



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

METRO COUNCIL
November 12, 1992
Agenda Item No. 3.2-

DATE: November 5, 1992
TO: Metro Council
FROM: Casey Short, ^{CS} Council Analyst
RE: Metro Headquarters Project

The purpose of this memo is to provide the Metro Council an analysis of the status of the Metro Headquarters Project budget and suggest actions for the Council to consider in overseeing the project in the future. This issue is on the Council's agenda for your November 12 meeting.

BACKGROUND

The Metro Council adopted a series of resolutions in October and December, 1991 authorizing the acquisition and development of the former Sears Building and attached garage on N.E. Grand Avenue for use as Metro's central offices. The Council adopted Ordinance No. 91-440 on December 12, 1991, authorizing the sale of \$23 million in general revenue bonds to pay for the project. The building is to be ready for occupancy in March, 1993.

The project budget spans the two fiscal years 1991-92 and 1992-93. The total cost is \$23.5 million, including the costs of financing (\$4.2 million), real estate (\$5.5 million), and project management (\$663,000). The major cost is for construction, with budgeted expenditures in 1992-93 of \$13.12 million, of which \$12.76 million is for Capital Outlay, including some \$1.4 million for furniture & fixtures, communications wiring and 1% for art. (See "Metro Headquarters Project Sources and Uses of Funds" in Neil Saling's October 30 memorandum for more detail.)

REPORTING AND OVERSIGHT PROCEDURES

The Regional Facilities Department's Project Manager has provided project status reports to the Regional Facilities Committee at each of the committee's meetings since February, pursuant to the direction of the Committee Chair. (Outlines of those reports are included in this packet.) Those reports have included minimal discussion of the project budget, which were generally limited to reports that the project was proceeding on time and within budget.

Other oversight of the project is provided by the Executive Officer, who is kept informed by department staff. There is an

advisory committee, composed of Bill Naito (Norcrest China Co., H. Naito Properties, and principal of one of the three finalists in the design/build competition for this project), Doug Obletz (Shiels & Obletz), David Pugh (retired from Skidmore Owings & Merrill, and member of the selection committee for the design/build competition), and Bob Shiprack (Building Trades Council official and State Representative). This group is not comparable to the Advisory Committee on Design and Construction for the Oregon Convention Center. It has met only three or four times, and not recently, with the purpose of providing policy and public relations guidance; it is not a "hands-on" committee involved in operational decisions regarding the project.

BUDGET STATUS

The Request For Proposals for the Headquarters Project listed a maximum budget of \$9,364,000 for construction of the office building. There is an additional allowance of \$991,000 for garage construction work. The project budget included a contingency of \$1,472,418, some 8.2% of the total project budget, excluding financing costs. (Please see Neil Saling's October 30 memorandum for detail on the budget.)

Regional Facilities Department staff presented a detailed report on the project budget to the Regional Facilities Committee on October 27. That report showed garage costs are expected to be \$314,000 below estimates, but construction of the building could be \$1,590,000 above estimates. (A revision to that report is included in Mr. Saling's October 30 memo, and shifts some \$195,000 from building costs to garage costs, but there is no change to the total.) The projected draw on contingency from these construction cost estimates totals \$1.276 million; these construction cost increases coupled with relatively minor adjustments (some \$90,000) elsewhere in the project budget reduced the projected contingency from \$1.47 million to \$107,000.

Staff had expected to have some \$340,000 in contingency, but estimated costs of compliance with City of Portland Design Commission requirements came in only days before the Regional Facilities Committee meeting, and were double the \$230,000 that was earlier estimated. Staff was comfortable that \$340,000 was an adequate contingency to complete the project, but \$107,000 was not.

The reduction of the \$1.47 million contingency to a projected \$107,000 calls for review and analysis of the sources of the reduction. The demands on the contingency appear in the form of change orders, either executed or anticipated.

Six change orders have been executed to date, with a total net cost of \$625,000. Of these, \$488,000 are related to building construction (as separate from garage construction, which is under budget). Two of these add office space to the building. Change Order #1 adds 5000 square feet of usable space on the Grand Avenue side of the ground floor, at a cost of \$118,000. Change Order #3 adds 3600 square feet on the fourth floor (the "penthouse"), at a cost of \$112,000; this space had earlier housed mechanical equipment, which was removed in Change Order #1 at a cost of \$14,600.

There are three anticipated change orders of significance. The first is \$125,000 for a paging system. The only point to make here is that this is an item that would be nice to have but is not essential. If expenditures need to be reduced, this could be eliminated. An alternative would be to determine the cost to install the ducts and reserve installation of the paging system to a time when funds were available.

The second big anticipated change order is \$460,592 to comply with the City of Portland's design review guidelines. This is the item that brought the contingency to the inadequate \$107,000 level, from \$340,000. I agree with the staff's contention that the requirements of the Design Commission are unusually stringent and costly, but I think some of the costs could have been anticipated by the design/build team in preparing their bid. The building's location in the Lloyd District falls inside the Oregon Convention Center Urban Renewal District and the area governed by the Central City Plan, which might have more stringent design guidelines than other locations. The question I would pose is whether the Hoffman team's proposed design conformed with known City policies on building design, and if so, whether responsibility for absorbing additional design-related costs should be borne solely by Metro or shared by the contracting team.

The third anticipated change order of considerable magnitude is \$720,000 expected for tenant improvements. Tenant improvements are Metro's responsibility: the RFP posed a total construction budget of \$9.36 million, which included Metro's estimate of \$1.8 million for tenant improvements. The design/build teams, in essence, built their bids for construction on the base number of \$9.36 million minus Metro's \$1.8 million allowance for tenant improvements. The Hoffman team, therefore, bid some \$7.5 million for the core and shell work, with any extra costs (or savings) for tenant improvements to be Metro's responsibility. Metro's allowance of \$1.8 million for tenant improvements was based on BOOR/A's October 1991 Building Program that estimated space requirements at just under 63,000 square feet. The Hoffman

team's proposal was for 79,412 square feet; subsequent additions to the built-out space have increased Metro's space to 88,000 square feet.

The increase in built-out space authorized by acceptance of Hoffman's proposal and subsequent change orders totals some 25,000 square feet more than the original plan for 63,000 square feet. This is a 40% increase in Metro space, for which Metro pays the costs of tenant improvements; the proposed \$720,000 increase in tenant improvement costs is a corresponding 40% increase above the \$1.8 million budgeted.

CONCLUSIONS AND RECOMMENDATIONS

The Metro Headquarters project is not over budget. The most recent report from Accounting (through November 2) shows \$10.745 million remaining in the General Revenue Bond Fund's Construction Account, with another \$192,000 in the Renewal and Replacement Fund.* With careful management, this should be sufficient to complete the project. Staff has proposed adjustments totalling some \$200,000 in reduced expenditures which should help ensure the project remains within budget.

The history of the project, though, leads me to recommend that Council exercise a more diligent oversight function throughout the remaining months of the project. Additions to the scope of the project have occurred with little or no direct review from the Council or the Regional Facilities Committee. Those additions may be well justified in that their construction during the active construction phase may prove to be more inexpensive than doing the work later, on an individual contract. The important point for the Council now is that the project no longer has a sizeable contingency. The contingency is small enough to justify the Council taking an active role in determining how to manage the remaining funds.

