-site waste assessments and technical assistance to help the business reach its waste reduction goals. A

waste profile specific to the industry will be developed. This profile will help similar industries plan waste reduction programs.

Petroleum Contaminated Soils (PCS), Construction/Demolition (C/D) Debris, Salvageable Building Materials (SBM), and Special Wastes Petroleum contaminated soil results from the removal of leaking underground storage tanks from service stations and other businesses that store petroleum products. For the next several years a large amount of this waste will be generated due to DEQ requirements for tank replacement. DEQ regulations do not specify how the contaminated soils are to be managed. As a result, much of these soils are simply left in piles where the petroleum either volitalizes to the atmosphere or is washed back into the soil by rain.

Metro has:

- Developed policies to assure effective remediation of petroleum-contaminated soils.
- Provided technical assistance to PCS Processors.
- Surveyed PCS remediation sites in cooperation with the DEQ.

Special wastes are wastes that, due to their abrasiveness, high moisture content, or non-compactibility, cannot be easily handled by transfer stations. Metro coordinated the efforts of the City of Portland, the United Sewerage Agency, and other local governments to establish a regional consolidation facility for sewage grits and screenings.

Recycling of C/D debris is a new area which Metro is largely pioneering. This program is an ongoing effort that will expand and diversify opportunities to reduce and recycle this material. Program elements include demonstration projects, dissemination of technical information, networking with the building industry, establishing a recycling infrastructure, and promotion.

CD/SBM makes up 17% of the solid waste stream. Approximately one third of this material is presently being reused or recycled. However, it is estimated that up to 75 percent has the potential to be recovered. CD/SBM currently makes up about four percent of the region's recovery rate. If the percentage of this waste recycled were doubled from the current 33% to 66%, then the regional total would rise from 38% to 42%.

The objective of this program element is to facilitate the adoption of waste reduction measures within the construction industry. Utilize the Construction and Demolition Waste Reduction Steering Committees (made up of representatives from the building industry, hauling and processing communities) to develop, promote and critique the waste reduction programs. Utilize the results of FY 1992-93's Construction/Demolition/Land Clearing programs to establish a broader understanding of construction and demolition waste reduction techniques. Encourage implementation of waste reduction techniques on other government construction projects

Petroleum Contaminated Soils (PCS): Monitor and evaluate the processing and disposal of petroleum contaminated soils. Continue to promote the destruction of contaminants instead of landfilling. Coordinate closely with DEQ.

- Monitor the quantities of soils received at all disposal and processing facilities.
- Provide technical assistance and resources to augment DEQ's efforts in properly managing soils.
- Provide direct mailings and follow-ups to all underground storage tank supervisors.

Special Wastes: Evaluate the current management practices and best management practices for special (industrial) waste. The development of regional landfill capacity and advances in processing capabilities drastically altered the waste management system since the special waste chapter was developed. Develop an understanding about these wastes in order to properly manage them.

- Research waste generators through designated facility records, DEQ files and historical data.
- Research recycling, waste reduction, and reuse techniques for these wastes.
- Develop educational and informational programs about best management practices.
- Determine total quantity of waste generated within the region.
- Unmanaged wastes

Bulky Wastes: Bulky, or heavy durable goods provide significant disposal and recycling problems for residents of the region. This program will investigate the best management practices for these wastes.

- Determine best management practice for bulky items and durable goods such as televisions, mattresses, stuffed furniture, toilets.
- Develop recommendations for changes to the system that would facilitate better management.

Organic Wastes: With the closure of the Riedel composting facility, it is important to develop an alternative method of recovering organic wastes. This program will be managed by the Solid Waste Department with considerable support from Waste Reduction staff.

- Identify types of organic wastes, where they are being generated, and estimate quantities.
- Determine technologically feasible recovery alternatives.
- Estimate effects of alternatives on entire regional solid waste system.

Non-Profit Charitable Agency Disposal Credits As tip fees rise, The Salvation Army, Goodwill, and St. Vincent DePaul and other non-profit, charitable organizations are increasingly burdened with unsalvageable material that is dropped off at their facilities after hours. This program provides to eligible non-profit agencies partial funding for disposal cost relief. This funding is calculated using the previous years tonnages disposed, disposal fees, and recycling credit percentages. Each agency's recycling level determines its recycling credit. Provide technical assistance to identify avenues of reuse and recycling for incoming materials.

During calendar year 1990, Goodwill, Salvation Army, and St. Vincent DePaul reused and recycled 3,641, 3,628, and 3,005 tons of material respectively. During 1991, the same agencies reused and recycled 4,302, 4,049, and 2,273 tons of material respectively. Each year, the agencies combined, have reused and recycled over 10,000 tons of material. This a significant amount of material that is reused and recycled within our region. In addition, each non-profit agency employs many less fortunate and underprivileged citizens with mental or physical handicaps.

Neighborhood Clean-Up Program This program provides partial funding to local governments to help defray the costs of community-based clean-up events and illegal dumpsite clean-ups. During FY 1990-91, the Program collected and recycled 1,208 tons of yard debris, 23 tons of other recyclables, and disposed of 696 tons of mixed solid waste. During FY 1991-92, the Program collected and recycled 1,435 tons of yard debris, 102 tons of other recyclables, and disposed of 745 tons of mixed solid waste.

One Percent for Recycling Program

The 1% For Recycling program was adopted by ordinance in 1988. Since then, 34 grants have been awarded and approximately $1,275,000 has been distributed. It provides grants for innovative waste reduction and recycling projects. Individuals, non-profits, businesses or governments not eligible for other Metro or private financing may apply for grants. An advisory committee chaired by a Metro Councilor, and with citizen representatives from Clackamas, Multnomah and Washington Counties, review proposals and make funding recommendations to the Executive Officer and Metro Council.

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Budget & Rate Setting

Fiscal Year 1993-94 Budget

Metro's solid waste programs are funded primarily through fees and charges for solid waste disposal services. The Solid Waste Department also obtains a small portion of its revenues from various sources related to operations and from the investment of available fund balances.

Metro operates on a fiscal year basis which begins July 1. The budget process for the next fiscal year begins in November when Metro's Finance and Management Information Department distributes the budget preparation schedule and issues a budget preparation manual. During November and December, the Solid Waste Department completes its five year financial plan and its budget detail for the next fiscal year. During January, the Finance and Management Information Department reviews the five year plan and the budget detail for accuracy, adherence to directives, policies, and procedures, and identifies any issues of concern. The Finance and Management Information Department meets with Metro departments as required to resolve any concerns. During February, Metro's executive officer completes a review. In March, the budget is submitted to the Council for its approval. The budget must be filed with the Tax Supervising and Conservation Commission and adopted by the Council before June 30.

Prior to budget preparation in November and December, the Department develops a forecast of solid waste disposal tonnages for the next fiscal year. This forecast is an important step in estimating revenue requirements of programs, required fund balances, and operation costs. The regional forecast is disaggregated into (1) forecasts of tonnage by facility to assist in estimating facility-specific costs, and (2) costs which vary by facility. The regional forecast for FY 1993-94 is 1,043 million tons disposed, of which approximately 689,000 tons are expected to be handled at Metro facilities. The tonnage breakdown by industry is shown in the first column of Exhibit 1.

The adopted Solid Waste budget for Fiscal Year 1993-94 identifies gross revenue requirements of $55,526,796. After deductions for miscellaneous revenue, the net budget requirements for FY 1993-94 are $53,409,073.

Budget line items by Departmental Division are shown in the "Total" column of Exhibit 2. The four columns comprising the total -- the Regional User Fee, Metro System User Fee, Regional Transfer charge, and the Transport and Disposal Fee -- are components of the solid waste disposal rate. These concepts are important elements of the rate-setting process, described in the next section.

Rate Setting Method

Metro's rate setting methodology consists of three principal steps. As outlined above, an annual budget is prepared which identifies the costs of the programs which will be funded through solid waste user charges and fees, and a forecast of regional disposal tonnages is developed with a breakdown of disposal tonnages by facility. In a third step, the information developed during the first two steps is combined to develop solid waste rates. The rate structure used by Metro consists of four components, a Regional User Fee, a Metro User Fee, a Regional Transfer Charge, and a Transport and Disposal Fee.

Costs of programs which provide a regional benefit are recovered through the **Tier 1 Regional User Fee**. This fee is assessed on all solid waste disposed in the region. The fixed costs associated with Metro facilities are recovered through the **Tier 2 Metro User Fee**. The variable operating costs of Metro facilities are recovered through a **Regional Transfer Charge**. The costs of solid waste transport and disposal are recovered through a **Transport and Disposal Fee**.

The Tier 1 Regional User Fee is collected at Metro facilities and all franchised facilities. The Tier 2 Metro User Fee, the Regional Transfer Charge, and the Transport and Disposal Fee are collected only at Metro facilities. The forecasted tonnages associated with each of these components is shown in Exhibit 1.

The four rate components are described in detail below:

Regional User Fee. That non-tonnage related portion of the rate that pays for the cost of solid waste programs not directly related to operation of the Metro transfer or disposal facilities. Management and administration, waste reduction programs, system planning and development, and capital renewal and replacement are included in this component. In general, if a program benefits all waste disposers in the region, the cost is allocated to this component. The Regional User Fee rate component is collected from all waste tonnage disposed from the region, including both Metro and non-Metro facilities.

Metro System User Fee. That non-tonnage related portion of the rate that pays for the facility operations, disposal and transportation fixed costs, and debt service for construction of the Metro Central and Metro South transfer stations. The disposal and transportation fixed costs currently refer to the annual fixed amount that Metro is required to pay both Oregon Waste Systems for disposal at the Columbia Ridge Landfill in Arlington and Jack Gray Transport, Inc. for hauling waste to the Columbia Ridge Landfill, regardless of the number of tons processed. The Metro System User Fee rate component is collected from all tonnage disposed at Metro owned facilities.

Regional Transfer Charge. That tonnage related portion of the rate that pays for operation contract costs for Metro owned transfer stations. In general, costs associated with station operations contracts are allocated to this component. A Regional Transfer Charge is collected from all tonnage disposed at Metro owned facilities.

Disposal and Transportation Fee. That Tonnage Related portion of the rate that pays for disposal and transportation costs. These include contract payments to Oregon Waste System and Jack Gray Transport. The Disposal and Transportation Fee is collected from all tonnage disposed at Metro owned facilities.

A description of the costs allocated to each component is included in Exhibit 2. The contingency for each component is based on the proportion of each component's cost in the total system cost.

Revenue from sources other than the disposal rate are allocated to the rate components as a reduction of gross revenue requirements to obtain total net expenses (Exhibit 2, page 4.) Credits to non-profit organizations, *e.g.*, Salvation Army and Goodwill Industries, are considered reductions in revenue and are allocated to the Regional User Fee.

Base rates for each component are calculated by dividing the net total expenses allocated to each component by the appropriate estimated tonnage to be received. That is, each column in the bottom line of Exhibit 2 is divided by the corresponding tonnage estimate from Exhibit 1. Then Metro's excise tax is added to each rate component. The aggregation of the rate components at this point produces a base system rate (Base Rate + Excise Tax). As the final step, Rehabilitation & Enhancements Fees and DEQ Fees are added to the base system rate to obtain the Total Rate. These calculations are shown in Exhibit 3.

The Total Rate is charged uniformly at all Metro facilities. The Regional User Fee is charged at all non-Metro facilities.

Oversight and Decision

The calculation of rates during each budget cycle is overseen by the Rate Review Committee, a group representing public and private interests and chaired by a Metro councilor. The manager of the Budget and Finance Division of the Solid Waste Department provides staff liaison to the committee. The Rate Review Committee passes recommendations to the Metro Solid Waste Committee of the Metro Council, which passes its own recommendations to the full Council. The final rate is adopted by the Council during the Spring, for implementation during the fiscal year beginning July 1.

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Recent Trends and Implications

Metro relies on a variable revenue source -- fees and charges for solid waste disposal -- to cover both fixed and variable costs of the solid waste system. As a matter of principle, reliance on a variable revenue source for recovery of both fixed and variable costs reduces overall revenue stability. As a matter of fact, Metro's revenue base has been eroding over the last several years, and will continue to erode. Under the current system and rate structure, the only feasible response to a declining tonnage base is a continual rise in the per-ton disposal charge. This response only exacerbates the problem, as rising costs drive tonnage and users from the system. As a result, funding for solid waste disposal operations and recycling programs is jeopardized, and a diminishing group of users is burdened with an increasing cost of paying for the whole system.

Recent Trends

During the 1980's waste disposed at Metro facilities had exhibited a mild, upward trend. In 1990, Metro handled 838,000 tons of waste -- over 70 percent of the 1,173,000 tons disposed regionally that year. In 1993, Metro expects to handle 689,000 tons -- less than two-thirds of the 1,043,000 regional tonnage. In a region which has experienced an overall decline in disposal of 3.8 percent per year, Metro's decline has been 6.3 percent per year -- indicating an erosion of "market share" in excess of the regional trend in declining disposal.

There are numerous reasons for this relationship between trends. The two most salient of these are: (1) implementation of reduction and recycling programs, including near-universal curbside collection of recyclables at single family residences; and (2) price responses to rising tipping fees by users of the system.

Reduction and Recycling

In 1990 the regional recycling rate was 32 percent, and 38 percent in 1991. The Regional Solid Waste Management Plan targets a 50 percent rate by the year 2000, and 56 percent by 2010. These rates will be achieved by continuing to support single family programs, by increased targeting of multi-family and commercial generators, and numerous other informational and adjunct programs.

Metro is committed to supporting reduction and recycling goals and targets. However, success of these programs necessarily reduces the disposal tonnage. Thus, the current rate structure induces a conflict between reduction and recycling objectives, and stable financing of the solid waste management system.

Price Responses

In 1988, Metro's rate was less than $20.00 per ton. In 1990 the rate had risen to $44.75 per ton to cover the costs of closing St. Johns Landfill, and to begin paying for the new transfer station system. As the new system was being built, the tipping fee rose approximately $10.00 per ton per year during the subsequent three years, to $75.00 per ton in 1993.

The response by users to rising rates has taken a variety of forms. All have combined to reduce the amount of waste handled by Metro's disposal operations. Some forms of price responses are consistent with Metro's reduction and recycling goals; e.g., source separation and diversion activities. Other responses may simply alter where or how waste is disposed. Most types of price response may be analytically understood to be forms of either "product" differentiation, or avoidance behavior.

Avoidance behavior results when generators seek to reduce or avoid solid waste charges by diminishing or eliminating disposal. Avoidance behavior may be illegal -- as with littering or dumping -- or legal. Varieties of legal avoidance behavior are: (1) source reduction, with which Metro is making progress towards its reduction and recycling goals; but, again at the expense of its revenue stability goals. (2) Emigration, in which generators may physically leave the area. Clearly, the regional effects of the latter response transcend the impact on Metro's tonnage base.

Product differentiation is the identification, separation, and handling of distinct waste substreams. Most forms of product differentiation are focused on identification and removal of commodities of value from the waste stream. In this sense, source separation and diversion may be viewed as forms of product differentiation, motivated *in part* higher disposal costs.

A subtler form of product differentiation is the potential for separating waste into substreams with different opportunity costs of *disposal* -- for example, separating out "dry" waste suitable for a special purpose landfill. The ability to differentiate substreams for different disposal options is a cause of the shift of waste away from Metro facilities. The incentive for this type of activity increases with increasing difference between disposal costs for different types of waste.

Implications of trends

Under the existing solid waste system and current rate structure, recent trends adversely affect Metro's policies on rate stability, equity and predictability:

Stability: under the current rate structure, tipping fees are expected to continue their rise. Staff has run some preliminary scenarios which suggest that tipping fees could reach $123.00 per ton ($100 in 1993-94 dollars) by 2000 if regional recycling goals are reached.

Equity: There will be a rising and *differential* burden on regional rate payers. Large generators, who have the greatest ability to reduce their disposal tonnage, will be able to leave the system more easily than small generators. This will place an inequitable burden on households and small businesses who will be forced to pay for a greater share of the whole system through disposal changes alone.

Predictability: The unknown scope for "product differentiation" renders the predictability of tonnages uncertain, as the substreams comprising the disposal stream are uncertain.

METRO

DATE: July 16, 1993

TO: Solid Waste Advisory Committee and Rate Review Committee

FROM: Terry Petersen, Planning and Technical Services

RE: Metro's authority to assess solid waste fees

Attached for your information is a memorandum From Todd Sadlo, Metro Senior Assistant Counsel, addressing long-term financing of Solid Waste Management Activities.

Written comments or questions should be submitted to Connie Kinney, our Solid Waste Advisory Committee Secretary.

TP:ay
Attachment
cc: Bob Martin, Solid Waste Director
Connie Kinney, Solid Waste Advisory Committee Secretary

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METRO
WASTESHED
YARD DEBRIS
COLLECTION SYSTEM
EVALUATION

JULY 1993

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METRO WASTESHED

YARD DEBRIS COLLECTION SYSTEM EVALUATION

JUNE 1993

The Metro Regional Yard Debris Recycling Plan (RYDRP), adopted in January of 1991, directs Metro to perform an evaluation of the regional yard debris collection system by August of 1993. The purpose of the evaluation is to determine the need for weekly curbside collection or other higher intensity program consistent with market capacity.