I recommend that the Council immediately establish a policy governing the Metro Headquarters project which requires project staff to provide detailed accounting of the project budget to the Regional Facilities Committee at each of its meetings, and require that committee to approve any additions or reductions to

*The FY 1992-92 Metro Budget includes a Renewal and Replacement Account in the General Revenue Bond Fund budget. The \$192,000 in this account was intended for future capital improvements, but could be spent this year. There is a Budget Note for this account which requires the Council's prior review and approval of any expenditures from the account.

Metro Headquarters Project
November 5, 1992
Page 5

the project - including future change orders. The Council could choose to establish a separate advisory committee, similar to the Convention Center Advisory Committee on Design and Construction, which had strong advisory authority over that project, but it is probably too late in the project to establish such a committee and have it be effective.

It is the Council that is ultimately responsible to the public for the expenditure of public funds. Given the high public visibility of this project and the shortage of contingency funds projected to be available, the Council should take the steps necessary to oversee the project to its completion, determining changes in scope and taking direct responsibility for adherence to the budget.

Council

11/12/92

3.2

PROJECT BRIEFING
November 10, 1992
Metro Regional Center Project
Report No. 18

CONSTRUCTION ACTIVITY

- Exterior brick and glazing being installed.
- Interior walls and Council rotunda being framed.
- Tower elevator "fin" being installed
- Rough-in plumbing, electrical, HVAC ongoing.
- Sidewalk work ongoing.

SCHEDULE

- Move -in March 1993; minimal schedule slippage (1 week).
- Plaza work controls critical path; secondary path through millwork.

SPACE PLANNING

- Space for Greenspaces identified.
- Portland Police will have 1500 square foot space in building; lease being prepared.

CITY OF PORTLAND

- Working with City to have twin ornamental light fixtures installed on Irving, 7th & Lloyd.
- Lloyd & 7th and Lloyd & Grand intersections revisions underway.

CHILDCARE

- Space plan complete; capacity of 50 children (anticipate 20 -25 Metro kids).
- Staff attending District Task Force on childcare.
- Proposals from operators due December 4; Center opening May 1993.

PARKING/TRANSPORTATION

- Scheduling parking garage construction activity to minimize disruption to the on-going parking operation.
- Possibility of Federal support for Model Transportation Program.

PROJECT BUDGET

- Construction costs per sq.ft. approx. \$82/sq. ft. (\$100 if financing costs included)/ initial annual operating rate is approx. \$16/sq.ft.
- Uncommitted contingency approximately \$107,000; major demand by plaza work (\$460,000); potential contingency of \$307,000 under review.
- Expect large change order (\$675,000) for parking garage work.

ENERGY

- PP&L FinAnswer Contract final costs being prepared.
- Voice and Data consultant under contract; cabling design complete.

MINORITY CONTRACTING

- No set goals. MBE participation over 11%.
- Minority on-site representation dropping off as new subcontractors come on board (averaging 9.6%); women participation increasing.

MISC.

- Both art projects under contract.
- Council Chamber under design; Portland Cable Access (PCA) has committed to supplying cameras and other related equipment to allow live broadcast.
- Project Waste Reduction program in place; good results/ good publicity.
- Leasing efforts for present Metro Center seem to be on track; one good possibility; reviewing tenant improvement proposal.
- Preliminary FF&E list developed; FF&E Review Committee will make recommendations to Regional Facilities Committee; goal will be to maximize use of existing furniture.

FINANCE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 92-1698 CONFIRMING THE
REAPPOINTMENT OF BONNIE KRAFT TO THE INVESTMENT ADVISORY BOARD

Date: November 9, 1992 Presented By: Councilor Van Bergen

COMMITTEE RECOMMENDATION: At the November 5, 1992 meeting the Committee voted unanimously to recommend Council approval of Resolution No. 92-1698. All Committee members were present and voting.

COMMITTEE DISCUSSION/ISSUES: Ms. Jennifer Sims, Finance Director presented the Staff Report. She outlined Ms. Kraft's long local government finance service and her valuable service to the District as a member of the Investment Advisory Board. Chairman Van Bergen commented that this Board was very valuable to the District and has served us well in the past.

EXHIBIT A

METRO COUNCIL
November 12, 1992
Agenda Item No. 6.4
Supplemental Packet

REQUEST FOR PROPOSALS
for

**Comprehensive Waste Stream
Characterization Study**

**Metropolitan Service District
Portland Metropolitan Region**

Metro RFP # 92R-33-SW

October 1992

**Metropolitan Service District
2000 S.W. First Avenue
Portland, OR 97201-5398
(503) 221-1646**

TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. BACKGROUND.....	1
III. SCOPE OF SERVICES.....	1
A. Overview of work.....	1
B. Work Plan Summary.....	2
C. Tasks.....	4
IV. PROJECT TIMELINE AND SCHEDULE.....	7
V. PROJECT ADMINISTRATION.....	8
VI. PROPOSAL INSTRUCTIONS.....	8
A. Submission of Proposals.....	8
B. Deadline.....	8
C. RFP as Basis For Proposals.....	8
VII. PROPOSAL CONTENTS.....	9
A. Transmittal Letter.....	9
B. Project Organization.....	9
C. Project Work Plan.....	9
D. Qualifications of Proposed Staff.....	9
E. Firm/Team's Experience.....	10
F. Capital Equipment and Disposition.....	10
G. In-Kind Services and Equipment Expectations.....	10
H. A Completed Disadvantaged Business Compliance form.....	10
I. Budget/Cost Proposal.....	10
J. Health and Safety Protection.....	11
K. Exceptions and Comments.....	11
VIII. EVALUATION OF PROPOSALS.....	11
A. Evaluation Procedure.....	11
B. Evaluation Criteria.....	11
IX. GENERAL PROPOSAL/CONTRACT CONDITIONS.....	12
A. Limitations of Award.....	12
B. Billing Procedures.....	12

X. LIST OF ATTACHMENTS

- ATTACHMENT A..... WASTE STREAM COMPONENT DEFINITIONS**
- ATTACHMENT B..... FIELD SORT FORM**
- ATTACHMENT C..... PERSONAL SERVICES AGREEMENT**
- ATTACHMENT D..... METRO CODE FOR DISADVANTAGED BUSINESS PROGRAM
and LETTER FROM DEPUTY EXECUTIVE OFFICER**
- ATTACHMENT E..... METRO DISADVANTAGED BUSINESS PROGRAM FORMS**
- ATTACHMENT F 1991 VEHICLE TONNAGES DELIVERED TO
DISPOSAL FACILITIES**
- ATTACHMENT G..... SORT ESTIMATE TABLES**
- ATTACHMENT H..... METRO 1989/90 WASTE CHARACTERIZATION
STUDY - FINAL REPORT**

I. INTRODUCTION

The Solid Waste Department of the Metropolitan Service District (Metro) is requesting proposals from qualified contractors for a comprehensive characterization of municipal solid waste presently being generated in the Portland metropolitan area. The objective is to collect data that will be useful to a variety of solid waste management programs and activities.

Respondents are asked to submit a work proposal and a cost for services, as described in this Request for Proposals (RFP). Proposals are due on December 14, 1992, at 5:00 p.m., PST, in Metro's Solid Waste Department at 2000 S.W. First Avenue, Portland, Oregon 97201-5398, and should be directed to the attention of Bill Metzler, Project Manager. Details concerning the project are contained in this document.

Metro staff intends to take an active role in all aspects of the study. However, the sorting of the waste stream will be performed exclusively by the consultant.

II. BACKGROUND

The Metropolitan Service District (Metro) is the government agency responsible for coordinating regional solid waste management in the Portland metropolitan region. The Metro region consists of a three county area (Clackamas, Multnomah and Washington counties), including 24 cities, with a combined 1991 population of 1.2 million people.

Metro conducts periodic studies to determine changes in waste composition. Previous studies occurred in 1986 - 1987 and in 1989 - 1990. A copy of the 1989-90 study is attached (see attachment H). The current request is for proposals to conduct sampling during the winter, spring, summer and fall seasons of 1993.

III. SCOPE OF SERVICES

A. Overview of work

The waste composition and quantification for this RFP will entail the following Study Elements:

- | | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|
| Study Element I. | Sample and classify waste as it is delivered to transfer stations and landfills |
| Study Element II. | Sample and classify waste directly from points of generation. |
| Study Element III. | Conduct survey of users and visual characterizations at disposal facilities to collect data on vehicle type and content. |

Waste sorted as part of Study Elements I and II will include construction and demolition waste, but will not include special wastes such as regulated hazardous waste, sewage sludges, and asbestos.

For Study Element I, vehicles delivering waste to disposal sites will be selected for sampling. The driver of the vehicle will be interviewed to determine what classes of generators generated the waste. A sample will then be chosen from the waste delivered, sorted into different components, and each component weighed.

Study Element II will involve sampling waste directly from the point of generation. Targeted waste will include single and multi-family residential generators and commercial generators. Waste from generators will be collected separately and brought directly to the disposal site (or other sorting location) for characterization.

Study Element III is to collect key data on users of six disposal facilities (Hillsboro Landfill, Forest Grove Transfer Station, Lakeside Landfill, East County Recycling, Metro South and Metro Central). The survey will include visual inspection and general classification of waste loads as they are unloaded. General information collected will include:

- Type of vehicle
- Type of generator
- Net weight of vehicle
- Place of origin
- General content of load
- Additional information as desired

B. Work Plan Summary

Sort Schedule and Sampling Information:

- Sampling Season: (1) winter 1993, (2) spring 1993, (3) summer 1993, and (4) fall 1993. See Project Timeline and Schedule. Exact dates to be determined in the final contract.
- Proposals should be based on an average sort consisting of 200-250 pounds of waste (for both Studies I and II).

Study Sites:

- **Study Element I - Waste Sorting at Disposal Facilities:** Metro Central, Metro South, and Hillsboro Landfill.
- **Study Element II - Generator Sorts:**
Single-family residential generator sorts: Pre-selected routes of residential waste will be sorted. Metro, consultant and haulers will coordinate to design special routes.

Multi-family residential and non-residential generator sorts: Waste from multi-family residential units and individual non-residential generators (commercial, industrial) will be collected and brought to a central area for sorting.

- **Study Element III - User Surveys at Disposal Facilities:**
The consultant will survey users of disposal facilities during one week at each of the following facilities for all four sort seasons: Hillsboro Landfill, Forest Grove Transfer Station, Lakeside Reclamation Landfill, East County Recycling, Metro South and Metro Central.

Waste Stream Components (Study Elements I and II):

Proposals should be based on sorting 10 major categories of the waste stream, with several associated sub-categories (see Attachments A and B).

General Method of Sorting (Study Elements I and II):

- a. Interview drivers of sample vehicles at scalehouse of disposal facilities.
- b. Direct sample vehicles to the designated sort area.
- c. Extract approximately 200-250 pounds of waste from load with a front end loader and place same onto sorting surface. The waste sample must be protected from rain. Extraction of samples must be done in a manner that ensures that they are representative of the load.
- d. Sort waste sample by category into containers. Weigh the container and record weight on a form similar to the Field Sort Form (see Attachments A and B).
- e. The sorting of material shall be done by hand for all samples, down to items that are one inch in size. If, after this level of sorting has been achieved, some small items remain, the residuals should be weighed and by visual estimation allocate the residual material to the appropriate categories.
- f. A data form should be completed for each sample. This form should include information on the source of the sample, the type of truck delivering the sample, the type of generators that produced the load from which the sample was taken, the weight of each component of the sample, and other details. Metro will produce the forms (see attachment B).

Data Processing:

Contractor will provide original data sheets to Metro. Contractor will be responsible for ensuring that all forms are complete and entries legible. The consultant shall provide the above data to Metro.

Data Analysis:

Contractor will not be responsible for data analysis.

Each consultant responding to the RFP is expected to write a draft work plan that details how each task will be conducted, specifies completion dates for each task, and includes itemized costs. Respondents are requested to use the following work plan information as a guide to proposing

costs, in addition, the Sort Estimate Tables (Attachment G) must be completed. The final work plan and budget will be negotiated following selection of the consultant and may vary from the tasks in the RFP. Respondents may also propose alternatives to the tasks in the RFP, or alternative methods of accomplishing the tasks, that would meet the objectives of the study as described in this document. However, each proposal must include cost estimates for tasks and individual study elements as described in this RFP.

Please respond to each of the objectives and tasks listed below. Points will be granted in the evaluation process for completeness of response. Metro reserves the right to select or reject any or all proposals in whole or in part or negotiate a revised proposal in the best interest of Metro.

C. Tasks

TASK 1: FINALIZE SAMPLING PLAN.

Consultant will appoint one lead person to participate with Metro staff in design of final sample study plan and coordination with haulers and facilities.

NOTE:

Metro wants to be confident that the average amounts of each component reported in this study are reliable estimates of the actual amounts present in the waste stream. Respondents should propose the number of samples required for reliable estimates.

TASK 2: HAULER COORDINATION.

Metro staff has begun discussions with haulers concerning any re-routing that might be required as part of this study. Consultant will ensure that all sorting schedules and any deliveries of waste will be coordinated with and acceptable to all haulers and preapproved by Metro.

TASK 3: SELECTION AND TRAINING OF CREW

3.1. Consultant is responsible for selection, hiring, and training of sorting crew. Sorters must receive training before actually gathering data in the field. This training is vital for maintaining consistency in data collection and for ensuring worker safety. All staff involved in sorting waste must complete at least 4 hours of training on distinguishing the various categories of waste being sorted using actual waste samples (see Attachments A and B).

3.2. All staff involved in interviewing drivers must receive at least 2 hours of training to familiarize themselves with the categories of waste generators and truck types used in the survey. In addition, all staff must be trained and familiar with the contractor's health and safety plan.

STUDY ELEMENT I - Sample and classify waste as delivered to transfer stations and landfills.

TASK 4a. Commercial Load Sampling at Disposal Sites.

4a.1.Based on the sampling plan, select commercial vehicles at the scalehouse of the three disposal facilities. Sampling shall occur for rear, side and front-load packer trucks, commercial drop boxes and self-haul vehicles. The type of vehicles will be sampled in proportion to the total tonnage of waste delivered by the truck type to the site (see Attachment F). Waste samples are to be collected and sorted at each disposal site for the four sort seasons, as outlined under the "Project Timeline and Schedule". Respondents to the RFP should indicate how they will select samples at each site. This should include both how the contractor will select sample vehicles delivering wastes, and how the contractor will select the sample waste from within the vehicle's load. The average size (weight) of the samples taken will be 200 - 250 pounds.