This report is presented now to afford all local governments in the Metro wasteshed adequate time to assess the results of their collection systems and to make adjustments, where necessary, to comply with the regional plan by July, 1994. This is the time specified in the regional plan by which yard debris collection systems will enable maximum yard debris recovery, consistent with available processing and marketing capacity.

BACKGROUND

In practice, generators utilize a number of different methods to "get rid of" yard debris. Yard debris is burned, disposed as garbage, illegally dumped in empty lots, ravines, etc., home composted, self-hauled to depots, and recycled through curbside collection systems and community clean-up events. In reality, many households use a combination of these alternatives. The yard debris collection systems were intended to complement efforts at home composting and to substitute for illegal dumping and disposal as garbage.

There are two major documents that govern the implementation of the region's yard debris collection programs. One is the RYDRP. The other is the Department of Environmental Quality (DEQ) conditional approval of Washington County's yard debris depot system. Adopted in January 1990, this approval permitted Washington County to follow its own plan in lieu of the RYDRP.

The conditional approval listed three key elements of a successful yard debris recycling program. These elements are: "1) the changing ability of yard debris processors to receive and process yard debris and to market yard debris products, 2) the effectiveness of the proposed yard debris depots and collection systems, and, 3) the impact of proposed education and promotion programs on the levels of public participation in yard debris separation and recycling efforts."

The conditional approval also stated that the Washington County depot system must meet the performance standards set in OAR 340-60-125(5). These standards specified a target yard debris recycling level for the metro region of 80 percent by July, 1992. These Division 60 rules were re-written, however, as OAR Chapter 340 Divisions 90 and 91 which were adopted in

December, 1992. The new rules dropped the 80 percent yard debris target because the Metro Regional Yard Debris Recycling Plan was adopted.

The RYDRP established an even more ambitious yard debris recycling goal of 67 percent by 1993 and 93 percent by 1996. These targets remain as part of the Plan.

LIMITATIONS OF THE STUDY

In performing this evaluation, there were a number of factors that limited the analysis. Some of these factors are explained below.

Effect of the 1992 Drought

Most of the programs were implemented in the summer of 1992. This was a drought year in which water restrictions were enacted and yard debris generation was probably well below normal. The result would be an overall underestimation of diversion rates.

Lack of Data on Source of Yard Debris Self-Hauled to Depots

Yard debris depots do not collect data on the source of self-hauled yard debris. Thus, there is little data available upon which to base estimates on the amount of yard debris captured by depots from any particular jurisdiction. This presented a serious problem in evaluating depot programs.

Rapidly Changing Conditions

Even as this report is being written, changes are taking place in the region's yard debris recycling infrastructure. Between the writing of the first and second drafts, Portland's City Council approved an ordinance that will increase the frequency of its yard debris collection program from monthly to weekly effective July 1, 1993. At the same time, several of the processors are considering relocating to different sites. The findings of this report should, therefore, be regarded as a "snapshot" of the region's yard debris recycling system at a particular moment in time. It is not anticipated that these changes will significantly impact the conclusions or recommendations presented in this report.

REGIONAL YARD DEBRIS PROCESSING CAPACITY

Both the RYDRP and the Washington County Plan require an intensification of programs to weekly curbside collection if the regional processing and marketing capacity appears adequate to handle the increased flow. As part of this analysis, Metro staff visited each metro area processor that composts yard debris and analyzed the processing capacity based on land, equipment, and method of processing. Though there are also processors that utilize yard debris, along with wood waste, as an input in the production of hogged fuel, they were not included in this analysis. The analysis indicates that, over the past two years, increases in the

number of processors and amount of processing equipment have resulted in a net capacity that is more than adequate to process the estimated flow from a region-wide weekly curbside collection system. The following is an analysis of each individual yard debris processing facility.

Table 1 summarizes the processing capacity of yard debris processors in the region. The columns labeled Rated Capacity summarizes the equipment manufacturers rated capacities of the primary size reduction equipment (i.e., hammer mills and tub grinders) used at each facility. The current total rated capacity listed in the table is 725 tons per hour for processing yard debris.

Equipment manufacturers often overstate the capacity of their equipment. Compost processors report that the actual capacity of the equipment is 1/3 to 1/2 less than the rated capacity. In addition, the actual processing rate of the equipment is further reduced by up to 1/3 for operational inefficiencies such as equipment utilization, maintenance and materials availability.

A *very* conservative calculation of the effective processing capacity for the region is calculated as follows:

Rated capacity x actual capacity factor x operational inefficiencies = effective capacity

725 tons/hour x 1/2 (actual cap. factor) x 2/3 (op. inefficiencies) = 242 tons/hour

For purposes of this analysis, it is assumed that the processors would receive 200,000 tons of yard debris a year if all of the yard debris in the region was collected and processed. If the processors were operating 40 hours per week, the entire 200,000 tons of yard debris could be processed in approximately 20 weeks based on the effective capacity of 242 tons/hour.

Clackamas County's 1992 material flow summary shows that 5 months[1] in the spring and fall account for over 50% of the yard debris collected. May, the highest flow month accounted for approximately 12% of the year's flow. The effective processing capacity could process up to 21% of the year's total flow (42,000 tons) in one month. This indicates that current processing capacity is adequate to keep ahead of these high flow periods. Processors could also operate more than 40 hours per week when material flow is high.

A Metro survey, completed in July 1991, of rated processing capacity indicated that these same facilities had a combined rated capacity of 335 tons per hour. The 216% increase in capacity in 18 months has largely been spurred by the prospects of receiving increased quantities of yard debris. Many of the existing facilities currently have plans to expand further.

Processors have responded to the prospects of increased availability of yard debris by expanding their processing capacity. It appears that there is excess capacity in the region even when the most optimistic projections of yard debris tonnage are compared to the most conservative processing capacity rates.

[1] April, May, June, Oct., and Nov.

Many of the yard debris processors also process additional materials in their operations. Land clearing debris, stumps and construction/demolition wood are most common. Most facilities have additional equipment not listed in this report, that is primarily used for these other materials. However, there is some cross utilization of equipment. This additional equipment could potentially be utilized for yard debris processing if the material flows increased significantly. The processors are constantly adding and upgrading processing equipment. It is reasonable to believe that this will continue especially if more yard debris becomes available for processing.

PROCESSOR FACILITY LOCATIONS

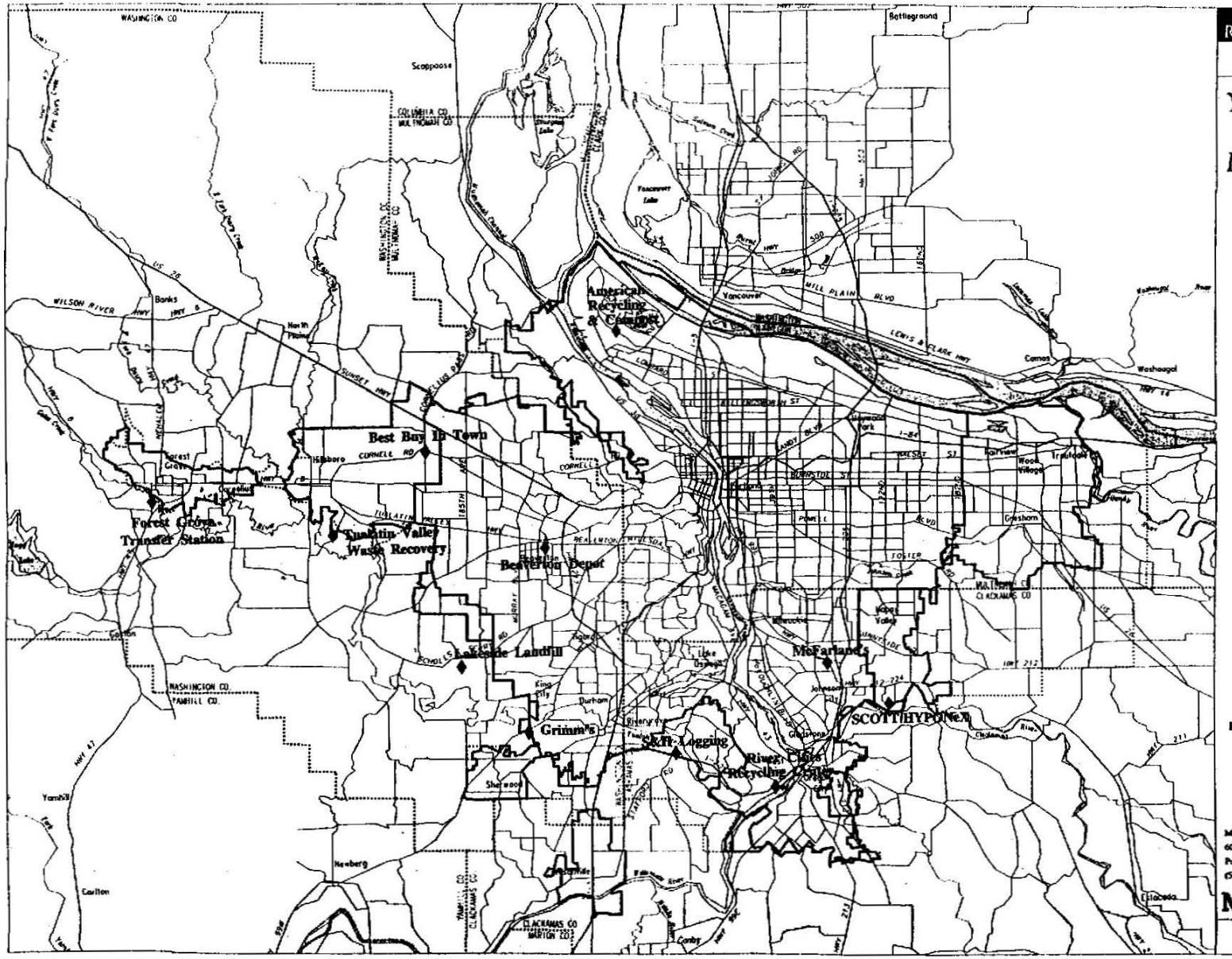
Map 1 shows the location of all yard debris processors in the Metro region. All but three of the yard debris processors are located along the southern borders of the Metro region. The southern tier processors represent greater than 90% of the total processing capacity in the region. In addition to the metro area facilities listed, there is another processor, H & H Wood Recycling, Inc., located just north of the Columbia River in Vancouver, Washington. However, according to H & H, only a very small proportion of it's tonnage is hauled by vehicles bearing Oregon license plates.

TOTAL LAND AREA

Table 2 shows the land area available for composting. A total of 41 acres is dedicated to composting operations. Assuming that the entire year's yard debris (200,000 tons) could be ground to prepare it for composting, the volume of the material would be 800,000 yards based on a volume reduction factor of 2:1 for unprocessed to ground yard debris. The ground yard debris, stacked 6 feet high, would cover an area of 85 acres. This does not account for maneuvering areas through and around the ground material. A conservative factor for allowing maneuvering and access space of 100% could be applied making the total area requirement 85 acres X 2 = 170 acres. This assumes that all material would be on the composting site for a full year. Another measure of capacity can be calculated by dividing the annual tonnage by the available area to determine the land utilization in tons/year/acre. In this example the land utilization would be 1,176 tons/year/acre.

According to the processors, the composting process takes between 6 to 26 weeks. If the average time for material to be on site is 16 weeks, the entire inventory of ground material would turn over three times per year. This effectively increases the capacity of the facilities to compost the material by a factor of three or creates an effective area of 41 acres X 3 = 123 acres.

Five of the facilities use static composting piles that are in excess of six feet high which reduces both the land area required to compost the material and maneuvering area around the pile. The effect is to increase the land utilization. As an example, the Solid Waste Information System Report indicated that Grimm's Fuel Company received 192,000 yards of yard debris in



R L I S

Yard Debris Depots

- Urban Growth Boundary
- Metro Boundary
- County Line
- Burn Ban Boundary
- ♦ Yard Debris Depots

DATA SOURCE

1988 Department of Environmental Quality (DEQ) Burn Ban Boundary map. This map was updated by Metro on April 27, 1993. DEQ has been mailed a copy of the updated map and we are awaiting their review.

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METRO

Plot date: April, 1993

1992. This is equivalent to 24,000 tons (8:1 ratio). The land utilization factor for Grimm's would be 24,000 tons/year ÷ 11 acres = 2,180 tons/acre/year which is almost twice as large as the average calculated earlier in this section. This indicates that processors utilize their land more efficiently than the earlier example and current land area is probably sufficient to process all of the region's yard debris.

The landfills (Hillsboro and Lakeside) could extensively expand the area dedicated to yard debris. Grimm's and Best Buy in Town could triple the size of their current operations if enough yard debris was available. Many of the processors have not completely utilized their land area for composting. They could expand their current operations with no additional acreage.

TABLE 1

MAJOR EQUIPMENT RATED CAPACITY

Facility	July 1991 Rated Capacity* (tons per hour)	January 1993 Rated Capacity* (tons per hour)	Horsepower
American Compost and Recycling	80	40	400
Best Buy in Town	---	20	200
Grimm's Fuel Company	180	350	1600
Tualatin Valley Waste Recovery	---	-0-**	-0-**
Scott Hyponex	---	40	250
Lakeside Reclamation Landfill	25	150	1500
McFarlane's Bark	50	50	500
S & H Logging	---	75	850
River Cities	---	-0-**	-0-**
TOTAL	335	725	5350

*Actual capacity may be 2/3 to 1/2 of manufactures rated capacity
**Rent tub grinder

TABLE 2

LAND AREA AVAILABLE FOR COMPOSTING

Facility	Current Composting Area	Possible Future Expansion of Composting Area
American Compost and Recycling	5	-0-
Best Buy in Town	6	14
Grimm's Fuel Company	11	34
Tualatin Valley Waste Recovery	1	---*
Scott/Hyponex	7	-0-
Lakeside Reclamation Landfill	1	---*
McFarlane's Bark	6	-0-
S & H Logging	2	-0-
River Cities	2	-0-
TOTAL	41	48

*Large land areas would allow composting operations to expand greatly.

AMERICAN COMPOST AND RECYCLING

Site Size and Location

American Compost and Recycling is located on Columbia Boulevard approximately 1/2 mile west of St. Johns Landfill. The site size is approximately five acres, all of which can be used for composting.

Experience

Composting operations began in 1987. Originally the compost product was used to reclaim a mine for the Oregon Department of Minerals and Geology but has been refined for sale to the general public.

Equipment Size and Capacity

Two 200-horsepower tub grinders, each capable of processing 20 tons per hour are used for the initial grinding of yard debris. A deck screen and leased trommel are used for size segregation of the final product.

Current Process

Leaves and grass clippings are processed through one tub grinder while brush and woody debris is processed through the other tub grinder. Size reduced material is placed on a pile which is periodically turned with a front-end loader. The composting process takes about six months. Composted material is size segregated through a trommel and deck screen.

Future Process

The site is currently being paved for public safety and convenience. Windrows will eventually replace the compost piling method. Commercial windrow turners are being investigated for addition to the process.

BEST BUY IN TOWN

Site Size and Location

Best Buy in Town is located on Cornell Road approximately one mile west of 185th Avenue near Hillsboro. The 1-1/2 acre site is used for collection of yard debris and marketing of final product. A second 41 acre site is located in rural Washington County. Approximately six acres are used for composting but up to 20 acres could be used in future operations. The concrete slab used for tipping is 60' square. The site is also a retail outlet for a wide variety of landscape products.

Experience

Best Buy in Town has been receiving yard debris and composting for approximately nine years. Its unscreened compost product is sold as a soil amendment.

Equipment Size and Capacity

A 200-horsepower, 20 ton per hour tub grinder is used for size reduction of the material.

Current Process

Yard debris is collected at the Cornell Road site and is trucked to the rural location for grinding. Windrows are formed which are turned by a plow blade. The final product is composted in two months. The material is marketed unscreened as a coarse compost material.

Future Plans

Screens will be added in the future to provide size segregation to the operation.

GRIMM'S FUEL COMPANY

Site Size and Location

Grimm's Fuel Company is currently located on Route 99, approximately five miles west of the junction with 217. Grimm's currently utilizes slightly over 11 acres of its 45-acre site. The composting area could easily be expanded by five acres if additional material was received. The remainder of the site is potentially available for future development of composting operations but would require modifications.

Experience

Grimm's Fuel Company has been composting yard debris for over ten years on its current site and has developed products which have gained wide acceptance within the Metro area.

Equipment Size and Capacity

Two processing lines are used for preparation of yard debris and conditioning the final compost products. The first line contains a 500 horsepower hammer mill capable of processing 100 tons per hour. It feeds a trommel which is used for final screening of compost product. A 250 horsepower, 50-ton per hour hammer mill processes the oversize material after the trommel. The second parallel line contains a recently installed 850 horsepower hammer mill capable of processing 200 tons per hour. Six aeration beds have been partially constructed for accelerating the composting process.

Current Process

Yard debris is processed through one of the hammer mills for size reduction before it is moved to the composting piles. All material is composted in one large static pile and requires three to five months to complete the composting process. Once the composting process is complete, material is reground through a hammer mill and processed through a trommel screen for size classification. Over-sized trommel rejects pass through a 250 horsepower hammer mill for further size reduction. The final compost product is marketed as garden mulch or mixed with other materials to produce ground cover, mushroom compost or soil.