4a.2.Consultant shall request information from the driver of each commercial truck sampled and record the Metro number, company name, type of vehicle, generalized route area and type of generators. Any special factors that affect waste generation will be identified and recorded (e.g., occurrence of a holiday or unusual weather). Whenever possible, sampling close to the occurrence of such out-of-the-ordinary events will be avoided. Consultants shall also record weight, percentages and types of all material as requested on the Field Sort Form (Attachment B).

4a.3.A 35 mm slide will be taken of each sample before sorting begins. A sample identification number should be included in the picture, or some other method should be developed to allow the slide to be matched to the sample data collected.

4a.4.Each sample will be sorted into material categories as specified in the final materials list and then weighed. In addition, a count will be made of each type of beverage container encountered in a sample, as indicated on the Field Sort Form.

4a.5.Consultant will separate containers of hazardous waste found during the sort and record these items on the Field Sort Form. Consultant will remove all medical/infectious waste (syringes, tubing, gauze etc.). Consultant will ensure that the disposal facility manager is in receipt of this material to ensure proper disposal.

4a.6.Data forms that have been properly reviewed and completed should be submitted to Metro each week.

Task 4b: Self-Haul Load Sampling at Disposal Facilities.

4b.1.Based on the sampling plan, consultant shall select self-haul vehicles at the scalehouses of the three disposal facilities. Sampling shall occur for car, pickup, trailer, and other vehicles. The consultant shall utilize a method of selection that identifies self-haul loads as representative of self-haul vehicle types.

4b.2.Sorting should proceed similar to the process outlined for sorting of commercial loads in tasks 4a.

STUDY ELEMENT II - Sample and classify waste from points of generation.

TASK 5a: Sort Single-Family Residential Waste.

5a.1.The sampling plan (Task I) will identify single-family households to be sampled. Metro will choose areas to be sampled. Metro will assist in coordination with haulers. Proposals should identify budget amounts for payment to haulers to cover costs of cooperation with this project.

5a.2.Waste sampling and sorting. Samples are to be collected at the same time normal garbage service is scheduled for the waste generator.

5a.3.Sorting samples. The samples collected directly from generators will be taken to the designated disposal site or other sorting location for sorting and weighing. The sorting method should be the same used in Task 4a.

Task 5b: Sort Multi-Family Residential Waste.

5b.1.The sampling plan (Task I) will identify multi-family units to be sampled. Metro will choose sampling areas. Metro will assist in coordination with haulers. Proposals should identify budget amounts for payment to haulers to cover costs of cooperation with this project.

5b.2.Waste sampling and sorting. Samples are to be collected at the same time normal garbage service is scheduled for the waste generator.

5b.3.Sorting samples. The samples collected directly from generators should be taken to the designated disposal site or other sorting location for sorting and weighing. The sorting methodology should be the same used in Task 4a.

Task 5c: Non-Residential Waste Sort.

5c.1.The sampling plan (Task I) will identify non-residential waste generators to be sampled. Metro will choose sampling areas. Metro will assist in coordination with haulers. Proposals should identify budget amounts for payment to haulers to cover costs of cooperation with this project.

5c.2.Waste sampling and sorting. Samples are to be collected at the same time normal garbage service is scheduled for the waste generator.

5c.3.Sorting samples. The samples collected directly from generators should be taken to the designated disposal site or other sorting location for sorting and weighing. The sorting method should be the same as in Task 4a.

STUDY ELEMENT III - Survey users at disposal facilities and conduct visual characterization of waste to collect data on vehicle type and content.

Task 6: User Survey/Observation at Disposal Facilities.

Consultant will survey and collect key data on users of six disposal facilities (Hillsboro Landfill, Forest Grove Transfer Station, Lakeside Landfill, East County Recycling, Metro South and Metro Central). Survey will include visual inspection and general classification/verification of waste loads in all vehicles as they are disposed. General information collected will include:

- Type of vehicle
- Type of generator
- Net weight of vehicle
- Place of origin
- General content of load
- Additional information as desired

In coordination with Metro staff, consultant will create standard survey forms. Survey data must be tied to cashier transaction records to obtain the net weight per vehicle type after the survey has been completed. Consultants will be responsible for implementing quality control procedures to ensure that correct data are input. Quality control procedures must be approved by Metro staff.

Task 7: Data Processing and Delivery (for Study Elements I, II and III).

Contractor will provide original data sheets to Metro. Contractor will be responsible for ensuring that all forms are accurate and legible. Completed survey forms should be submitted to Metro at the end of each week. Consultants will provide a memorandum with the data documenting any problems or assumptions related to the data collected.

IV. PROJECT TIMELINE AND SCHEDULE

The contract is expected to begin in January of 1993 and shall expire on December 31, 1993 unless terminated at an earlier date or amended in accordance with contract provisions.

The proposed schedule for completing the project is as follows:

Nov. 16, 1992	RFP issued.
Dec. 14, 1992	Deadline for proposal submittals.
Dec. 18, 1992	Contractor selected (unless interviews are required).
Jan. 4, 1993	Contract signed work begins (training, logistics).
Jan. 11 - Mar. 31, 1993	Winter season 1993 waste characterization sort and data collection
April 1 - June 30, 1993	Spring season 1993 waste characterization sort and data collection.
July 1 - Sept. 30, 1993	Summer season 1993 waste characterization sort and data collection.
Oct. 1 - Dec. 31, 1993	Fall season 1993 waste characterization sort and data collection

V. PROJECT ADMINISTRATION

Metro's project manager and contact for this project is Bill Metzler, Associate Solid Waste Planner in the Planning and Technical Services Division of Metro's Solid Waste Department.

Metro intends to award this contract to a single firm (consultant) to provide the services required. The consultant must assure responsibility for any subcontractor work and shall be responsible for the day-to-day direction and internal management of the consultant effort. Proposals shall identify a single person as project manager to work with Metro.

VI. PROPOSAL INSTRUCTIONS

A. Submission of Proposals

Respondents shall provide four (4) copies of their proposal and any supporting materials. The proposal should be prepared succinctly, providing a straightforward, concise description of the proposer's ability to meet the requirements of the RFP. Any proposal or part thereof received after the deadline will not be considered. Proposals should be printed double-sided and on recycled paper.

Proposals should be placed in a sealed envelope clearly marked: "Proposal for Waste Stream Characterization Study". The proposal shall be furnished to Metro addressed to:

Bill Metzler, Project Manager
Metropolitan Service District
Solid Waste Department
2000 SW First Avenue
Portland, OR 97201-5398

B. Deadline

Proposals are due at Metro no later than 5:00 p.m. PST on Monday, December 14, 1992.

C. RFP as Basis For Proposals

This RFP represents the most definitive statement Metro will make concerning information upon which proposals are to be based. Any verbal information which is not contained in this RFP, or in addenda to this RFP, will not be considered by Metro in evaluating proposals.

If any proposer has a question about this RFP or needs any clarification with regard to any portion of the RFP, inquiries must be made in writing to Bill Metzler, no later than November 27, 1992. If Metro determines that a question asked is important and merits a response, the question and Metro's answer will be sent to all parties on the list of proposers (those parties who have received a copy of the RFP) on or before December 4, 1992. Any proposer who has submitted a

proposal and who subsequently receives an addendum, may supplement their proposal as they consider appropriate, provided that the supplementary material is provided on or before the due date for proposals.

In addition to the above, Metro may issue addenda to clarify or add to the RFP. In such an event, additional time to respond to the RFP or to provide supplementary material will be provided as appropriate.

VII. PROPOSAL CONTENTS

The proposal should describe the ability of the consultant to perform the work requested. To facilitate the evaluation of proposals, all proposals must be submitted in the format outlined below. The contents of each section of the proposal shall include the following:

A. Transmittal Letter

Indicate who will be the project manager, that the proposal will be valid for thirty (30) days after the submittal date; and state the name, title, address, and telephone number of an individual or individuals with authority to contractually bind the company during the period in which Metro is considering proposals.

B. Project Organization

This part of the proposal should contain a concise description of how the respondent intends to organize its approach to the project and respond to project demands.

C. Project Work Plan

The respondent is requested to outline their methodology for the performance of the tasks and objectives identified in this RFP. Respondents may propose on one or more of the study elements.

The work plan should provide a narrative description of the plan for implementing the work tasks as well as any substantive or procedural innovations used by the respondent on similar projects that are applicable to the project described in this RFP.

A work flow chart for all tasks, which takes into consideration the work timeline and schedule should be included. Describe how the project will be completed within the given time frame.

D. Qualifications of Proposed Staff

Identify the project manager and submit his/her qualifications. In addition, identify the specific personnel assigned to major project tasks and submit their qualifications. Designate which tasks will be done by subconsultants and submit their qualifications.

The respondents are requested to include a table indicating the total staff-hours of effort by element broken down to indicate involvement of each firm. Also to be included is the level of commitment to the project by each assigned individual.

E. Firm/Team's Experience

A complete, concise and accurate description of experience relevant to this project should be cited. The prospective contractor shall have demonstrable experience in solid waste and in planning for the recovery of resources from that waste. The prospective contractor shall demonstrate strong capability to perform waste sampling in the field, and reporting of field observations.

For each project, include the name of a client contact person, his/her title, their role in the project and telephone number. Metro expects to contact these references.

F. Capital Equipment and Disposition

Provide a list of capital equipment such as scales and containers that will be purchased or rented specifically for completion of the proposal. This list should include the cost of the equipment, and if the equipment is to be purchased or rented. If the respondent already has major capital equipment for carrying out this proposal, this equipment should also be listed with a notation that respondent already owns the equipment.

G. In-Kind Services and Equipment Expectations

Provide a list of in-kind services or equipment that is expected to be supplied by disposal site operators, Metro, or others. Such in-kind assistance may include space at disposal site for setting up a small sampling and sorting operation, and use of a loader to help select the sample from the load.

H. A Completed Disadvantaged Business Compliance form.

Metro has made a strong commitment to provide maximum opportunities to Disadvantaged and Women-Owned Businesses when contracting for goods or services by adopting Metro Code Sections 2.04.100 et seq.

Recent court decisions have set new standards for the constitutionality of such programs. Please refer to Attachment D for a letter from The Metro Deputy Executive Officer which indicates the present status of this program.

L. Budget/Cost Proposal

Respondents are to clearly show the total budget estimate by task and study element for the prime consultant and each sub-consultant and significant breakdown of those total budgets for labor and materials. In addition, respondents are required to complete Attachment G - Sort Estimate Tables. Respondents are advised to provide any/all budget information required for a complete evaluation of their proposal and not anticipate or expect later opportunities for proposal

clarification. Metro has allocated \$225,000 to \$250,000 to carry out the waste characterization study (studies I, II, and III). We expect that Study I will require approximately 35 percent of the total budget *Note: Metro is reserving \$15,000 of the total RFP budget to augment a construction and demolition waste audit study. This study will be conducted independently of this RFP.*

J. Health and Safety Protection

Provide a health and safety plan, or a description of the equipment, procedures, training, and other measures that will be taken to ensure the health and safety of all personnel working on the project

K. Exceptions and Comments

Metro intends to enter into a Personal Services Agreement with the selected firm for this project. A copy of the standard form contract which the successful proposer will be required to execute is included as Attachment C. Firms wishing to take exception to, or comment on the Personal Services Agreement language or any other aspect of this RFP are encouraged to document their concerns in this part of their proposal. Exceptions or comments should be succinct, thorough, and organized.

VIII. EVALUATION OF PROPOSALS

A. Evaluation Procedure

Proposals will be evaluated by a selection committee based upon information and criteria provided in this RFP. Oral interviews with the highest-ranked firm(s) may be requested by the committee prior to selecting a firm with whom to enter contract negotiations. After considering the report of the selection committee which will summarize the results of the negotiation process, the Solid Waste Director will recommend a firm to the Executive Officer of Metro for award of a contract.

B. Evaluation Criteria

This section provides a description of the criteria which will be used to evaluate and select proposals submitted to accomplish the work described in this RFP.

EVALUATION CRITERIA

General----- (15 POINTS)

- a. Compliance with RFP
- b. Completeness of response.
- c. Clarity and understandability.

Project Organization----- (15 POINTS)

- a. Project management, assignment of personnel and use of sub-consultants.
- b. Availability of project staff.

Project Work Plan and Methodology----- (20 POINTS)

- a. Demonstration of understanding of the project objectives and responsiveness of proposal to those objectives.
- b. Project Work Plan. Amount of detail provided and demonstration of ability to adhere to the indicated work schedule.
- c. Appropriateness of sorting methodology to be employed.
- d. Sampling design adequate for reliable estimates of waste amounts.

Project Staffing Experience----- (20 POINTS)

- a. Commitment of the firm to the project and expertise of assigned personnel.
- b. Qualifications and favorable references for project manager, project team and sub-consultants.
- c. Demonstrated knowledge of waste management issues and / or waste characterization.
- d. Evidence of related, successful work record of the firm and sub-consultants.

Budget / Cost Proposal----- (30 POINTS)

- a. Compliance with RFP.
- b. Completion of all required forms.
- c. Appropriateness of budget and cost proposal to scope of work.

IX. GENERAL PROPOSAL/CONTRACT CONDITIONS

A. Limitations of Award

This RFP does not commit Metro to the award of a contract, nor to pay any costs incurred in the preparation and submission of proposals in anticipation of a contract. Metro reserves the right to accept or reject any or all proposals received as the result of this request, to negotiate with all qualified sources, or to cancel all or part of this RFP.

B. Billing Procedures

Proposers are informed that the billing procedures of the selected firm are subject to the review and prior approval of Metro before reimbursement for services can occur. A monthly billing, accompanied by a progress report, shall be submitted for review and approval prior to payment. Invoices shall be the monthly progress reports and will list time, staff and materials for each task and sub-task completed.