Future Plans

A trommel screen will be added to the processing line containing the 850 horsepower hammer mill. Cross conveyors will be included to allow for transfer of material between the two lines after initial size reduction and for direct deposition of ground material onto the composting pile. This will add much versatility and flexibility to the processing capacity at Grimm's Fuel Company and will also provide complete redundancy for all critical equipment.

LAKESIDE RECLAMATION LANDFILL (GRABHORN, INC.)

Site Size and Location

Sixty acres in size, Lakeside Landfill is located approximately five miles west of the Progress Exit of Route 217 on Vandermost Road. Yard debris is tipped in an undeveloped portion of the landfill. Size reduced material is composted on a one-acre blacktop slab.

Experience

Grabhorn has been composting yard debris for approximately one year. New products utilizing the finer grade are being developed.

Equipment Size and Capacity

All of the equipment at Lakeside Reclamation is mobile and can be configured into different processing lines depending upon the needs. A 300 horsepower tub grinder capable of processing 50 tons per hour and a 1200 horsepower tub grinder capable of processing 100 tons per hour are used for the primary size reduction. A trommel screen and shaker screens are used for size segregation of finished products.

Current Process

Yard debris is processed through one of the tub grinders and is placed in a large pile on the paved area. The pile is turned with a track hoe to provide aeration. The finished compost is then screened into final products.

Future Plans

The composting process will continue to be refined as needed.

MCFARLANE'S BARK, INC.

Site Size and Location

McFarlane's Bark, Inc. is located approximately 1/2 mile west of Milwaukie Exit of I-205. The site is approximately six acres. Recent commercial development of the surrounding area has led to increased complaints about odor. Relocation to another site is presently under consideration.

Experience

McFarlane's Bark began composting operations in 1972 on this site and has an established compost product.

Equipment Size and Capacity

A 400 horsepower, 40 ton per hour hammer mill is used for initial size reduction of the material. A second 150 horsepower, ten ton per hour hammer mill is available for regrinding the final composted products. Two trommel screens and other screening equipment is also on site.

Current Process

Yard debris is accepted and tipped on a paved area. Leaves and grass are separated from larger yard debris by a screen. The larger yard debris is processed through the 400 horsepower hammer mill and moved to the static composting pile. According to the owner, the composting process takes approximately one and one-half months. Composted material is then size segregated through a trommel screen. Large materials which do not pass through the trommel screen are reintroduced into the composting pile. A second line for processing the finished compost consists of a hand sorting station to remove large pieces of wood before the material is reground and screened into the finished products. The second line is used as a backup to the trommel. The end products are compost, ground cover mulch and soil amendments.

Future Plans

A 300 horsepower, 30 ton per hour hammer mill will be installed after the trommel screen to regrind the oversized, uncomposted materials. The size of the static composting pile has been reduced significantly during the past year although a large volume remains on site. New locations are being sought for the operation since the current site is located in a commercial area and a number of odor complaints have been received.

RIVER CITIES RECYCLING CENTER

Site Size and Location

River Cities Recycling Center is located approximately one mile west of the West Linn/Oregon City Exit of I-205. The two acre site is leased from PGE and is completely paved.

Experience

West Linn has been composting yard debris on this site for approximately five years. Gladstone and Oregon City have been utilizing the site for the past 6 months. The final products are sold directly to residents of the cities and have been well received.

Equipment Size and Capacity

A tub grinder is rented to process the accumulated material. No other processing equipment is on site.

Current Process

The accumulated yard debris is ground through the tub grinder and composted in static piles. The composting process takes approximately two months.

Future Process

There are no immediate plans to change the current process.

S & H LOGGING

Site Size and Location

S & H Logging is located at the Stafford Road Exit off I-205. Two acres of the 8-1/2 acre site are used for windrows of composting yard debris. Use of the site for composting is not consistent with the property's zoning and the composting operation may have to be moved to a different location. Another site is presently under consideration.

Experience

S & H Logging has been composting for approximately two years. Its compost products are sold from the site along with bark and other soil products.

Equipment Size and Capacity

S & H Logging does its initial grind with a 525 horsepower tub grinder that can process 50 tons of yard debris per hour. A second tub grinder rated at 325 horsepower and 25 tons per hour provides additional first grind capacity and is used to regrind composted material.

Current Process

Yard debris is sized reduced through the large tub grinder and then windrowed. The windrows are turned with a front end loader and compost is mature in three to four months. The compost is then re-ground before being sold.

Future Process

Expansion of composting operation is not possible at this site.

SCOTT/HYPONEX

Site Size and Location

SCOTT HYPONeX is located approximately two miles east of the I-205/Route 212 Interchange. The site contains approximately 10-acres of fenced area with approximately 7-1/2 acres prepared for composting and storage.

Experience

SCOTT/HYPONeX began operations at this site in November, 1992. The site currently has very little yard debris processed. The company operates 22 yard debris composting sites across the country. The products from these sites are bagged and sold through retail outlets.

Equipment Size and Capacity

A 225 horsepower horizontal feed grinder capable of processing approximately 40-tons per hour is used both for the primary grinds and finish grinds.

Current Process

Yard debris is ground and placed in windrows which are turned with a front-end loader. The composting process takes approximately 10 to 12 weeks. The finished compost will be trucked to Molalla, Oregon, for final screening, blending and bagging.

Future Plans

The facility is currently investigating the procurement of a compost turning machine.

TUALATIN VALLEY WASTE RECOVERY (HILLSBORO LANDFILL)

Site Size and Location

Tualatin Valley Waste Recovery (TVWR) located at Hillsboro Landfill, provides all yard debris processing for the landfill. Hillsboro Landfill is located approximately one mile south of Tualatin Valley Highway on Minter Bridge Road in Hillsboro. The landfill covers 350 acres. Yard debris is tipped and processed on approximately one acre of the site. This area could be expanded considerably to handle increased volumes of yard debris.

Experience

TVWR has been processing yard debris for approximately 1-1/2 years. The first grind product is sold directly to end users. No composting operations are performed on the landfill site.

Equipment Size and Capacity

A portable tub grinder is rented to process the accumulated yard debris.

Current Process

Source separated yard debris is stockpiled for two to three weeks until a sufficient quantity has been accumulated to ensure that the tub grinder will be utilized for at least two days. The ground product is loaded into trucks for sale directly to commercial customers as a soil amendment.

Future Plans

TVWR is planning to purchase a tub grinder for its yard debris processing.

MARKET CAPACITY FOR YARD DEBRIS PRODUCTS

The purpose of this part of the analysis was two-fold: 1) to reexamine market capacity for yard debris compost since adoption of the *Regional Yard Debris Recycling Plan* (January 1991) and implementation of collection programs in the tri-county area; and 2) to determine if the markets are adequate to utilize an increased supply of material from an expanded system of weekly curbside collection region-wide. The results indicate that there is adequate market capacity to absorb a significant additional quantity of yard debris compost.

Markets Capacity Criteria

The *Regional Yard Debris Recycling Plan* identified the following criteria to evaluate market capacity in the tri-county area:

- Sustained upward trend in sales of product
- Consistent, favorable product test results
- Demonstrated new market penetration
- Annual market analysis comparing yard debris products to other competitive products
- Demonstration that incoming materials are processed and marketed within two years of receipt

Methodology

To determine market capacity, Metro considered the evaluation criteria from the *Regional Yard Debris Recycling Plan* and other factors affecting demand for yard debris products, such as population growth and housing starts. The conclusions and findings are based on a combination of quantitative information on production and sales gathered from yard debris processors, and descriptive information on potential future demand for compost. Information was collected from the following sources:

1. A telephone survey of nine yard debris processors in the tri-county region to determine inventory levels, amount of material sold, and sales compared to competing products. A copy of the survey form is attached to this report.
2. An analysis of regional building permit data and population projections to determine current and potential demand for compost products.
3. A review of new uses for yard debris compost products to evaluate the potential for new market penetration.
4. A review of procurement laws and policies to determine their impact on demand for yard debris products.
5. A review of compost test results from the past two years.

Survey Results of Yard Debris Processors

In February 1993, Metro surveyed nine yard debris processors in the tri-county area to identify the amount of compost products sold in 1991 and 1992; and to document information about trends for future sales of compost products. The processors who participated in the survey were Grimm's Fuel Company, McFarlane's Bark, American Compost and Recycling, Lakeside Reclamation, Best Buy in Town, S&H Logging, River Cities One Stop Recycling Center, Scott's Hyponex and Hillsboro Landfill.

Only Grimm's Fuel and McFarlane's Bark kept records of sales of compost products; the remaining processors gave estimates. Some of the compost products sold by Grimm's Fuel and S&H Logging are blended products that do not contain 100% yard debris. All other processors sell compost products that are 100% yard debris. In addition to its Clackamas facility, McFarlane's operates a retail outlet in Clark County, Washington. Only seven processors sold yard debris compost products in 1991 and 1992. SCOTT HYPONeX and Hillsboro Landfill were also surveyed but are not listed on graphs 1 through 3 because they did not produce compost in 1991 or 1992. However, they both expect to produce compost in 1993. Scott's intends to bag their product and market it at the retail level.

Graphs 1 through 3 show that sales of yard debris compost products increased or remained the same for all processors between 1991 and 1992. All nine processors indicated that demand will continue to increase for their compost products and cited the following six reasons.

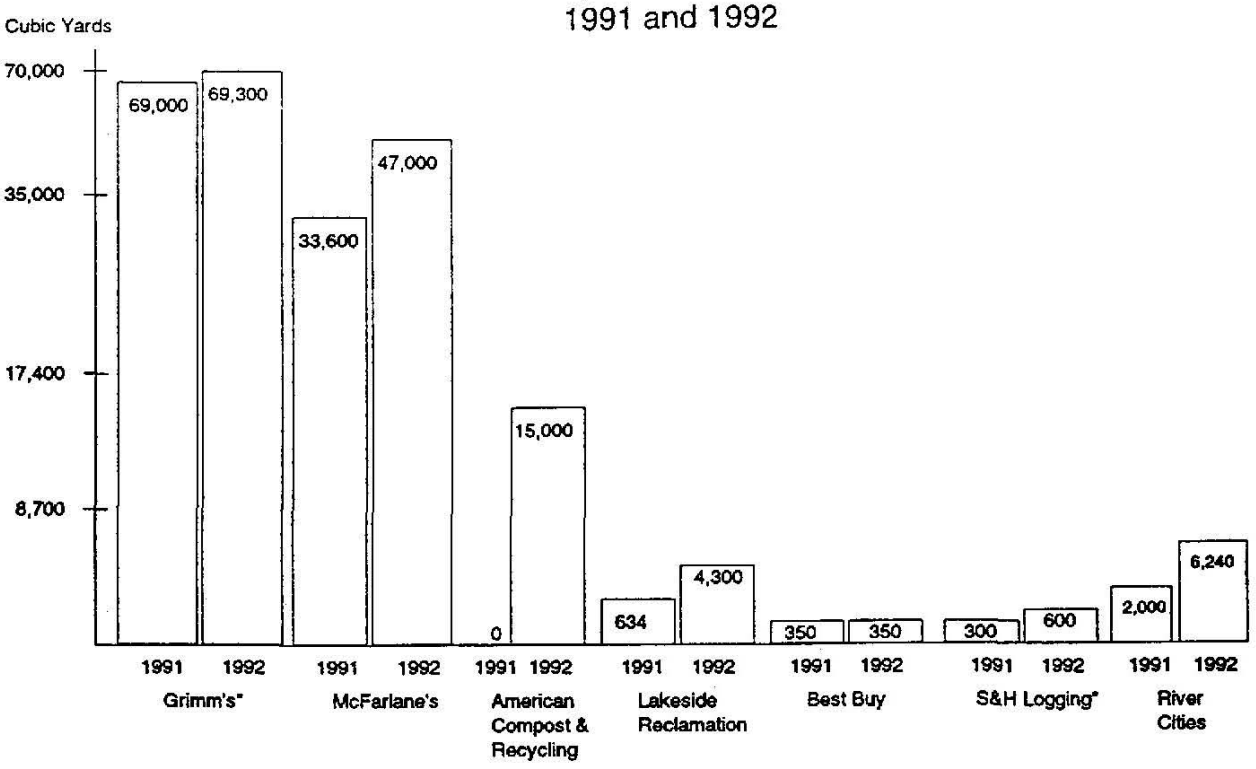
- Bark products have increased in price and decreased in availability.
- The public thinks bagged soil amendments currently on the market are too expensive.
- Successful compost education programs by Metro and others continue to bring in new customers.
- Old customers come back for more compost because they are happy with quality and price.
- Public perception has changed. People want the "look" of compost instead of bark products.
- People are more environmentally aware and more interested in gardening than five years ago.

Finished compost products currently stockpiled at the processing facilities are small or nonexistent.[2] Even though spring, the biggest sales season of the year is approaching, only 12,600 cubic yards of finished product are available, about 17.3% of total sales for 1992. American Compost and Recycling is completely out of product, even though customers are still calling regarding availability.

Unfinished compost products (first grind) at all facilities measure about 32,660 cubic yards, or about 25% of total sales for 1992. About half of the 32,660 cubic yards of unfinished product is located in the pile at McFarlane's Bark. Failure of McFarlane's to market material has been attributed to site limitations and operating inefficiencies rather than lack of demand. Sales of processed (ground once but not composted) yard debris for hogged fuel and/or mulch measured a total of 8,850 cubic yards for 1991 and 1992 from all processors.

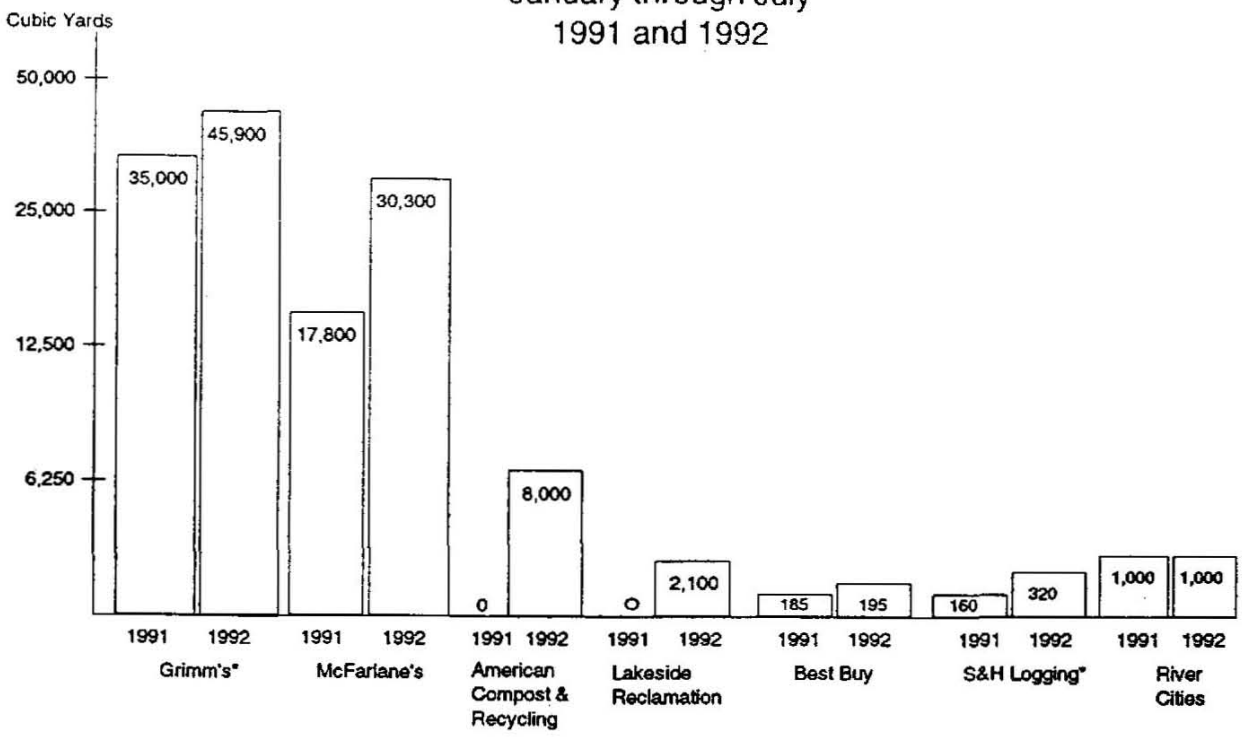
[2]On November 13, 1992, a pile of land clearing debris that had been processed as boiler fuel caught fire. The fire also consumed some demolition debris but, according to Grimm's Fuel Co., did not affect the stockpiled yard debris.