X. LIST OF ATTACHMENTS

- A. WASTE STREAM COMPONENT DEFINITIONS**
- B. FIELD SORT FORM**
- C. PERSONAL SERVICES AGREEMENT**
- D. METRO CODE FOR DISADVANTAGED BUSINESS PROGRAM and
LETTER FROM DEPUTY EXECUTIVE OFFICER**
- E. METRO DISADVANTAGED BUSINESS PROGRAM FORMS**
- F. 1991 VEHICLE TONNAGES DELIVERED TO DISPOSAL
FACILITIES**
- G. SORT ESTIMATE TABLES**
- H. METRO 1989/90 WASTE CHARACTERIZATION STUDY - FINAL
REPORT**

ATTACHMENT A.
WASTE STREAM COMPONENT DEFINITIONS

ATTACHMENT A.
WASTE STREAM COMPONENT DEFINITIONS

The following are definitions of the categories and subcategories of the waste stream.

1. PAPER

Writing Papers (printing and other communication paper)

- A. Newspaper - Printed ground-wood newsprint (minimally bleached fiber). This category also includes some glossy paper typically used in newspaper insert advertisements, unless found separately.
- B. Printing/Writing/Office Paper (uncoated high-grades) - Printing, writing and computer papers, including mainly thermo-chemical pulps. This category is composed of high-grade paper, which includes white ledger, colored ledger, computer printouts, computer tab cards, bond, and copier paper. Excludes glossy coated paper such as magazines, direct mailings, catalogs and glue-bound publications.
- C. Magazines - This category includes:
 - Less than 1/2 inch - Publications done on glossy paper with a thickness of less than 1/2".
 - More than 1/2 inch - Publications done on glossy paper with a thickness more than 1/2".
- D. Hard-cover Books - Books consisting of white or cream ledger with hard covers.
- E. Low-Grade Scrap Paper - Recyclable printing paper, phone books, direct mailings (including stray sheets of ledger-grade paper commonly included in direct mail), used envelopes, other paper with sticky labels, construction paper, fax paper, bright -dyed paper (fiesta or neon colors), paperback books, and uncoated (non-glossy) groundwood catalogs (glue bindings).
- F. Nonrecyclable Scrap Paper - Paper not included above that is not easily recyclable. Includes carbon paper, tissue, photographs, blueprint, and paper normally soiled through use (paper plates).

Packaging Paper

- G. Corrugated Cardboard, Kraft Paper - Kraft liner board, container board cartons and shipping boxes with corrugated paper medium (unwaxed). This category also includes Kraft (brown) paper bags. Excludes waxed and plastic-coated cardboard, solid boxboard, multi-walled bags that are not pure unbleached Kraft.

- H. **Bleached Boxboard** - Milk cartons, juice cartons and white freezer boxes. Poly-coated bleached paperboard used for milk, ice-cream, juice (including aseptic packaging), frozen dinners, and many other frozen food boxes. Includes printed or unprinted white fiber boxes, but currently have limited markets due to polyethylene coating. Does not include uncoated paperboard (either bleached or unbleached), as uncoated boxboard is included in "Low-Grade packaging" below. Does not include cups or non-food poly-coated packages.
- I. **Low-Grade Packaging** - Other low-grade recyclable papers used in packaging, includes chipboard and other solid boxboard (not poly-coated), bags (without poly liners and not pure unbleached Kraft), clothing forms, egg cartons (molded pulp).
- J. **Nonrecyclable Packaging Paper** - Paper for which no significant recycling opportunities currently exist in Oregon. Includes waxed cardboard, poly-lined chipboard, foil lined papers, Christmas wrapping paper.
- K. **Mixed Paper/Materials** - Includes juice cans, oil cans, paper with thick foil laminates.

2. PLASTICS

Plastic Packaging

- A. **Rigid plastic containers** - Plastic packages of finite shape with a capacity of from eight ounces to five gallons. Includes lids from dish or wide-mouth containers, but not from lids from bottles. Includes polystyrene cups used commercially to package food, but not polystyrene cups sold as a product for home or office use (usually marked - included in "rigid plastic products").
 - 1) **#1-PET**: Polyethylene Terephthalate.
 - 2) **#2-HDPE**: High Density Polyethylene.
 - 3) **#3-PVC**: Vinyl.
 - 4) **#4-LDPE rigid**: Low Density Polyethylene.
 - 5) **#5-PP**: Polypropylene.
 - 6) **#6a-PS**: Polystyrene (solid).
 - 7) **#6b-PS**: Expanded Polystyrene.
 - 8) **#7-Other**.
 - 9) **Unidentified**.
- B. **Small Rigid Containers** - Containers such as small yogurt cups that are under 8 ounces in size but otherwise would be classified as rigid plastic containers.
- C. **Other Rigid Packaging** - Containers larger than 5 gallons, plastic bottle lids and lids from glass, metal or paper containers.

- D. **Film Packaging - Polyethylene film packaging and other film packaging. Includes grocery store produce bags, bread bags, food wrap, vacuum-formed packaging, bubble packs.**

Plastic Products

- E. **Film Products - Shower curtains, plastic sheeting, trash bags, and other film products.**
- F. **Rigid Plastic Products - Dishware and utensils, including expanded polystyrene cups and plates, household items, vinyl products, all-plastic furniture, and toys.**
- G. **Thermoset Plastics - Formica, fiberglass, and other related products.**
- H. **Mixed Plastics/Materials - Items whose predominant material is plastic, but is combined with other material, such as kitchen ware, toys and car parts with metal and wood components.**

3. GLASS

- A. **Deposit beverage glass (beer, soft drink, mineral water).**
- B. **Other Clear Bottles - All clear non-deposit beverage glass, including broken glass identified as non-deposit beverage glass. Included are wine bottles, wine cooler bottles, liquor bottles, juice bottles, and other non-deposit glass beverage containers.**
- C. **Other Colored Bottles - Colored non-deposit beverage glass. Same as B, except bottle glass which is green, brown, and other colored glass.**
- D. **Clear Container Glass - Clear glass food jars and other recyclable glass containers. Includes glass food jars, ketchup/mustard bottles, baby food jars, pickle jars, mayonnaise jars and other clear container glass that is not a beverage bottle.**
- E. **Colored Container Glass - Colored glass food jars. Same as D, but for green, brown, and other colored glass.**
- F. **Flat Window Glass - (not including mirrors).**
- G. **Nonrecyclable Glass - Includes products such as light bulbs, auto and cooking ware glass. Fiberglass insulation is included in other inorganics rather than here.**

4. METALS AND APPLIANCES

- A. Aluminum Beverage Cans - Used aluminum beverage cans (separate count of refundable vs no-deposit).
- B. Other Aluminum Containers and Foil - Aluminum pet food cans, foil-formed trays/containers, and foil.
- C. Other Aluminum - All other aluminum materials including furniture, house siding, cookware and scrap.
- D. Non-ferrous Metals - Non-iron derived metals, including copper, brass, lead, pewter, zinc, and other metals to which a magnet will not adhere. Metals that are significantly contaminated are not included (separate estimate for percent recoverable post-collection).
- E. Tinned Food Cans - Predominantly steel cans (some with tin or enamel coatings) used to hold food. Includes soup cans, vegetable cans etc.
- F. Other Tinned Cans - Same as above, except originally made to hold non-food items such as paint thinner.
- G. Other Ferrous Metals - Ferrous and alloyed ferrous scrap materials derived from iron, including household, industrial and commercial products not containing significant contaminants. This category includes scrap iron and steel to which a magnet adheres. Includes all-steel furniture such as bed frames. Does not include appliances, food cans, or other ferrous metal items listed elsewhere (separate estimate for percent recoverable post-collection).
- H. White Goods - This category is composed of discarded stoves, washer, dryers, refrigerators and other large household appliances.
- I. Small Appliances - This category includes household appliances such as television, toasters, broilers, can openers, blender, etc.
- J. Aerosol Cans -
- K. Mixed Metals/Materials - Other composite metal products and metals combined with other materials such as small gas engines, electrical motors, umbrellas, insulated wires.

5. ORGANIC WASTES

- A. Food. Discarded food and similar kitchen wastes. Does not include the container holding discarded food wastes.

- B. **Leaves and Grass.** Naturally occurring vegetative material and other fine organic waste from park, lawn and garden maintenance. Typically leaves, grass clippings, and herbaceous weeds. Excludes woody material greater than 1/4 inch diameter. Material can be home-composted without chipping.
- C. **Small Prunings (under 2")** - Prunings less than 2" diameter. Naturally occurring woody material from trees, plants, and shrubs. Could be chipped with a small chipper for home composting.
- D. **Large Prunings (over 2")** - Bulky woody yard waste excluding stumps. This category is composed of trees, large branches greater than 2" diameter, and other similar materials which can not be home-composted due to their size, weight and composition.
- E. **Stumps** - Stumps too large to be ground by most commercial composters due to size, without use of a special stump-splitting device (greater than 1 foot diameter or 100 pounds).
- F. **Untreated Lumber** - Unfinished or unpainted dimensional lumber or wood, including plywood and particleboard, used for construction or resulting from building demolition.
- G. **Wood Pallets and Crates** - Includes similar packaging lumber and dimension lumber material used in pallets and crates.
- H. **All-Wood Furniture** - Includes desks, chairs, bureaus and other furniture items made from wood.
- I. **Other Wood Products** - Includes pencils, coat hangers, and other objects made of wood that are not used for packaging or construction or as furniture.
- J. **Mixed Wood/Materials** - Mostly woody items combined with plastic, metal or other materials. Excludes items that are better included in another category.
- K. **Dead Animals** - Excludes animal parts generally used for or derived from food.
- L. **Other Organics** - Carbon containing wastes not otherwise categorized, including organic fines and other non-sortable combustibles.

6. Other Materials

- A. **Tires.**
- B. **Rubber Products** - Includes toys and inner tubes.

- C. Disposable Diapers - Disposable diapers, including fecal materials contained within. Cloth diapers are to be sorted under textiles.
- D. Carpets and Rugs.
- E. Other Textiles - Fabric materials including natural and man-made textile materials such as cottons, wool, silks, woven nylon, rayon, polyesters and other materials. This category includes clothing, rags, curtains and other fabric materials.
- F. Rocks/Concrete/Bricks.
- G. Soil and Nondistinct Fines.
- H. Gypsum Wallboard.
- I. Fiberglass Insulation.
- J. Roofing/Tarpaper - Asphalt shingles and tar roofing paper.
- K. Other Inorganics - Includes plaster and linoleum.
- L. Furniture and Furnishings - This includes reusable and non-reusable household items that are large such as chairs, tables, and mattresses. Excludes furniture made from single materials (all metal, all plastic, all wood).

7. Hazardous Materials

- A. Latex Paint.
- B. Oil-based Paints and Thinners.
- C. Pesticides/Herbicides.
- D. Fertilizer
- E. Motor Oil.
- F. Oil Filters
- G. Antifreeze
- H. Other Auto Products
- I. Fuels (Diesel, Gasoline, Kerosene).

- J. Adhesives/Cleaning Solvents.**
- K. Caustic Cleaners.**
- L. Lead Acid Batteries.**
- M. Dry-Cell Batteries.**
- N. Asbestos.**
- O. Aerosol Cans.**
- P. Other Chemicals**
- Q. Medical Wastes - Includes syringes, tubing, gauze, etc.**
- R. Other - This category should be used only if the items included here are individually described on the data sheet.**

**ATTACHMENT B.
FIELD SORT FORM**

**Attachment B
DRAFT FIELD SORT FORM**

DATE: _____ LOAD TYPE: _____ LOAD #: _____ LOCATION: _____

WRITING PAPERS			
Newspaper			
Printing/Writing/Office			
Magazines - less than 1/2"			
Magazines - more than 1/2"			
Low-grade Scrap Paper			
Nonrecyclable Scrap Paper			
Hardcover Books			

PLASTIC PACKAGING			
#1 PET Containers			
#2 HDPE Containers			
#3 PVC Containers			
#4 LDPE Containers			
#5 PP Containers			
#6 Solid PS Containers			
#6 Foam PS Containers			
#7 Other Containers			
Unidentified Containers			
Small Containers			
Other Rigid Packaging			
Film Packaging			

PAPER PACKAGING			
Cardboard/Brown Bags			
Low-Grade Packaging			
Nonrecyclable Packaging			
Bleached Boxboard			
Mixed Paper/Materials			

ORGANICS			
Food			
Leaves & Grass			
Small Prunings (under 2")			
Large Prunings (over 2")			
Stumps			
Untreated Lumber			
Treated Lumber			
Wood Pallets & Crates			
Wood Furniture			
Other Wood Products			
Mixed Wood/Materials			
Dead Animals			
Other Organics			

PLASTIC PRODUCTS			
Film Products			
Rigid Plastic Products			
Thermoset Plastics			
Mixed Plastics/Materials			

OTHER MATERIALS			
Tires			
Rubber Products			
Disposable Diapers			
Carpet			
Other Textiles			
Rock, Concrete, Brick			
Soil & Non-distinct Fines			
Gypsum Wallboard			
Fiberglass Insulation			
Roofing/Tar Paper			
Other Inorganics			
Furniture			

GLASS			
Deposit Beverage Glass			
Other Clear Bottles			
Other Colored Bottles			
Clear Container Glass			
Colored Container Glass			
Flat Window Glass			
Nonrecyclable Glass			

METALS			
Aluminum Beverage Cans			
Aluminum Foil/Food Trays			
Other Aluminum			
Nonferrous Metals			
Tinned Food Cans			
Other Tinned Cans			
Other Ferrous Metal			
White Goods			
Small Appliances			
Aerosol Cans			
Mixed Metals/Materials			

HAZARDOUS MATERIALS

BEVERAGE CONTAINER COUNTS

Latex Paint			
Oil-based Paints/Thinners			
Pesticides/Herbicides			
Fertilizer			
Fuels (gas/kerosene/diesel)			
Caustic Cleaners			
Lead-acid Batteries			
Dry-cell Batteries			
Asbestos			
Medical Wastes			
Other Chemicals			
Motor Oil			
Oil Filters			
Antifreeze			
Other Auto Products			
			No. of Aerosol Cans

	Aluminum	Steel	Glass	Plastic
Deposit Beer				
No-deposit Beer				
Unidentified Beer				
Deposit Pop/Mineral				
No-deposit Pop/Mineral				
Unidentified Pop/Mineral				
Wine				
Wine Cooler				
Liquor				
Juice				
Milk				
Water				
Other				

SUPERMDX:

LOCATION

Metro South	<input type="checkbox"/>	<input type="checkbox"/>
Metro Central	<input type="checkbox"/>	<input type="checkbox"/>
Hillsboro Landfill	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