1. Compost Product(s) Sold
1991 and 1992

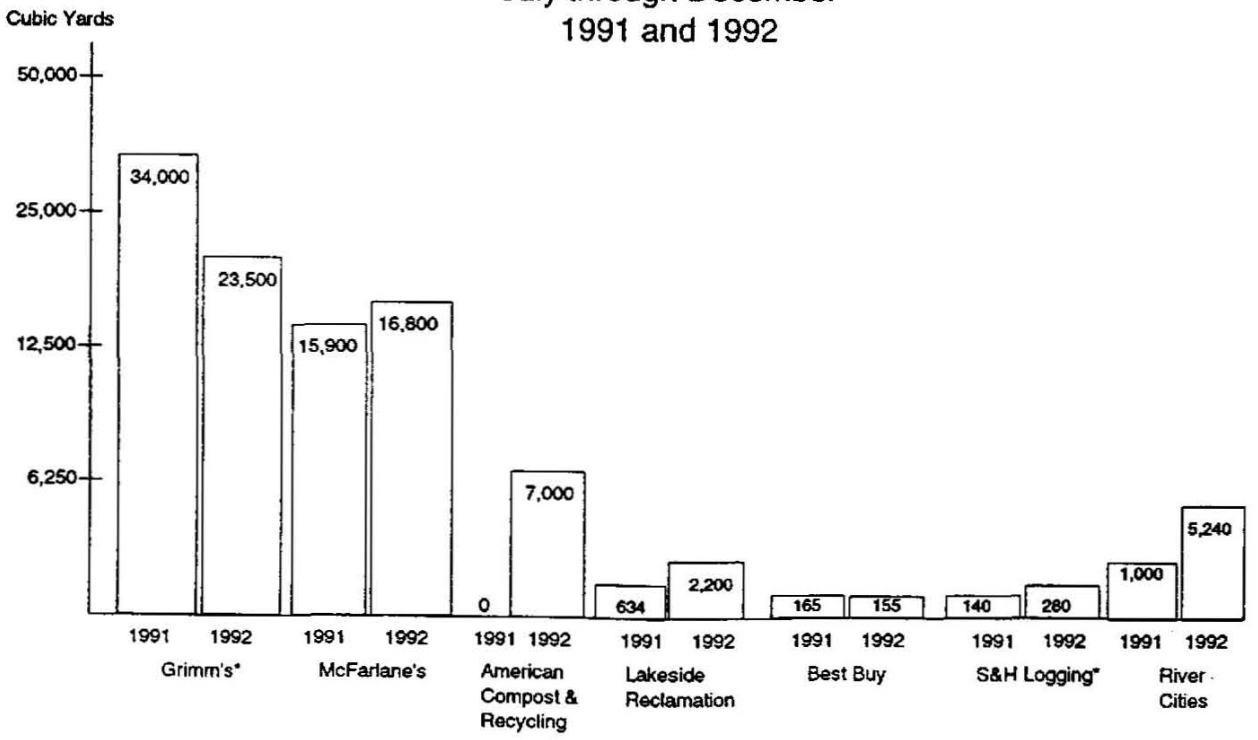


*Includes blended compost products that are not composed of 100% yard debris.

2. Compost Product(s) Sold by Season
January through July
1991 and 1992



3. Compost Product(s) Sold by Season
July through December
1991 and 1992



*Includes blended compost products that are not composed of 100% yard debris.

SUMMARY

Based on responses to Metro's survey, the market for yard debris compost products is good and appears to be increasing. Between 1991 and 1992 compost sales increased by about 24%. Yard debris compost processors surveyed cite consumer preference, competitive price, and environmental awareness as reasons their market will continue to increase. In 1992 American Compost and Recycling began producing and selling compost. SCOTT HYPONeX, a national firm, also entered the compost business in the Metro area. Hillsboro Landfill plans to begin producing and selling compost in mid-1993. This entry into the market of new processors indicates private industry considers the compost market strong and able to handle additional product.

Factors Affecting Demand

Population, Housing Starts and the Construction Market

According to Portland State University's Center for Population Research and Census, the total population for Clackamas, Multnomah and Washington Counties in 1991 was 1,217,200. Metro's population projections predict an average annual increase in population of 1.4% through 2010. Regional employment, population and housing forecasts project an average annual growth rate of 1.7 % through 2010.

The number of new housing starts also affects the demand for yard debris compost, since an increase in construction should result in an increase in landscaping activities. Residential building permit data from the State of Oregon Housing Agency, indicate that in 1992 residential building permits were issued for 7,922 housing units (single and multi-family) within the tri-county area compared to 6,888 in 1991, reflecting a 15% increase.

This compares with an average increase of 6% nationally. If the assumption that population/employment growth and activity in the construction industry results in greater compost use, then projections for the tri-county region indicate a steady, long-term demand for composted materials.

New Market Penetration

Yard debris compost competes with other landscape products such as peat moss, bark dust, composted manure, and mushroom compost. Educational campaigns promoting the value of yard debris compost combined with the higher costs and decreasing availability of many competing products have increased the use of compost compared to competitive products. The survey of processors indicate that yard debris products comprise a larger portion of sales than in prior years. The vice president of the American Society of Landscape Architects confirmed that landscapers will increase their use of yard debris compost products, as long as quality remains high. He identified three uses: soil amendment, mulch and erosion control. The entry of bagged yard debris compost into the retail market should also increase demand.

In addition to replacing other products, there are several new applications for compost products that have the potential to vastly increase demand. These are use of leaf compost for stormwater mitigation and yard debris compost for erosion control. Two demonstration projects are underway to test compost in these applications. The stormwater mitigation project is in its second year and results indicate that leaf compost is an excellent medium to mitigate stormwater runoff.

Another Metro demonstration project is currently testing yard debris compost for use at construction sites as an alternative to strawbales, plastic fencing, and other conventional erosion control techniques. Compost is already utilized for this purpose in Europe. Metro's current study is testing a three inch thickness of compost. Application at this level on construction sites and roadbeds would utilize large volumes of composted material and have the potential to greatly increase demand for the product. In addition to the large volumes required, compost for erosion control develops a market niche for coarser, less mature product than that used as a soil amendment or mulch.

The processors who participated in the Metro survey identified other new uses for yard debris compost in potting mix and horse stall bedding. W&H Pacific consultants who are conducting the stormwater and erosion control projects for Metro report that compost can also be used as a filter to remove acetone, solvent gases and propellants from aerosol cans.

Procurement

The 1991 Oregon Recycling Act requires state and public agencies to purchase recycled products, including compost, if they are available, meet applicable standards, can be substituted for a comparable non-recycled product, and do not exceed the costs of non-recycled products by more than five percent. Yard debris compost meets all these tests.

A September 1992 report issued by the Task Force on Compost and Sludge Use for the State of Oregon recommended that the state use compost for mulching, soil amendments, ground cover and other related uses. Based on trial applications of compost, the state established specifications for different types of uses of compost. In November 1991 they adopted guidelines and procedures for the purchase of compost and sludge.

State projects can utilize large quantities of material and open up a new market for yard debris and other compost products. Metro, and the cities and counties within the Metro region have also adopted procurement ordinances as a requirement of the *Regional Solid Waste Management Plan*. These ordinances in combination with the state purchasing law should result in an increased demand for compost products. Educational programs for potential public sector users, such as public works, transportation and parks department can be expanded should there appear to be an over-supply of material.

Testing

Metro began testing samples of yard debris compost from Grimm's Fuel and McFarlane's Bark in April 1986. Samples are tested twice annually by the Oregon State University and other

testing laboratories for nutrient content, soluble sales, pH, particle size/water retention capacity, bulk density, carbon-nitrogen ration, herbicides/pesticides, germination and toxicity, pathogens and weed suppression characteristics. The last sample was tested in March 1993. Test results have been within acceptable limits, although broad standards have yet to be completed. The fact that yard debris compost is tested and continues to be of consistent high quality helps processors in marketing their product.

Market Capacity Findings

1. A telephone survey of nine yard debris processors in the tri-county area indicates that nearly all yard debris composted in 1991 and 1992 was marketed. Sales trends indicate a steady market for the material.

2. The use of compost increased in the last two years and this trend is expected to continue in subsequent years. New companies have located in the area based on their analysis of potential demand.

3. Population projections indicate continued growth in the tri-county area at a rate of approximately 1.4% each year through 2010. Regional population, employment and housing forecasts project an average annual growth rate of 1.7% through 2010. This would suggest growth in the economy and in new construction with an accompanying increase in building activity.

4. New housing starts based on residential building permit data increased approximately 15% in the tri-county area between 1991 and 1992. The national average for the same period was about 6%. This level of new residential construction suggests a steady demand for landscaping products, including yard debris compost.

5. Potential new applications for compost in stormwater mitigation and erosion control can utilize large volumes of compost and will provide new markets. Nurseries could use large amounts of yard debris compost in potting mix.

6. Government procurement and price preferences for compost will increase the purchase of compost products by state and public agencies.

7. Laboratory test results in 1991 and 1992 indicate that compost samples submitted by Grimm's Fuel and McFarlane's Bark were of consistent high quality. Continued testing and adoption of standards should result in a material that will remain competitive with other products.

YARD DEBRIS COLLECTION PROGRAMS

Clackamas County, Happy Valley, Lake Oswego and Milwaukie

Standard cans, kraft bags, and tied bundles are all acceptable. Clackamas County's program, as implemented in January 1992, diverted considerably less yard debris per capita than its pilot program. This may be partly attributable to the drought. However, it was also due, in large part, to the withdrawal of the hauler supplied containers. This is further evidenced by the greater tonnage being captured by Tualatin's program which also makes use of hauler supplied carts. Lake Oswego, which began its program in October, 1992, has a garbage rate structure with an increasing marginal cost for the second can. This gives a strong incentive to recycle. Milwaukie began its weekly curbside collection program in April of 1992.

Oregon City, Gladstone and West Linn

Oregon City and Gladstone have long standing curbside yard debris collection programs. Oregon City's is unique in that, for a time, the charge for the program was included in residents' water bills and there were few limitations on the amount of yard debris that could be placed at the curb for collection. Gladstone's program has been funded from the City's general fund. West Linn has a municipal composting depot but no curbside collection. During the past year these cities' programs have been managed by a contractor for the River Cities Environmental District.

Portland

The City of Portland began curbside yard debris collection in April of 1992. Grass was a major component of the yard debris collected. Portland haulers currently collect yard debris monthly, though nine had an every other week collection program during April, May, and June of 1992. An every other week collection program appears to divert significantly more yard debris than monthly collection. Portland will increase the frequency of pickup to every other week, city-wide beginning July, 1993.

In addition to its curbside program the City's Bureau of Maintenance collects Fall leaves from some residential streets and composts them. The amount of leaves collected in the Fall of FY 1991-92 was reported to be 5,200 tons[3].

Gresham, Fairview, Troutdale and Wood Village

These four cities jointly planned and implemented a weekly curbside collection program in September of 1992. Customers have a choice of using either a standard 32-gallon can provided by the customer or a 60-gallon roller cart supplied by the hauler.

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[3] *Bureau of Maintenance Recycling Report, November, 1992.*

Washington County and Cities

Washington County's yard debris program consists primarily of depots and an on-call fee-for-container service. In addition, there are three cities within the County that provide curbside collection of yard debris. Tualatin has implemented weekly collection using automatically tipped roller carts and no exemptions from the program. The cities of Durham and Sherwood also provide curbside collection. Durham's is a weekly program while Sherwood's is quarterly.

SYSTEM PERFORMANCE

In general, comparisons among different jurisdictions may not be valid as average lot size and generation rates most likely differ from one jurisdiction to another. However, the substantial difference between the estimated recovery rates of different types of programs clearly indicate that jurisdictions which use weekly curbside collection as a major element of their programs have a significantly higher recovery rate than do jurisdictions with less-than-weekly collection and those that rely primarily on depots.

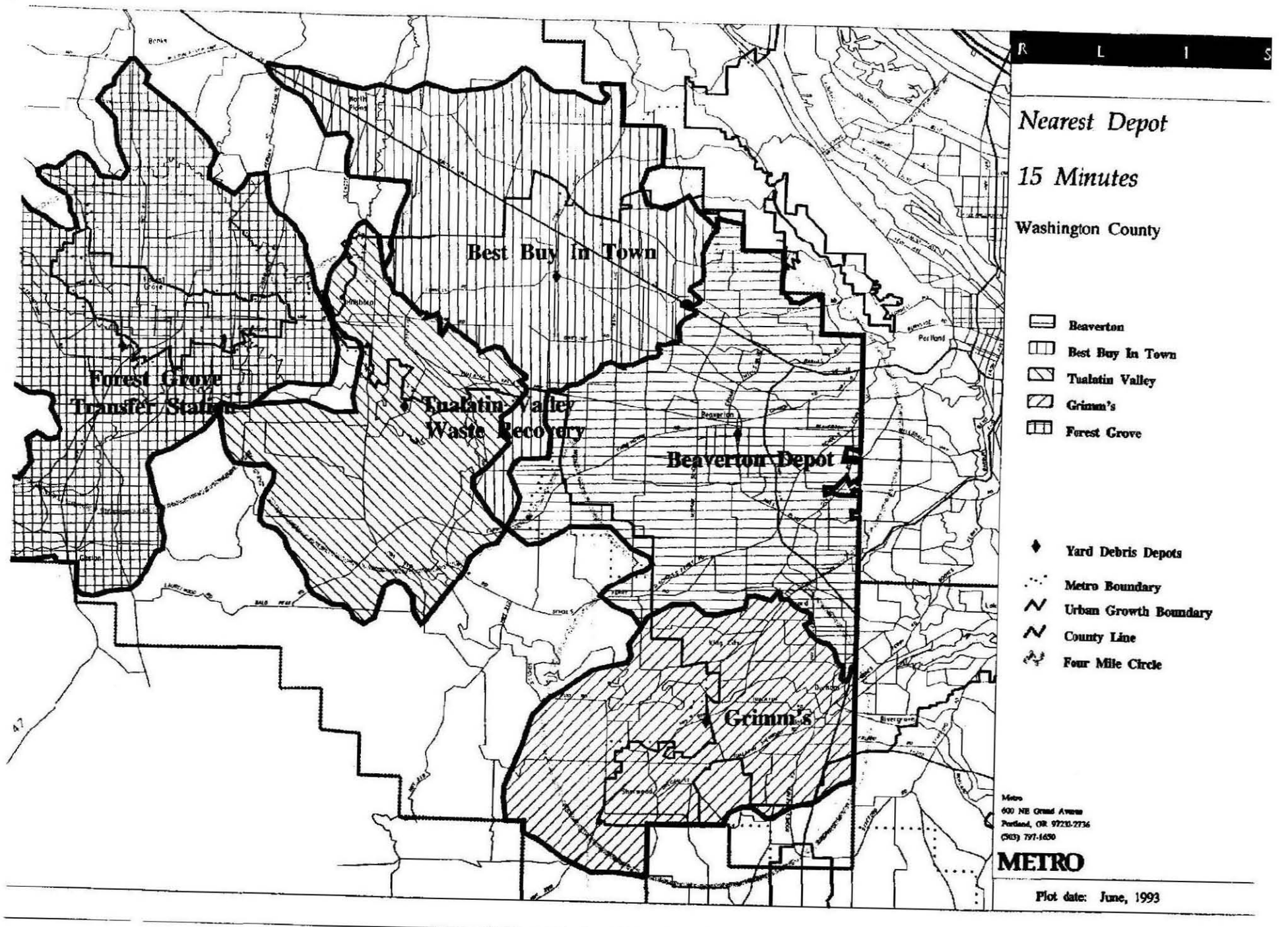
Depots are an element of each of the jurisdiction's programs. In 1991, Metro surveyed customers at Grimm's Fuel and McFarlane's Bark. The survey included questions about the kinds of material brought to the facilities (yard debris, land clearing debris, demolition wood waste, etc.) and the county of origin of each respondent. Table 3, below summarizes the survey results of those respondents self-hauling yard debris. I-205 was arbitrarily chosen as the dividing line between Multnomah County and East Multnomah County. For the purpose of this analysis, all Multnomah County yard debris is credited to the City of Portland and all E. Multnomah County yard debris is credited to the east Multnomah County Cities of Gresham, Fairview, Wood Village and Troutdale.

TABLE 3

ORIGIN OF SELF-HAULED RESIDENTIAL YARD DEBRIS

	DEPOT			
	McFarlane's		Grimm's	
COUNTY OF ORIGIN	No.	%	No.	%
Multnomah (west of I-205)	23	29	21	24
Multnomah (east of I-205)	8	10	1	1
Clackamas	45	58	21	24
Washington	2	3	44	51
Total	78	100	87	100

The major yard debris processors estimate that about half of the yard debris tonnage they process comes from residential self-haul. The following table breaks out the estimated residential self-haul tonnage and allocates it to a county of origin in the same proportion as the number of respondents from Table 3.


Best Buy In Town
Forest Grove
Transfer Station
Tualatin Valley
Waste Recovery
Beaverton Depot
Grimm's
Nearest Depot
15 Minutes
Washington County
Beaverton
Best Buy In Town
Tualatin Valley
Grimm's
Forest Grove
Yard Debris Depots
Metro Boundary
Urban Growth Boundary
County Line
Four Mile Circle
Metro
600 NE Grand Avenue
Portland, OR 97232-2736
(503) 797-1650
METRO
Plot date: June, 1993

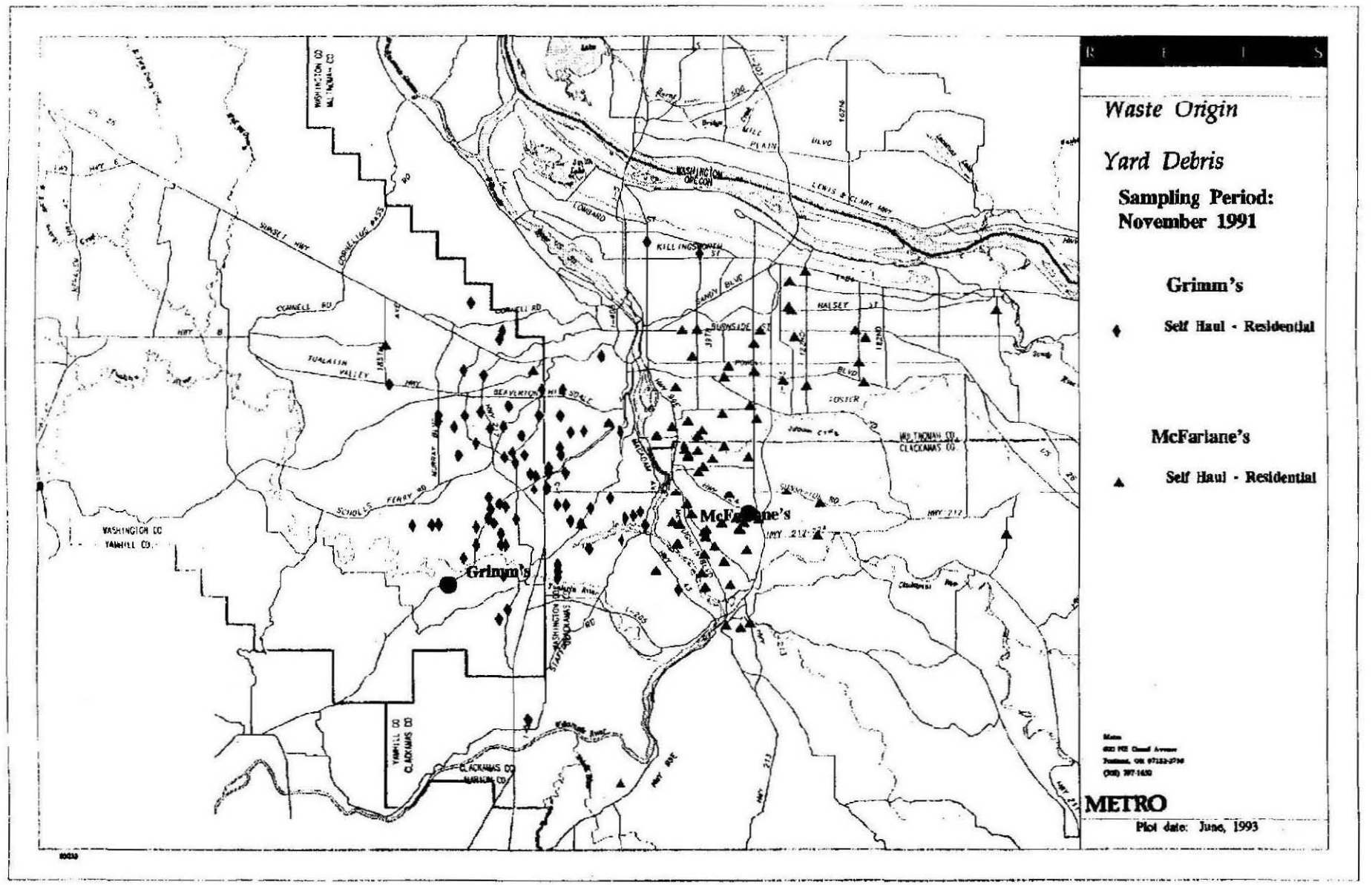

Grimm's
McFarlane's
Waste Origin
Yard Debris
Sampling Period:
November 1991
Grimm's
Self Haul - Residential
McFarlane's
Self Haul - Residential
METRO
Plot date: June, 1993

TABLE 4
ALLOCATION OF SELF-HAULED RESIDENTIAL YARD DEBRIS

	DEPOT						
	McFarlane's			Grimm's			
County Of Origin	Total Tons*	Self-Haul Tons**	%	Total Tons	Self-Haul Tons	%	Total Self-Haul Tons
Multnomah	8,306	4,153	29	5,754	2,877	24	7,030
E. Multnomah	2,864	1,432	10	239	120	1	1,552
Clackamas	16,613	8,306	58	5,754	2,877	24	11,183
Washington	860	430	3	12,226	6,113	51	6,543
Total	28,643	14,322	100	23,973	11,987	100	26,308

*SWIS Report, Feb 15, 1993.
**Estimated to be half of total tonnage.

The numbers in the last column of Table 4 are the total tons of yard debris from each area's program estimated to be recovered at depots. In Table 5 on the following page, these figures are added to recovery from other program elements to arrive at a total recovery tonnage for each area's program.

TABLE 5
TONNAGE DIVERTED BY VARIOUS YARD DEBRIS COLLECTION PROGRAMS

Program Elements	LOCAL JURISDICTION				
	Clackamas County and Cities (excl. River Cities)	Oregon City, West Linn, Gladstone	Portland	Gresham, Wood Village, Fairview, Troutdale	Washington County and Cities
Curbside*	4,915	see Depots**	5,595	3,089	719
Grimm's & McFarlane's	11,183	---	7,030	1,552	6,543
Other Depots	--	3,125	--	--	1,381
Fee-for-Container	194	N/A	339	479	2,008
City Leaf Program	None	None	5,200	None	None
TOTAL	16,292	3,125	18,164	5,120	10,651

*Based on data reported to Metro by local governments. Partial data was extrapolated to an annual estimate using a scaling factor derived from patterns of tonnage received by processors over a four year period.
**Yard debris collected curbside in Gladstone and Oregon City is taken to the River Cities depot in West Linn. The curbside tonnage is thus included under the Other Depots" category.

Table 5 reveals that depots are critically important to most jurisdictions' programs, even when a curbside program is in place.

YARD DEBRIS GENERATION AND DIVERSION RATES

Since this evaluation is specified in the Regional Yard Debris Recycling Plan and focuses on the residential sector, the generation estimates used were based on the Metro Regional Yard Debris Recycling Plan estimate of 5.8 cubic yards per household per year. It should be noted that this methodology is different from that used for the Metro Recycling Level Survey. The Recycling Level Survey calculated generation as the sum of yard debris tonnage recycled at commercial processors and tonnage disposed. This analysis, however, based generation on the 5.8 cubic yards per household estimated in the Regional Yard Debris Plan and includes material burned, home composted, chipped or hauled by landscape services. As a result, the regional weighted average recovery percent from Table 6 will be different from the figure calculated for the Recycling Level Survey.

Though this may be an accurate regional average, it should be recognized that the lot sizes and yard debris generation rates differ from one municipality to another. On an individual basis, yard debris diversion rates may tend to be overestimated for jurisdictions with many greater-than-average size lots and underestimated for jurisdictions with many less-than-average size lots.

TABLE 6
DIVERSION RATES OF VARIOUS YARD DEBRIS
COLLECTION PROGRAMS

Jurisdiction	Number of Occupied Households*	Generated Tonnage**	Collected Tonnage	Avg. lbs Per Hsld/Week	Percent Recovery
Clackamas Cnty UGB (excl. River Cities)	34,288***	24,859	16,292	18.36	66
Oregon City, West Linn, Gladstone	10,605	7,689	3,125	11.3	41
Portland UGB, Maywood Park	138,884	100,690	18,164	5.0	18
Gresham, Fairview, Troutdale, Wood Village	19,599	14,209	5,120	10.0	36
Washington County and Cities	73,872	53,557	10,651	5.3	20

*Figures from 1990 census, updated with building permit information. Census categories used were "One Detached", "One Attached", and "Other." Includes customers exempted from the curbside program.
**Number of households multiplied by 0.725 tons/year. Generation figures are from the Regional Yard Debris Recycling Plan and include the amount of yard debris estimated to be home composted and chipped by landscape services.
***Combined population of Unincorporated County and the cities of Happy Valley, Lake Oswego, and Milwaukie.

The figures presented in Table 6 must be interpreted with caution. It should be kept in mind that the recovery rates presented in the far right column of the table are for all elements of each jurisdiction's program. They are not comparisons of one curbside program with another or of curbside vs. depot programs. Though Clackamas County does have a very effective curbside collection program, its high recovery rate is due, in large part, to the proximity of McFarlane's Bark, a major depot near a densely populated area.

The east Multnomah County Cities, are not serviced by a convenient depot, yet they have a very good diversion rate. In contrast to all of the other jurisdictions, which divert more yard debris from depots than from curbside collection, two-thirds of this area's diversion is attributable to a very effective curbside collection program. Portland and Washington County, without effective curbside collection are not diverting yard debris at as high a rate as jurisdictions with depots and weekly curbside collection.

WASHINGTON COUNTY'S PROGRAM

When the EQC listed yard debris as a principal recyclable material in the fall of 1988, curbside collection became the service standard for cities over 4,000 and the areas within their urban growth boundaries. In response, Washington County local governments jointly developed a yard debris plan characterized by a low density depot system supplemented by an on-call fee-for-container recycling service. This plan was advanced under EQC administrative rules which permitted local governments to develop such alternatives - as long as they could be shown to be as effective as curbside.

In January of 1990, the Dept. of Environmental Quality granted conditional approval to the plan. One of the conditions of the approval was that, should the system fail to perform adequately, Washington County and the cities within it would be required to conform to the Regional Yard Debris Recycling Plan and implement curbside collection if warranted by the regional processing and marketing capacity.

Depots

Altogether, depots in Washington County were open more hours than anticipated in their Plan. According to the Plan, two depots were to be located in Beaverton, one of which was to be open six days a week. Since that depot would be located in the County's major population center, this was a key element of the plan. Only one depot was sited in Beaverton, and it has operated one day per month. Effort was made to site the second depot in Beaverton. An RFP was issued and proposals were received. The proposals were not acted upon due to the fact that both the County and Beaverton recognized the need for a future curbside collection system. The City and County determined that establishing a fully operational depot, once preliminary planning was underway to establish a curbside collection system, was not necessary.

The Nearest Depot Map shows a polygon surrounding each of the five Washington County Depots. Each polygon envelops the area for which its respective depot is the nearest one in terms of driving time. Table 7 shows the number of occupied single family homes within each polygon. It indicates that 41,174 homes are served by the Beaverton Depot.

TABLE 7

HOUSEHOLDS SERVED BY NEAREST DEPOT

Nearest Depot	Single Family Households, 1990 Census	Additional Through 12/31/92	Total No. Single Family Households
Beaverton	39,310	1,864	41,174
Grimm's	9,239	958	10,197
Best Buy in Town	13,056	1,557	14,613
Tualatin Valley	6,104	181	6,285
Forest Grove	5,436	169	5,605
Totals	73,145	4,729	77,874

It is difficult to estimate how many Washington County residents make use of the depot system. The major part of Beaverton is serviced by a depot that operates only one Saturday per month. It may be that Beaverton residents also make use of more distant depots such as Grimm's Fuel Co. However, the inconvenience, need for access to a truck or trailer, and relatively long travel time, make it seem unlikely that Beaverton residents are recycling yard debris at a very high rate at distant depots.

Projected vs. Actual Performance

The Washington County plan appears to establish a "baseline" collection for their system in 1988 and 1989 at about 9,600 tons. Over four years, recovery was forecast to grow by 53% to over 14,000 tons. Figures for 1992 indicate that the Washington County yard debris collection system as a whole is only 4% greater than the estimated 1988-9 baseline of 9,600 tons.

TABLE 8

PROJECTED AND ACTUAL TONS FOR WASHINGTON COUNTY

System as Implemented	Actual Tons (1992)	System as Planned	Projected Tons (1992)
Grimm's & McFarlane's	6,543	Grimm's*	4,215
West Beaverton	330	Garden Home\Beaverton	1,771
Forest Grove	27	Forest Grove	553
Best Buy	24	Beaverton	3,932
Hillsboro	1,000**	Hillsboro	3,485
Tualatin weekly curbside	661	Tualatin curbside	526
Sherwood quarterly curbside	33	Sherwood quarterly curbside	188
Durham weekly curbside	25	Durham weekly curbside	49
"Fee for Container"	2,008		
TOTAL	10,651	TOTAL	14,719

*The Wash. County yard debris plan did not include an estimate of yard debris originating within the County but recovered at McFarlane's.
**Metro believes that the figure supplied to Washington County by Hillsboro Landfill (3,797 tons for the first six months of 1992) overestimates the amounts of material brought to that facility by residential self-haul. Metro believes the actual amount to be perhaps one tenth that amount. However, for this analysis, Hillsboro has been credited with a full 1,000 tons.

CONCLUSIONS

Self-haul to depots is a vitally important part of the regional yard debris recycling effort. However, the results of this study indicate that self-haul augments rather than substitutes for curbside collection. Programs that rely principally on self-haul do not capture yard debris at as high a rate as do programs that have frequent curbside collection.

DEQ rules and Metro's Regional Yard Debris Recycling Plan specify that if the regional processing and marketing capacity are found to be adequate to absorb the supply of yard debris, local jurisdictions will be required to provide weekly on-route yard debris collection in 1994. The analysis shows that there is a surplus of processing capacity in the region and that, by all indications, there is also enough market demand to absorb additional compost. It is therefore recommended that Washington County and the City of West Linn include curbside yard debris collection in their programs.

The experiences of local governments has shown that other factors in addition to frequency of collection determine the amount of yard debris that is recycled. Such factors include the type of containers used and bans on yard debris in garbage cans. Therefore, jurisdictions may be able to show that programs of less than weekly collection can achieve diversion rates comparable to those achieved by weekly collection.

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M E M O R A N D U M

METRO

Date: July 15, 1993

To: Terry Petersen, Planning and Technical Services

From: Todd Sadlo, Senior Assistant Counsel

Regarding: LONG-TERM FINANCING OF SOLID WASTE MANAGEMENT ACTIVITIES

By memo dated May 10, 1993, you asked several questions regarding Metro's authority to assess solid waste fees. I have attached your memo for the convenience of the reviewer. This memo first discusses Metro's solid waste management authority in general terms, and then answers your particular questions.

Metro's General Authority, Express and Implied

Metro's authority is derived from the 1992 Metro Charter and Oregon statutes. An amendment to the Oregon Constitution in November of 1990 gave the electors of a metropolitan service district the authority to adopt a charter.[1] The Constitution states that under a charter, Metro's officers shall "exercise all the powers and perform all the duties, as granted to, imposed upon or distributed among district officers by the Constitution or laws of this state, by the district charter or by its authority."[2] Both the Oregon Constitution and state statute therefore contemplate that an adopted charter is a grant of authority independent from authority granted to Metro by way of Oregon statutes.

The Metro Charter emphasized basic principles regarding Metro's authority that are also contained in the Oregon Constitution and Oregon statutes. The Charter states that:

> "Metro has jurisdiction over matters of metropolitan concern. Matters of metropolitan concern include the powers granted to and duties imposed on Metro by current and future state law and those matters the council by ordinance determines to be of metropolitan concern. The council shall specify by ordinance the extent to which Metro exercises jurisdiction over matters of metropolitan concern."[3]

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[1]Or. Const., Art. XI, sec. 14.

[2]Id., subsec. (2). The legislature subsequently adopted ORS 268.710(2), containing the same statement of the authority of Metro Officers.

[3]1992 Metro Charter, sec. 4.

The Charter also states that:

> "When carrying out the functions authorized or assumed under this charter: (1) Metro has all powers that the laws of the United States and this state now or in the future could allow Metro just as if this charter specifically set out each of those powers, (2) the powers specified in this charter are not exclusive, (3) any specification of power in this charter is not intended to limit authority, and (4) the powers specified in this charter shall be construed liberally."[4]

Metro therefore derives broad express authority from the Charter and from Oregon statutes.[5]

It has been customary to refer to the general power and authority of a government to make and enforce laws as the "police power." The "police power" has been described as "the power to make all laws which in contemplation of the Constitution promote the public welfare."[6] "The police power embraces the whole sum of inherent sovereign power which the state possesses, and, within constitutional limitations, may exercise for the promotion of the order, safety, health, morals, and general welfare of society* * * *"[7] The term "police power," however, is no longer in general use in Oregon courts.[8] The concept is being

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[4]1992 Metro Charter, sec. 9.

[5]ORS chapter 268 includes the following general grants of authority:

- ORS 268.300(1): "A district shall constitute a municipal corporation of this state, and a public body, corporate and politic, exercising public power. It shall have full power to carry out the objectives of its formation* * * *
- ORS 268.360(1): "For purposes of its authorized functions a district may exercise police power and in so doing adopt such ordinances as a majority of the members of its council considers necessary for the proper functioning of the district."

[6]Christian v. LaForge, 194 Or. 450, 242 P.2d 797, 801 (1952), quoting State v. Redmon, 134 Wis. 89, 105, 114 N.W. 137, 14 L.R.A., N.S., 229, 126 Am.St.Rep. 1003, 15 Ann.Cas. 408.

[7]Id.

[8]See Linde, "Without Due Process," 49 Or.L.Rev. 125, 147 (1970). " 'Police power' terminology* * *ought to be completely abandoned, shunned in opinions, proscribed from briefs, and blue-penciled whenever it creeps into sight."

supplanted by the view that the state has complete ("plenary") legislative and administrative authority that is limited only as specified in the state or federal constitution.[9]

Metro's authority is not plenary, but is either granted by statutes or by home rule provisions of the State Constitution.[10] It is clear from the Metro Charter and statutory references above that Metro has been granted very broad general authority to carry out its designated functions, in any manner that Metro deems appropriate. This interpretation is consistent with the modern view of the extent of implied local government authority, set forth in Burt v. Blumenauer:

> "In recent times, the judicial demand for explicit expressions of authority and recognition of only attendant authorities 'necessarily implied' by those expressed has given way to an interpretation that local governments have broad powers subject only to constitutional or preemptive statutory prohibitions."[11]

Metro's authority to take whatever steps it deems appropriate to carry out its designated functions is therefore only limited to the extent that it is expressly or impliedly preempted from acting by its Charter, by statute, or by the state or federal constitution.[12]

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[9]Burt v. Blumenauer, 299 Or. 55, 696 P.2d 168, 171 (1985). City of Hillsboro v. Purcell, 306 Or. 547, 761 P.2d 510, 512 (1988). Eckles v. State of Oregon, 306 Or. 380, 760 P.2d 846, 858 (1988).

[10]Linde, supra, at 152.

[11]Burt v. Blumenauer, supra, at 172. The early view of municipal authority, known as "Dillon's rule," was that: "a municipal corporation possesses and can exercise the following powers, and no others: First, those granted in express words; second, those necessarily or fairly implied in or incident to the power expressly granted; third, those essential to the accomplishment of the declared objects and purposes of the corporation,--not simply convenient, but indispensable. Any fair, reasonable, substantial doubt concerning the existence of power is resolved by the courts against the corporation, and the power is denied." (Footnote omitted, emphasis in original.) 1 Dillon, Municipal Corporations, §237, at 448-50 (5th ed. 1911), cited in Burt v. Blumenauer, supra, at 171 (1985). See also Pioneer Real Estate Company v. City of Portland, 119 Or. 1, 247 P. 319 (1926). Colby v. City of Seaside, 80 Or. 73, 156 P. 569 (1916). Naylor v. McColloch, 54 Or. 305, 103 P. 68 (1909).

[12]See also, City of Beaverton v. International Association of Fire Fighters, Local 1660, 20 Or. App. 293, 531 P.2d 730, 733 (1975): "General grants of power contained in a city charter are sufficient to grant powers not specifically mentioned in the charter, particularly where the charter contains language saying that it is to be liberally construed."

Metro's Authority over Solid Waste Management

Metro's authority over solid waste is also derived from the Charter and Oregon statutes. Section 6 of the Charter ("Other Assigned Functions"), states simply that "Metro is authorized to exercise the following functions: (1) Acquisition, development, maintenance and operation of: * * *(c) facilities for the disposal of solid and liquid wastes.* * *(2) Disposal of solid and liquid wastes; * * *and (5) Any other function required by state law* * * *"

State statute requires Metro to implement solid waste reduction programs in the region.[13] Metro is also required to report its progress in implementing its solid waste reduction program to the Environmental Quality Commission every two years.[14]

ORS chapter 268 includes an extensive list of Metro powers related to solid and liquid waste disposal, many of which Metro is currently exercising. ORS 268.030 states that "(3) Subject to the limitations of state law, the district may provide: (a) Metropolitan aspects of sewerage, solid and liquid waste disposal* * *" and local aspects of those public services transferred to the district by agreement.

ORS 268.317(1) gives Metro the authority to "Build, construct, acquire, lease, improve, operate and maintain landfills, transfer facilities, resource recovery facilities and other improvements, facilities or equipment necessary or desirable for the solid and liquid waste disposal system of the district* * * *" Metro can also require both generators and haulers of solid or liquid waste "* * *to make use of the disposal, transfer or resource recovery sites or facilities of the district or disposal, transfer or resource recovery sites or facilities designated by the district."[15] Furthermore, by statute Metro can:

> "Regulate, license, franchise and certify disposal, transfer and resource recovery sites or facilities; establish, maintain and amend rates charged by disposal, transfer and resource recovery sites or facilities; establish and collect license or franchise fees; and otherwise control and regulate the establishment and operation of all public or private disposal, transfer and resource recovery sites or facilities located within the district."[16]

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[13]ORS 459.340.

[14]ORS 459.345.

[15]ORS 268.317(3),(4).

[16]ORS 268.317.

Metro has also been given, and has exercised, authority to establish the Regional Solid Waste Management Plan (RSWMP) as a functional plan.[17] The premise of the RSWMP is that solid waste management is an activity of metropolitan significance, requiring regional planning and control.[18] ORS 459.095 further establishes Metro's position of authority in regional solid waste management by stating that:

> "(1) No ordinance, order, regulation or contract affecting solid or liquid waste disposal, resource recovery or solid waste management shall be adopted by a local government unit if such ordinance, order, regulation or contract conflicts with* * *a solid waste management plan or program adopted by a metropolitan service district and approved by the department (of Environmental Quality) or any ordinances or regulations adopted pursuant to such plan or program."

As a general conclusion, Metro has been granted extensive express authority to manage solid waste in the metropolitan area. By charter, statute and current judicial interpretations, Metro also has broad implicit authority to take action to carry out its designated functions in any manner that is not expressly foreclosed by its charter, or preempted by state or federal constitutions or statutes. Any analysis of Metro authority must begin with recognition of Metro's broad authority over regional solid waste management.

Metro Charter Provisions Related to Financing

The Charter grants to Metro general authority to raise revenue through taxes and fees[19], and also places limits on that authority. Metro's taxing authority is limited in two ways. First,

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[17]ORS 268.390: "A district council shall:

(1) Define and apply a planning procedure which identifies and designates areas and activities having significant impact upon the orderly and responsible development of the metropolitan area, including, but not limited to, impact on:

(a) Air quality;

(b) Water quality; and

(c) Transportation.

(2) Prepare and adopt functional plans for those areas designated under subsection (1) of this section to control metropolitan area impact on air and water quality, transportation and other aspects of metropolitan area development the council may identify."

[18]Id. See also, Regional Solid Waste Management Plan, Section 1, and ORS 459.017(b), which gives Metro and other local governments "primary responsibility for planning for solid waste management." The RSWMP serves as both a functional plan for land use planning coordination purposes, and as a DEQ approved solid waste management plan for purposes of ORS 459.095.

[19]1992 Metro Charter, sec. 9, 10.

Metro must seek voter approval of "broadly based taxes of general applicability on the personal income, business income, payroll, property, or sales of goods or services of all, or a number of classes of, persons or entities in the region* * *"[20] Taxes not included in this limitation may be imposed without voter approval. However, Metro may only spend $12,500,000 (in 1993, and as adjusted annually in conformance with a Consumer Price Index) of revenue from taxes imposed without voter approval.[21]

Metro has authority to fund all or part of the solid waste system through tax revenues, subject to the above limitations.[22] Currently, the system is funded entirely through user fees, which are subject to a separate limitation, in Section 15, as follows:

> "* * *charges for the provision of goods or services by Metro may not exceed the costs of providing the goods or services. These costs include, but are not limited to, costs of personal services, materials, capital outlay, debt service, operating expenses, overhead expenses, and capital and operational reserves attributable to the good or service."

This limitation is discussed in more detail below.

User Fees v. Taxes

In several of your questions, you seek to know how to distinguish a fee from a tax. Metro Charter Section 11 states:

> "For purposes of sections 11, 13 and 14 of this charter, 'taxes' do not include any user charge, service fee, franchise fee, charge for the issuance of any franchise, license, permit or approval, or any benefit assessment against property."

For the purpose of the Charter therefore, neither voter approval nor consultation with a "tax study committee" is required for imposition of fees of the type listed, and such fees are not subject to expenditure limits contained in Section 14.

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[20]Id., sec. 11.

[21]Id., sec. 14. The excise tax is the only tax currently imposed by Metro that is subject to the expenditure limitation. Metro must also consult with a "tax study committee" before imposing any new taxes without voter approval. Id., sec. 13.

[22]Solid waste expenditures in fiscal year 1993-94 are budgeted at approximately $53 million.

The Charter's distinction between fees and taxes conforms to Oregon judicial doctrine. In most Oregon cases the court attempted to determine whether a given 'fee,' 'assessment' or 'tax' was subject to state constitutional strictures related to uniformity of taxation.[23] For instance, in Sproul v. State Tax Commission[24], the Oregon Supreme Court considered whether a one cent per acre assessment against lands in eastern Oregon for a fire suppression fund was an unconstitutional "tax." In a detailed analysis, the Court concluded that the one cent levy was a valid exercise of the state's "police power," not an invalid exercise of its "taxing power."[25]

In reaching its conclusion, the court in Sproul emphasized that the purpose of the levy was not to raise general revenue, but to fund a specific activity to promote public welfare.[26] The Court reasoned that the state could unquestionably use its "police power" to establish a regulatory system to prevent fires, and could likewise levy funds to "manage in a proprietary capacity" the same activities over which it has regulatory authority.[27] According to Sproul, an 'assessment,' 'levy' or 'license fee' is not a 'tax' if it is to fund a specific regulatory program over which the state has legitimate regulatory authority and is not for the purpose of raising general revenue.[28]

The Metro Charter is also consistent with the definition of a "tax" that was added to the Oregon Constitution through Ballot Measure 5 in 1990 for property tax limitation purposes.[29] The Ballot Measure 5 definition becomes relevant when the "tax," "fee" or

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[23]Or. Const, Art. I, sec. 32, Art. IX, sec. 1.

[24]234 Or. 579, 383 P.2d 754 (1963).

[25]Id. at 755.

[26]Id. at 758.

[27]Id. at 758, 759.

[28]Id. at 758, 760. In Dennehy v. Department of Revenue, 305 Or. 595, 756 P.2d 13, 18 (1988), the Oregon Supreme Court cited Sproul approvingly, "leaving aside the 'police power' label." See also, Automobile Club of Oregon v. State of Oregon, 314 Or. 479, 840 P.2d 674, 678 (1992).

[29]Or. Const., Art. XI, sec. 11b states, in relevant part: "* * *(b) A 'tax' is any charge imposed by a governmental unit upon property or upon a property owner as a direct consequence of ownership of that property except incurred charges and assessments for local improvements* * *" "Incurred charges" is also defined, but is not relevant to this analysis; See Roseburg School District v. City of Roseburg, 1993 Or. LEXIS 56 (May 21, 1993).

"charge" is arguably "imposed" on property or a property owner, "as a direct consequence of ownership" of the property.[30]

In Roseburg School District v. City of Roseburg[31], the Oregon Supreme Court emphasized that a "fee for service" is not "imposed upon property or upon property owners as a direct consequence of property ownership"[32]; it is imposed on the user of the service, who might not be the property owner.[33] The court in Roseburg School District made clear that service fees are not property taxes, even if they relate closely to property ownership and are difficult to avoid.

The Ballot Measure 5 definition of "tax" will be relevant to Metro solid waste revenue collection only if Metro devises a revenue collection system that is imposed directly on generators. In that instance, care should be taken to ensure that a charge is imposed only as a consequence of participation in Metro's solid waste management system through the generation, recycling or disposal of solid waste.[34]

Answers to Specific Questions

Topic #1. Service and User Fees

1. In your first specific question, you ask how the limitations on user charges in Section 15 of the Charter (cited above, p. 6) might be interpreted. In light of the analysis presented above, it is not reasonable to interpret this provision in a manner that limits Metro's authority to manage and finance a regional solid waste disposal system, or to provide regional solid waste planning and waste reduction programs. With regard to solid waste, the

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[30]Id.

[31]Supra, fn. 29.

[32]Roseburg School District v. City of Roseburg, supra at 12 (emphasis added).

[33]Id. at 9. Roseburg involved a "storm drain fee" that was added to the bill for drinking water services. When premises are improved, those premises are presumed to generate storm water runoff, and the "persons having the right to occupy the property" (who may or may not own the property) are presumed responsible to pay the storm water runoff fee. Id. at 2-3.

[34]The city of Roseburg allowed persons to seek a reduction or elimination of the fee by demonstrating that the service is not being used. (Id.) Although not discussed in detail in the case, presumably the property owner would need to demonstrate that the property is not generating storm water runoff entering the city's system or otherwise obtaining the benefits of the city's system.

"service" provided by Metro includes all Metro solid waste disposal, planning, management and waste reduction programs. A person generating, or hauler disposing of, waste in the region is receiving solid waste management services from Metro.

Metro Charter Section 15 simply extends to the entire agency a principle that has been applied to Metro's solid waste management program since at least 1987, when the legislature imposed a similar restriction.[35] The purpose of such a provision appears to be to ensure that a service provided by the district does not become a 'cash cow' for unrelated programs.

The minutes of the Charter Committee indicate that the Committee was not intending to in any manner limit Metro's ability to fund solid waste programs. Solid waste management was viewed by the Committee as an "enterprise" that would continue to carry its own weight through fees for service, with taxes used essentially to fund land use planning functions and general overhead.[36]

You state that Metro might consider a "two-part pricing system for solid waste disposal which levies a flat fee on all customers, regardless of usage; and a variable rate based on actual usage." You ask whether the "flat" portion of the fee could be considered a "user charge."

Yes. As discussed in more detail above, the fee will be a "user charge" as long as it is imposed on users of Metro's solid waste system and the revenue is dedicated to regional solid waste management.

2. You then ask, if the "flat" portion could be considered a "user charge, are there restrictions on the types of costs which may be used to justify it? We have in mind identifiable fixed costs such as debt service and long-term contractual obligations that must be covered regardless of tons disposed (of)."

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[35]ORS 459.335 states, in relevant part, "* * *the metropolitan service district shall use moneys collected by the district as service or user fees for solid waste disposal for activities of the metropolitan service district related to solid waste and related planning, administrative and overhead costs of the district."

[36]See "Minutes of the Charter Committee of the Metropolitan Service District." A complete set is available in the Metro Office of General Counsel.

In creating any new structure for financing the solid waste system, you should attempt as nearly as possible to develop a rational basis for the approach taken.[37] Although "the ratio between the percentage of benefit conferred and the percentage of cost paid need not be computed precisely,"[38] there should be a "substantial relation" between the imposition of the burden and the benefit received.[39] Conceptually, assessing identifiable fixed costs to a flat fee and variable costs to a variable tonnage rate seems to be a rational and legally acceptable approach.

3. You next ask, "What is our authority for imposition and collection of the 'flat' portion of a service fee? If Metro's disposal customer is a commercial hauler, can Metro collect a flat fee directly from the hauler perhaps based on the type and number of the hauler's accounts? If not, could Metro work through the franchising jurisdiction? Can Metro bill generators directly? In general, what mechanisms are available for collection of a flat fee to cover fixed costs?"

As discussed above, any of these approaches might be acceptable, subject to development of an analysis demonstrating that those receiving benefits from Metro's solid waste disposal system are paying in rough proportion to the benefit received. Some of the suggestions you have listed raise potential administrative concerns that are not addressed here. One approach that you have touched on (below) is for Metro to license haulers and to collect a portion of its solid waste management revenue through the license fee. The fee could then be proportioned upon gross receipts, type and number of accounts, or some other measure that will spread the cost burden with relative uniformity.

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[37]In Sproul, at 762, (cited above, fn. 20), the Court cited approvingly a passage from Freund, Police Power, at 635: "It is an elementary principle of equal justice, that where the public welfare requires something to be given or done, the burden be imposed or distributed upon some rational basis, and that no individual be singled out to make a sacrifice for the community. This principle lies at the foundation of the law of taxation, and applies equally to the police power. With reference to the latter, it may be expressed by saying that to justify the imposition of a burden, there must be some connection of causation or responsibility between the person selected or the right impaired and the danger to the public welfare or the public burden which is sought to be avoided or relieved* * *"

[38]Sproul, supra at 762.

[39]Id.: " '* * *the assessment will be upheld whenever it is not patent and obvious * * *that the plan or method adopted has resulted in imposing a burden in substantial excess of the benefits* * *' " citing Austin v. Tillamook City, 121 Or. 385, 395, 254 P. 819, 822, in the context of property assessments.

If Metro chooses to develop a hauler licensing system, its scope should be limited to implementation of Metro's traditional solid waste management functions and collection of revenue for those functions. Cities and counties have been granted specific authority to franchise solid waste collection haulers, establish collection rates and assign service areas.[40] Traditional collection franchising appears to be a "local government service" as defined in the Charter.[41] As such, Metro is prohibited by the Charter from providing the same types of services without obtaining approval from the voters or from a majority of the members of the Metro Policy Advisory Committee (MPAC).[42] A license system imposed for the purpose of regulating solid waste disposal and carrying out other Metro solid waste management responsibilities need not conflict with local solid waste franchising, and if not, could be implemented without voter or MPAC approval.

4. In your fourth set of questions under topic #1, you request an analysis of the basis for determining whether a charge is a tax. The answers to your questions are contained under the heading "User Fees v. Taxes," above.

5. In your fifth question under topic #1, you ask: "What are the statutory limitations on Metro's authority regarding banning self-haul and mandating and enforcing universal collection?"

There are no express statutory limitations on Metro's ability to impose and enforce universal solid waste collection, and it is possible that Metro's express and implicit solid waste management authority (discussed above) includes such authority. The background provided for your question, however, does not adequately explain why elimination of self-hauling would be necessary or desirable in implementing a fee system with a flat fee component, or how universal collection would be implemented. More complete development of a rationale and approach to universal collection would help to bring legal issues related to such implementation into focus. It is, for instance, conceivable that such a system would be perceived as impinging on traditional "local government services" and require referral to the voters or MPAC.[43]

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[40]ORS 459A.085.

[41]1992 Metro Charter, Section 7(2): "* * *As used in this section, 'local government service' is a service provided to constituents by one or more cities, counties or special districts within the jurisdiction of Metro at the time a Metro ordinance on assumption of the service is first introduced* * *"

[42]Id.

[43]1992 Metro Charter, Section 7.

Topic #2. License Fees

In your second topic, you cite ORS 268.317[44] relating to Metro's flow control authority. In your first question under this topic, you ask whether Metro has authority to license haulers of solid waste. Your question is answered in the affirmative above, under topic #1, question three. You then ask whether there are any statutory limitations on what costs could be included in hauler license fees. As discussed above, the costs should be reasonably related to those necessary for proper functioning of Metro's solid waste management system, and reasonably apportioned to the benefit received.[45] As discussed above, the license fee need not be restricted to the cost of administering the license, and can include other costs related to Metro's regional solid waste management system.

Additional Question: Fees Imposed on Products at the Time of Sale

At the Solid Waste Advisory Committee meeting on June 24, 1993, a question was raised regarding Metro's authority to impose fees at the time of sale of products, presumably on items that contribute to solid waste generation in the Metro region. While it is conceivable that some form of generator charge could be established as a user fee under the Metro Charter, imposing charges at the time of sale of products raises additional questions. Section 11 of the Charter requires voter approval of "broadly based taxes of general applicability on * * *sales of goods* * **" Imposition of fees on the sale of specific items or classes of items tends to resemble a sales tax, implicating this section. Other problems include justifying the fee with regard to certain items and not others, and establishing a mechanism to collect the fee.

If the Committee determines that collection of revenue in the manner suggested is an option it might like to pursue, additional research should be conducted by this Office. Currently, this Office has strong reservations regarding the ability to collect revenue in this manner without voter approval.

Please contact me if you have further questions regarding this matter.

ds
1257

Attachment

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[44]Quoted in part above, at fn. 15.

[45]See ORS 459.335, quoted above, fn. 35, and general discussion above, top of page 10.

M E M O R A N D U M

METRO

DATE: May 10, 1993

TO: Todd Sadlo, Senior Assistant Counsel

FROM: Terry Petersen, Planning and Technical Services

RE: Long-Term Financing

We have started a planning project on long-term financing and rate setting. At the April 22 meeting of the Solid Waste Advisory Committee (SWAC), I was asked several general questions regarding statutory limitations on Metro's authority to assess solid waste fees. I told the SWAC that I would request answers to the questions from our legal staff.

If possible, I would appreciate a response to as many of the questions as possible by Wednesday, May 19. This would give me time to prepare and distribute the agenda and discussion materials for the May 27 meeting of the SWAC. I recognize that some of the questions may require research that can not be completed in two weeks.

Topic #1: Service and User Fees

ORS 459.335 states:

"Notwithstanding any other provision of ORS 268.330 or 268.515 or section 9, chapter 679, Oregon Laws 1985, the metropolitan service district shall use moneys collected by the district as service or user fees for solid waste disposal for activities of the metropolitan service district related to solid waste and related planning, administrative and overhead costs of the district".

Section 11 of the Metro Charter states:

"For purposes of sections 11, 13, and 14 of this charter, "taxes" do not include any user charge, service fee, franchise fee, charge for the issuance of any franchise, license, permit or approval, or any benefit assessment against property".

We need guidance on how "taxes", "user fees", "user charges", "service fees", and "franchise fees" are defined, interpreted, and applied relevant to Metro solid waste.

We also need some general guidance on Metro's authority and limitations on collecting such fees, charges, and taxes.

Questions:

1. Section 15 of the Charter appears to limit "user charges" to the cost of service provision. How might this be interpreted? For example, we might consider a two-part pricing system for solid waste disposal which levies a flat fee on all customers, regardless of usage; and a variable rate based on actual usage. Could the "flat" portion of this system be considered a "user charge"?

2. If so, are there restrictions on the types of costs which may be used to justify it? We have in mind identifiable fixed costs such as debt service and long-term contractual obligations that must be covered regardless of tons disposed.

3. What is our authority for imposition and collection of the "flat" portion of a service fee? If Metro's disposal customer is a commercial hauler, can Metro collect a flat fee directly from the hauler perhaps based on the type and number of the hauler's accounts? If not, could Metro work through the franchising jurisdiction? Can Metro bill generators directly? In general, what mechanisms are available for collection of a flat fee to cover fixed costs?

4. What determines whether a charge is a "tax"? For example, a charge against income or property would seem to be a tax because the individual cannot opt out of the system. In contrast, users of the commercial waste collection system could choose not to use the service. For most waste generators, however, this may not be a realistic option. Would flat fees for solid waste be interpreted as tax-like and therefore fall under the tax restrictions placed on Metro?

5. A rate system that involves flat fees might be most effective if all households and businesses participate in the commercial collection system. Eliminating self-haul disposal and/or requiring universal collection service might be necessary to implement such fees. I do not find any reference in ORS chapters 268 and 459 regarding Metro's authority in these areas. What are the statutory limitations on Metro's authority regarding banning self-haul and mandating and enforcing universal collection?

Topic #2: License Fees

ORS 268.317 states:

For purposes of solid and liquid waste disposal, a district may:

(3) Require any person or class of persons who generate solid or liquid wastes to make use of the disposal, transfer or resource recovery sites or facilities of the district or disposal, transfer or resource recovery sites or facilities designated by the district.

(4) Require any person or class of persons who pick up, collect or transport solid or liquid wastes to make use of the disposal, transfer or resource recovery sites or facilities of the district or disposal, transfer or resource recovery sites or facilities designated by the district.

One option for implementing this authority would be to license haulers. In addition to accomplishing our flow control objectives, could licensing haulers be a mechanism by which fees are assessed to cover certain fixed costs.

1. Does Metro have the authority to license haulers of solid waste?

2. If so, are there any statutory limitations on what costs could be included in hauler license fees? Must the costs covered by the license fee be restricted to the cost of administrating the license or could the license fee include other fixed costs?

TP:clk
cc: Bob Martin, Solid Waste Director
Roosevelt Carter, Budget and Finance Manager

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Conclusion

"There is a sufficient

potential risk

to the financial stability

of Metro's Solid Waste System

that we should proceed

with a study of

system financing alternatives

and rate-setting practices"

The Basic Situation

- **Reliance on a variable revenue base to cover fixed and variable costs threatens financial stability.**

- **When the revenue tonnage base is declining, the current rate structure induces a conflict between recycling objectives and stable financing of the solid waste management system.**

System Financing Study Components

- **Consultant**
  - Describes "state of the practice"
  - Provides alternatives
- **Metro Solid Waste Staff**
  - Scenario analysis of alternatives
  - Evaluation of alternatives
  - Legal issues
- **Regular consultation among**
  - Council Solid Waste Committee
  - Rate Review Committee
  - Solid Waste Advisory Committee
  - Metro Solid Waste Staff
- **Coordination and information exchange**
  - Metro Tax Study Committee
  - Other governments and agencies
  - Industry representatives
  - Interested parties
- **Findings and recommendations to Council**
- **Chapter 11 of RSWMP (rates)**

System Financing Study
Rate Structure Component

Alternatives Analysis

- **Consultant proposes alternative rate structures**
- **Current rate structure is the benchmark alternative**
- **The performance of each alternative on each evaluation criterion is analyzed under a variety of future scenarios**
- **The performance of each alternative is summarized in an evaluation matrix**
- **The evaluation matrices form the basis for discussion, narrowing, and choice of alternatives**

System Financing Study
Rate Structure Component

Evaluation Criteria

- **Revenue reliability**
- **Rate predictability**
- **Rate equity**
- **Recycling incentives**

- **Authority to implement**
- **Consistency with Metro objectives and policies**
- **Revenue adequacy**
- **Implementability**

- **Economic impacts**
- **Credit rating impacts**
- **Affordability to users**

System Financing Study
Rate Structure Component

Evaluation Matrix

- **Six general scenarios**
- **For each alternative, each cell contains a (weighted) sum of scores on evaluation criteria**

Metro Enterprise Options	Tonnage Scenarios: Changing Regional Tonnage	Tonnage Scenarios: Shift in Metro's Tonnage Share
Disposal Operations & Disposal Franchising (Status quo)		
Expand Licensing & Franchising Scope		
Diversify Disposal Activities		

Rate Review Committee/Solid Waste Advisory Committee (July 22, 1993)
DA:clk
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Exhibit 1
Projected Tonnage by Facility and Rate Component
Solid Waste Department
FY 93-94

FACILITY	Regional User Fee (Fixed)	Metro System User Fee (Fixed)	Regional Transfer Charges Station Operation	Disposal Fee Transport/ Disposal
ST JOHNS	0	0	0	0
METRO SOUTH	356,736	356,736	356,736	356,736
METRO CENTRAL	332,449	332,449	332,449	332,449
COMPOSTER	0	0	0	0
WILSONVILLE FACILITY (New)	0	0	0	0
FOREST GROVE	62,059	0	0	0
HILLSBORO	165,939	0	0	0
LAKESIDE RECLAMATION L.	79,261	0	0	0
RIVERBEND	0	0	0	0
TUALATIN VALLEY	63	0	0	0
MARION COUNTY (Direct Haul)	6,371	0	0	0
OPRC (Residue)	2,639	0	0	0
EAST CO. RECYCLING (Residue)	23,012	0	0	0
DIRECT HAUL TO LANDFILL	15,319	0	0	0
PROCESSORS	0	0	0	0
TOTAL TONS	1,043,848	689,185	689,185	689,185

15,1993

Exhibit 2
FY 1993-94 Budget by Rate Component
Solid Waste Department

DIVISION/ Expense Category	Line #	EXPENSE: Regional User Fee (Fixed)	Metro System User Fee (Fixed)	Regional Transfer Charges Station Operation	Disposal Fee Transport/ Disposal	Total
ADMINISTRATION						
Personal Services	9	$515,867				$515,867
Material & Services	10	90,671				90,671
GENERAL ACCT. - Cap. Outlay	40	6,810				6,810
TOTAL ADMINISTRATION		$613,348	$0	$0	$0	$613,348
BUDGET & FINANCE						
Personal Services	12	$461,629				$461,629
Material & Services(Except DEQ Pa	14	185,485				185,485
GENERAL ACCT. - Cap. Outlay	40	23,500				23,500
TOTAL BUDGET & FINANCE		$670,614	$0	$0	$0	$670,614
ENGINEERING						
Personal Services	16	$692,155				$692,155
[redacted]rial & Services	17,18	183,458				183,458
TOTAL ENGINEERING		$875,613	$0	$0	$0	$875,613
PLANNING						
Personal Services	25	$516,622				$516,622
Material & Services	26,27	344,816				344,816
TOTAL PLANNING		861,438	$0	$0	$0	$861,438
RECYCLING INF. AND EDUCATION						
Personal Services	29	$332,036				$332,036
Material & Services	30,31	245,240				245,240
GENERAL ACCT. - Cap. Outlay	40	4,500				4,500
TOTAL RECYCLING INF.		$581,776				$581,776
WASTE REDUCTION						
Personal Services	20	$527,975				$527,975
Material & Services :						
Grants & 1% for Recycling	21	683,000				683,000
Miscellaneous Professional Serv	22	142,000				142,000
Other Materials & Services	23	108,162				108,162
GENERAL ACCT. - Cap. Outlay	40	15,000				15,000
TOTAL WASTE REDUCTION		$1,476,137	$0	$0	$0	$1,476,137

15,1993

Exhibit 2
FY 1993-94 Budget by Rate Component
Solid Waste Department

DIVISION/ Expense Category	Line #	EXPENSE: Regional User Fee (Fixed)	Metro System User Fee (Fixed)	Regional Transfer Charges Station Operation	Disposal Fee Transport/ Disposal	Total
TRANSFERS						
Support Services - Indirect		$2,541,165				$2,541,165
Support Services - Direct		56,181				56,181
Building Fund - Debt Service		194,199				194,199
Building Fund -(O/M)		0				0
Insurance Fund - General		81,897				81,897
Workers Comp		50,997				50,997
Transportation Fund		324,125				324,125
Planning and Develcpment Fund		0				0
Smith/Bybee Lakes Fund		18,700				18,700
Environmental Insurance		475,000				475,000
TOTAL TRANSFERS	38	$3,742,264	$0	$0	$0	$3,742,264
CONTINGENCY		$0	$0	$0	$0	$0
OTHER ACCOUNTS						
Other General Account	40	213,000				213,000
Metro Central Construction		$0	$0	$0	$0	0
Renewal and Replacement Account	41	732,000				732,000
St. Johns Closure Account	42	1,450,000				1,450,000
Debt Service- Metro Central Bonds	46		2,755,813			2,755,813
Debt Service- Fibre Based Fuel Proje	47	269,420				269,420
TOTAL OTHER ACCOUNTS		$2,664,420	$2,755,813	$0	$0	$5,420,233

15,1993

Exhibit 2
FY 1993-94 Budget by Rate Component
Solid Waste Department

DIVISION/ Expense Category	Line #	EXPENSE: Regional User Fee (Fixed)	Metro System User Fee (Fixed)	Regional Transfer Charges Station Operation	Disposal Fee Transport/ Disposal	Total
OPERATIONS						
MANAGEMENT SERVICES						
Personal Services	52	$278,016				$278,016
Material & Services	53	564,730				564,730
TOTAL MANAGEMENT SERVICES		$842,746	$0	$0	$0	$842,746
SCALEHOUSE SERVICES						
Personal Services	56		$717,179			$717,179
Material & Services	57		308,918			308,918
GENERAL ACCT. - Cap. Outlay	40		21,000			21,000
TOTAL SCALEHOUSE SERVICES		$0	$1,047,097	$0	$0	$1,047,097
ENVIRONMENTAL SERVICES						
Personal Services	61	$1,092,235				$1,092,235
Material & Services	62	1,098,274				1,098,274
GENERAL ACCT. - Cap. Outlay	40	156,800				156,800
TOTAL ENVIRONMENTAL SERVICES		$2,347,309	$0	$0	$0	$2,347,309
DISPOSAL SERVICES						
Material & Services	65	$0	$0	$0	$518,986	$518,986
Station Operation	66			5,013,354		5,013,354
Yard Debris (Station Operation)	67			45,760		45,760
Yard Debris (Hauling & Processing)	67				132,000	132,000
Fixed Costs - Disposal	68		1,802,950			1,802,950
Disposal Fees (Landfill)	69				15,949,625	15,949,625
Disposal Fees (Hazardous Material)	70	1,588,000				1,588,000
Fixed Costs - Transport	71		829,400			829,400
Transport Fees	72				8,738,605	8,738,605
Recycling Avoided Costs	73	1,830,878				1,830,878
Marion County Disposal	74				207,169	207,169
Marion County Transport	74				38,573	38,573
TOTAL DISPOSAL SERVICES		$3,418,878	$2,632,350	$5,059,114	$25,584,958	$36,695,300

15,1993

Exhibit 2
FY 1993-94 Budget by Rate Component
Solid Waste Department

DIVISION/ Expense Category	Line #	EXPENSE: Regional User Fee (Fixed)	Metro System User Fee (Fixed)	Regional Transfer Charges Station Operation	Disposal Fee Transport/ Disposal	Total
TOTAL OPERATIONS						
Personal Services		$1,370,251	$717,179	$0	$0	$2,087,430
Material & Services		5,081,882	2,941,268	5,059,114	25,584,958	38,667,222
GENERAL ACCT. - Cap. Outlay		156,800	21,000	0	0	177,800
TOTAL OPERATONS		$6,608,933	$3,679,447	$5,059,114	$25,584,958	$40,932,452
TOTAL EXPENSES FY 93-94		$18,094,543	$6,435,260	$5,059,114	$25,584,958	$55,173,875
Recycling Credits	82	352,921	0	0	0	352,921
TOTAL GROSS EXPENSES FY 93-94	84	**18,447,464**	**6,435,260**	**5,059,114**	**25,584,958**	**55,526,796**
[redacted]REVENUE:						
[redacted]iscellaneous		$495,803	$0	$198,000	$382,060	$1,075,863
Tire Hauling and Disposal Chgs.		0	0	0	54,195	54,195
Salvage (Recycling)		0	0	0	62,665	62,665
Investmt Inc.		202,522	393,984	54,232	274,262	925,000
SUBTOTAL	85	698,325	393,984	252,232	773,182	2,117,723
TOTAL NET EXPENSES FY 93-94		**17,749,139**	**6,041,276**	**4,806,882**	**24,811,776**	**53,409,073**

Exhibit 3
Calculation of Disposal Rate by Rate Component
Solid Waste Department
FY 93-94

Base Rate and Surcharges	Line #	Regional User Fee (Fixed)	Metro System User Fee (Fixed)	Regional Transfer Charges Station Operation	Disposal Fee Transport/ Disposal	Total
BASE RATE/ Per Ton	88	$17.00	$8.77	$6.97	$36.00	$68.75
Excise Tax (rate 7.0%)	89	1.19	0.61	0.49	2.52	4.81
Base rate + Excise Tax		18.19	9.38	7.46	38.52	73.56
Adjusted to FY 92-93 structure	90	19.00	7.00	9.00	38.25	73.25
DEQ Promotional Fee+Other Fe	91					1.10
DEQ Orphan Site Fee	91					0.15
Rehab. & Enhancement Fee	91					0.50
TOTAL RATE/ Per Ton	93					**$75.00**

WASHINGTON COUNTY, OREGON

RECEIVED
JUN 6 1993

July 2, 1993

TO: Metro SWAC Members

FROM: Delyn Kies DK
Solid Waste Management Coordinator

RE: Wilsonville Transfer Station

At our last meeting on June 24 Jim Watkins briefed us on the elements of the negotiated franchise agreement between Metro and Willamette Resources, Inc. for construction and operation of the Wilsonville Transfer Station. He also summarized the financial analysis.

Enclosed for your information are some additional materials:

1. A copy of Executive Officer Rena Cusma's June 15 statement to the Metro Council Solid Waste Committee.

2. A summary of the franchise agreement between Metro and Willamette Resources, Inc.

3. A briefing paper identifying and answering some of the major questions about the Wilsonville Transfer Station and the planning process.

Please feel free to call me at 648-8609 if you have any questions about the project or these materials.

c: Bob [redacted]
Jim Watkins
Chuck Geyer

Department of Health & Human Services
155 North First Avenue
Hillsboro, Oregon 97124

WIC Nutrition Plan: (503) 640-3555
Health Services: (503) 648-8881
Administration & Planning: (503) 693-4402
FAX: Clinic 693-4522 / Administration 693-4490
TDD: (503) 648-8601
Environmental Health: (503) 648-8722

WASHINGTON
COUNTY,
OREGON

July 2, 1993

RECEIVED
JUN 6 1993

TO: SWAC Members and Interested Persons

FROM: Delyn Kies DK

RE: Wilsonville Transfer Station

As promised in Item No. 5 of our June 22, 1993 Program Update memo to you, enclosed are the following materials for your information:

1. A copy of Rena Cusma's June 15 statement to the Metro Council Solid Waste Committee.

2. A summary of the franchise agreement between Metro and Willamette Resources, Inc.

3. A briefing paper identifying and answering some of the major questions about the Wilsonville Transfer Station and the planning process.

Executive Officer Cusma is now scheduled to make her formal recommendation to the Metro Council Solid Waste Committee on July 20.

The Washington County Solid Waste Systems Design Steering Committee is scheduled to meet on July 9 at 1:30 pm at Beaverton City Hall. This Committee is made up of elected officials from each of the cities in Washington County and the County Board of Commissioners and representatives of the Washington County Haulers Association. This Committee developed the System Plan for Washington County transfer stations. Rena Cusma has been invited to attend this meeting.

Please call me at 648-8609 if you have any questions about this project or the enclosed materials.

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WILSONVILLE TRANSFER STATION

Rena Cusma
Metro Executive Officer
June 15, 1993

I WOULD LIKE TO THANK THE COUNCIL SOLID WASTE COMMITTEE FOR THIS OPPORTUNITY TO GIVE YOU MY PRELIMINARY VIEWS ON ONE OF THE MOST DIFFICULT POLICY DECISIONS METRO HAS FACED IN IMPLEMENTING OUR REGIONAL SOLID WASTE STRATEGY. THE ISSUES REGARDING HOW MANY TRANSFER STATIONS WE NEED, AND WHERE THEY SHOULD BE LOCATED, GO BACK ALMOST TWENTY YEARS. THE VISION ADOPTED IN THE REGIONAL SOLID WASTE PLAN HAS LONG CONTEMPLATED TRANSFER STATIONS IN EACH OF THE MAJOR "WASTESHEDS" OF THE REGION, ROUGHLY CORRESPONDING TO THE THREE COUNTIES. AS WE SET OUT TO IMPLEMENT THIS VISION, THE FIRST FACILITY WAS PROVIDED IN CLACKAMAS COUNTY, THE PRESENT DAY METRO SOUTH. INITIALLY HOWEVER, THIS FACILITY WAS ENVISIONED TO WORK IN CONJUNCTION WITH AN INCINERATOR AT THE SAME LOCATION.

SUBSEQUENTLY, METRO CENTRAL, ORIGINALLY "METRO EAST", CAME ON LINE IN 1991, IN CONJUNCTION WITH CLOSURE OF THE ST. JOHNS LANDFILL. AGAIN, SITING CONSIDERATIONS AND THE LOOMING ST. JOHNS CLOSURE DEADLINE, RESULTED IN CONSIDERABLE MODIFICATION OF ORIGINAL PLANS REGARDING CONFIGURATION, LOCATION, AND CONTRACTUAL ARRANGEMENTS FOR THIS FACILITY.

IN THE MEANTIME, AWARD OF THE DISPOSAL AND TRANSPORTATION CONTRACTS, AFTER MUCH DISCUSSION AND REFINEMENT OF INTENT, BROUGHT US TO THE POINT OF HAVING IMPLEMENTED OUR ORIGINAL PLAN IN ALL ESSENTIAL ELEMENTS EXCEPT FOR THE FINAL TRANSFER STATION. BY THIS TIME, SITING CONCERNS WERE NO REAL SURPRISE, HOWEVER, IN WASHINGTON COUNTY ADDITIONAL VALID LOCAL CONCERNS REGARDING NUMBER OF FACILITIES, OWNERSHIP, AND FINANCING AROSE. A PRIVATE TRANSFER STATION IN FOREST GROVE WAS DEVELOPED AS AN INITIAL STEP. AFTER LENGTHY REVIEW AND DEBATE, WHICH I DO NOT PROPOSE TO REVIEW HERE TONIGHT, AN AGREED UPON PLAN FOR THIS FINAL SYSTEM ELEMENT WAS ADOPTED. THE BASIC ELEMENTS OF THIS PLAN INCLUDE:

* TWO TRANSFER STATIONS
* PRIVATELY OWNED AND OPERATED FACILITIES
* FACILITIES COVERED BY LONG TERM METRO FRANCHISES

CERTAINLY THERE IS VALUE IN DEMONSTRATING THE CAPACITY TO ADOPT A PLAN AND STICK WITH IT THROUGH IMPLEMENTATION. NEVERTHELESS, DOGGED PURSUIT OF AN ADOPTED COURSE, IN DISREGARD OF SIGNIFICANTLY CHANGED REALITIES, AT SOME POINT BECOMES FOOLISH.

THEREFORE MY DILEMMA (AND YOURS!) IS TO JUDGE WHETHER OUR CURRENT UNCERTAINTIES, ARE SO SIGNIFICANT THAT WE OUGHT TO CONSIDER REFINING OUR PLAN, AS WE HAVE SO SUCCESSFULLY DONE IN THE PAST, OR WHETHER WE THINK THAT THIS NEGOTIATED AGREEMENT, IN CONJUNCTION WITH A SITE THAT IS APPROVED, AND A CONTRACTOR THAT IS CAPABLE, IS WORTH THE NECESSARY $4.15 PER TON INCREASE IN THE TIP FEE ASSESSED REGION WIDE. I AM AT PRESENT DOUBTFUL.

THE TIPPING FEE IS ALREADY HIGH AND WE ARE CURRENTLY SUBSIDIZING THE RATE OUT OF RESERVES. AND WE ARE WORKING WITH THE SWPAC TO FIND A WAY TO STABILIZE THE FINANCIAL BASE OF THE SYSTEM. I HAVE INSTRUCTED THE STAFF TO DEVELOP AN IMPACT ANALYSIS ASSUMING THIS FACILITY IS NOT BUILT. CLEARLY WE WOULD NEED TO REDIRECT SOME WASTE FLOW TO METRO CENTRAL WHICH HAS CAPACITY AND PERHAPS TO SOME EXTENT TO FOREST GROVE. WE WOULD ALSO NEED TO REVISIT OUR SOLID WASTE MASTER PLAN AND REVISE OUR PAST POLICIES AND ASSUMPTIONS. GIVEN THE RADICAL DECREASE IN TONNAGE OVER THE LAST TWO YEARS, THIS NEEDS TO BE DONE UNDER ANY CIRCUMSTANCES.

ADDITIONALLY, I WILL BE VISITING WITH OUR LOCAL GOVERNMENT PARTNERS IN WASHINGTON, CLACKAMAS AND MULTNOMAH COUNTIES AND THE AFFECTED CITIES AND THE HAULING INDUSTRY ABOUT THE IMPACT OF **NOT** BUILDING THE FACILITY. I WILL BE PREPARED TO GIVE YOU A FINAL RECOMMENDATION WHEN THIS MATTER COMES BEFORE THIS COMMITTEE FOR A HEARING ON JULY 6.

Summary of Franchise Agreement with WRI (June 15, 1993)

Below is a summary of the major provisions of the negotiated franchise agreement between Metro and Willamette Resources, Inc. (WRI) as well as a discussion of some of the systemic reasons for the project.

1. The term of the agreement is 20 years (the same term as the bond issuance). The agreement can be extended up to 20 additional years in five year increments, or the franchise can be allowed to expire. Metro may purchase the facility at the end of the term at Fair Market value. During the agreement Metro has the right of first refusal.

2. The facility will be financed through the issuance of approximately 10 million dollars of project bonds, of which approximately 1 million is taxable for the land. Of the remaining 9 million, the money is spent for the following: 10% for offsite improvements (realignment of the road, extension of sewer and water)70% for the building and equipment, 20% for indirect costs such as contingencies, engineering fees and bond reserves.

The proceeds from the bonds are loaned to WRI who must provide credit enhancement. The enhancement will be in the form of a letter of credit. WRI is responsible for repayment of the bonds and will receive a monthly lump sum payment from Metro for this amount as long as they are not in default of the agreement.

3. The facility design consists of a flat tipping floor and waste sorting area, offices, truck wash, unacceptable waste building, scalehouse and public recycling area. The interior space will be over twice as large as Metro South. No material recovery equipment will be installed initially, however the infrastructure for such equipment will be in place. The contractor will receive the full avoided cost for recovered materials and may negotiate with Metro for future financing of material recovery equipment. If Metro participates in financing additional equipment, the amount of avoided cost is up for negotiation. Staff does not believe it is prudent to install material recovery equipment until the waste received at the facility is examined. Initial recovery is expected to be 4-5%.

4. Metro will process requests for payments during contruction, ensuring that the conceptual design agreed upon is built. If funds are available at the end of construction, the Contractor may apply such funds to the aquisition of materials recovey equipment, except that a baler must be the first equipment acquired.

5. Once constructed, the facility will be performance tested to determine its ability to receive, process and compact up to its design capacity of 825 tons per day.

6. The facility will be open 363 days a year. Weekday hours are 6 am to 6 pm Monday through Friday for commercial only and 8 am to 6 pm weekends for both public and commercial. Metro will operate the scalehouse and unacceptable waste storage area.

7. WRI will be paid a monthly tip fee which consists of mainly an O&M fee and debt service payment. In FY95-96 (the first full year of debt service), the average per ton cost will be $24.18 ($16.44 O&M and $7.74 debt), as compared to $25.22 at Central and $10.60 at South. The impact on the rate is $3.44 in FY 94-95, $4.15 in 95-96 and 4.32 in 96-96. If the facility is not built, the cost at South would be $9.23 and at Central $23.13. The O&M payment is escalated by 100% of the CPI up to 5%, and 85% of the CPI for over 5%. If new taxes are implemented which increase costs more than $200,000 (considering offsets), Metro agrees to negotiate tip fee increases for the <u>future</u> impact of the tax. Additional financial information is attached.

8. All waste within a designated service area is to be directed to the facility by use of Metro's flow control authority. In FY94-95, this will be about 130,000 tons, escalating to 163,000 tons in 2013. Capacity is 196,000 tons per year. Forest Grove station will continue to operate at about 9% of the regional tonnage or 66,000 tons. Metro reserves the right to direct waste to other facilities which can produce products from the waste, such as compost, energy or tennis shoes. If tonnage drops below 95,000 tons, Metro is obligated to meet with WRI to discuss the financial viability of the project, however Metro is under no obligation to take any action.

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WASHINGTON COUNTY, OREGON

Regional Solid Waste Management Plan Briefing Paper

PROPOSAL TO BUILD A TRANSFER STATION IN WILSONVILLE

This briefing paper is designed to identify and answer some of the major issues surrounding the proposal to construct a solid waste transfer station in Wilsonville. The briefing paper has been prepared by Washington County.

Proposed Transfer Station Vital Statistics
- Location: Ridder Rd., Wilsonville, Or
- Building Size: 81,300 sq.ft.
- Land Area: 9.34 acres
- Owner/Operator: Willamette Resources, Inc.
- Construction Begins: Fall, 1993
- Station Opens: Fall, 1994
- Starting Annual Tonnage: 130,000
- Maximum Annual Tonnage: 196,000

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1. What direction is provided by Metro's adopted Regional Solid Waste Management Plan (RSWMP), particularly the Plan Chapter for the Metro West Transfer and Material Recovery System?

Number of Transfer Stations: There are three existing transfer stations in the regional system: Metro South in Oregon City, Metro Central in Portland, and a station in Forest Grove. The RSWMP calls for another transfer station in the eastern portion of the Western Wasteshed (which is mostly Washington County). The proposed transfer station in Wilsonville would implement this portion of the RSWMP.

Uniform Level of Service: Policy 5.1 of the RSWMP states that "the solid waste system shall support a uniform level of service throughout the Portland metropolitan region." Construction of the proposed station in Wilsonville will, for the first time, provide uniform transfer station capabilities throughout the region, including Washington County.

Cost-Efficient Collection: Policy 6.0 of the RSWMP states that "local governments shall be responsible for assuring that collection of solid waste and recyclables is conducted in a cost efficient and reliable manner." The collection system in Washington County currently is inefficient due to the extended transportation times and associated costs of transferring most of the County's solid waste to other portions of the metropolitan region. Construction of the Wilsonville station will implement Policy 6.0 by making the collection system in Washington County much more efficient.

Environmental Quality: Policy 8.1 of the RSWMP states that "the design of the solid waste system shall strive to protect environmental quality through the selection of sites, facility design standards and operational standards." Construction of the Wilsonville station will substantially reduce travel distances in the solid waste system. This will reduce emissions from five major air pollutants.

Local Solutions: Policy 16.0 of the RSWMP states "the implementation of the solid waste management plan shall give priority to solutions developed at the local level that are consistent with all plan policies." Construction of the Wilsonville station was included in Washington County's proposed system plan, submitted to Metro with the unanimous support of all local governments in the County.

than if they used Metro South. These trip reductions are consistent with a major policy goal of state, regional and local governments - meeting the new Transportion Rule's requirements for reducing VMT.

The reduced travel miles equate directly to air pollution reductions. Between 20 and 40 tons of emissions annually will be reduced by building the Wilsonville facility. These emission reductions include carbon monoxide, hydrocarbons, nitrogen oxides, particulates and sulfur oxides. Also, the construction of the Wilsonville site will make it possible for haulers to move to smaller, lighter trucks. This will create additional savings.

A final acute, short-term problem exists related to construction of the West Side Light Rail line. During the construction period every feasible technique will be used to reduce vehicular travel and minimize the congestion from construction related trip diversions. One goal is to reduce use of Highway 217 by 1000 trips per day. Continued hauling of Washington County solid waste to Portland and Oregon City is counter to this goal.

9. Can we wait and build the Wilsonville transfer station later?

Very likely not. The City of Wilsonville has approved the use of the site for the transfer station and recycling center and set conditions for its development. Legal theory is not conclusive regarding how long this permit will extend if the land is not used for its permitted purpose. Another permit, the Site Development Permit, was approved by the Wilsonville Design Review Board. This permit expires in two years (February 24, 1995) if construction has not begun. It may be extended for a maximum of one year. The station cannot be built without this permit.

The likelihood that neighboring land uses will conflict with a future transfer station will increase over time. The possibility also exists that the site itself may be converted to a different use.

A decision not to make use of the current land use permits creates very substantial risks that the site will not be available for use as a transfer station in the future.

10 Are there side benefits to building the Wilsonville transfer station?

Yes. The most significant benefit is that the garbage haulers will be able to use smaller, lighter trucks. This will increase fuel efficiency, reduce air pollution, improve road safety and lessen the need for road maintenance (because of the reduction in truck weight and vehicle miles travelled).

11. What happens next?

Franchise negotiations for the Wilsonville station have been successfully completed. Now the Metro Executive Officer and Metro Council must decide whether to proceed with the transfer station. A hearing before the Council Solid Waste Committee is scheduled for 4:00 pm. (time approximate), Tuesday, July 6. The full Council is expected to act on the issue later in July.

For more information contact:
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