LOAD TYPE

SF Res	<input type="checkbox"/>
MF Res	<input type="checkbox"/>
Comm. Mixed	<input type="checkbox"/>
Gen	<input type="checkbox"/>

GEN CLASS

Retail	<input type="checkbox"/>
Wholesale	<input type="checkbox"/>
Office	<input type="checkbox"/>
Food/Lodging	<input type="checkbox"/>
Education	<input type="checkbox"/>
CDL	<input type="checkbox"/>
Other	<input type="checkbox"/>

LOAD #

Date Collected _____ Date Sorted _____

VEHICLE TYPE

RL	<input type="checkbox"/>	RO/D	<input type="checkbox"/>	Auto w/Trailer	<input type="checkbox"/>	Other Truck	<input type="checkbox"/>
FL	<input type="checkbox"/>	RO/C	<input type="checkbox"/>	Pickup	<input type="checkbox"/>		
SL	<input type="checkbox"/>	Auto/Van	<input type="checkbox"/>	Pickup w/Trailer	<input type="checkbox"/>		

RECOVERABILITY

DUE TO

YES?		% Recoverable	Quantity	Size	Distribution	Comments
	OCC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
NO?	Metals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**ATTACHMENT C.
PERSONAL SERVICES AGREEMENT**

PERSONAL SERVICES AGREEMENT

THIS AGREEMENT is between the METROPOLITAN SERVICE DISTRICT, a municipal corporation organized under ORS Chapter 268, referred to herein as "Metro," located at 2000 S.W. First Avenue, Portland, OR 97201-5398, and _____, referred to herein as "Contractor," located at _____.

In exchange for the promises and other consideration set forth below, the parties agree as follows:

1. Duration. This personal services agreement shall be effective _____, and shall remain in effect until and including _____, unless terminated or extended as provided in this Agreement.

2. Scope of Work. Contractor shall provide all services and materials specified in the attached "Exhibit A -- Scope of Work," which is incorporated into this Agreement by reference. All services and materials shall be provided by Contractor in accordance with the Scope of Work, in a competent and professional manner. To the extent that the Scope of Work contains additional contract provisions or modifies any provision in the body of this Agreement, the Scope of Work shall control.

3. Payment. Metro shall pay Contractor for services performed and materials delivered in the maximum sum of _____ AND _____/100THS DOLLARS (\$ _____), in the manner and at the time specified in the Scope of Work.

4. Insurance.

a. Contractor shall purchase and maintain at the Contractor's expense, the following types of insurance, covering the Contractor, its employees, and agents:

(1) Broad form comprehensive general liability insurance covering personal injury and property damage, with automatic coverage for premises, operations, and product liability. The policy must be endorsed with contractual liability coverage; and

(2) Automobile bodily injury and property damage liability insurance.

b. Insurance coverage shall be a minimum of \$500,000 per occurrence, \$250,000 per person, and \$50,000 property damage. If coverage is written with an annual aggregate limit, the aggregate limit shall not be less than \$1,000,000.

c. Metro, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSURED. Notice of any material change or policy cancellation shall be provided to Metro 30 days prior to the change or cancellation.

d. Contractor, its subcontractors, if any, and all employers working under this Agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide Workers' Compensation coverage for all their subject workers. Contractor shall provide Metro with certification of Workers' Compensation insurance including employer's liability.

e. If required by the Scope of Work, Contractor shall maintain for the duration of this Agreement professional liability insurance covering personal injury and property damage arising from errors, omissions, or malpractice. Coverage shall be in the minimum amount of \$500,000. Contractor shall provide to Metro a certificate of this insurance, and 30 days' advance notice of material change or cancellation.

5. Indemnification. Contractor shall indemnify and hold Metro, its agents, employees and elected officials harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, with any patent infringement arising out of the use of Contractor's designs or other materials by Metro and for any claims or disputes involving subcontractors.

6. Maintenance of Records. Contractor shall maintain all of its records relating to the Scope of Work on a generally recognized accounting basis and allow Metro the opportunity to inspect and/or copy such records at a convenient place during normal business hours. All required records shall be maintained by Contractor for three years after Metro makes final payment and all other pending matters are closed.

7. Ownership of Documents. All documents of any nature including, but not limited to, reports, drawings, works of art and photographs, produced by Contractor pursuant to this Agreement are the property of Metro, and it is agreed by the parties that such documents are works made for hire. Contractor hereby conveys, transfers, and grants to Metro all rights of reproduction and the copyright to all such documents.

8. Project Information. Contractor shall share all project information and fully cooperate with Metro, informing Metro of all aspects of the project including actual or potential problems or defects. Contractor shall abstain from releasing any information or project news without the prior and specific written approval of Metro.

9. Independent Contractor Status. Contractor shall be an independent contractor for all purposes and shall be entitled only to the compensation provided for in this Agreement. Under no circumstances shall Contractor be considered an employee of Metro. Contractor shall provide all tools or equipment necessary to carry out this Agreement, and shall exercise complete control in achieving the results specified in the Scope of Work. Contractor is solely responsible for its performance under this Agreement and the quality of its work; for obtaining and maintaining all licenses and certifications necessary to carry out this Agreement; for payment of any fees, taxes, royalties, or other expenses necessary to complete the work except as otherwise specified in the Scope of Work; and for meeting all other requirements of law in carrying out this Agreement.

Contractor shall identify and certify tax status and identification number through execution of IRS form W-9 prior to submitting any request for payment to Metro.

10. **Right to Withhold Payments.** Metro shall have the right to withhold from payments due to Contractor such sums as necessary, in Metro's sole opinion, to protect Metro against any loss, damage, or claim which may result from Contractor's performance or failure to perform under this Agreement or the failure of Contractor to make proper payment to any suppliers or subcontractors.

11. **State and Federal Law Constraints.** Both parties shall comply with the public contracting provisions of ORS chapter 279, and the recycling provisions of ORS 279.545 - 279.650, to the extent those provisions apply to this Agreement. All such provisions required to be included in this Agreement are incorporated herein by reference. Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations including those of the Americans with Disabilities Act.

12. **Assignment.** This Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstance, be assigned or transferred by either party.

13. **Termination.** This Agreement may be terminated by mutual consent of the parties. In addition, Metro may terminate this Agreement by giving Contractor five days prior written notice of intent to terminate, without waiving any claims or remedies it may have against Contractor. Termination shall not excuse payment for expenses properly incurred prior to notice of termination, but neither party shall be liable for indirect or consequential damages arising from termination under this section.

14. **No Waiver of Claims.** The failure to enforce any provision of this Agreement shall not constitute a waiver by Metro of that or any other provision.

15. **Modification.** This Agreement is the entire agreement between the parties, and may only be modified in writing, signed by both parties.

CONTRACTOR

METROPOLITAN SERVICE DISTRICT

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

SW form 100 s:\share\dept\forms\psa.frm 7.10.92

ATTACHMENT D.
METRO CODE FOR DISADVANTAGED BUSINESS PROGRAM
and LETTER FROM DEPUTY EXECUTIVE OFFICER

METRO CODE SECTION 2.04.100
Disadvantaged Business Program
METROPOLITAN SERVICE DISTRICT
Revised June 1991

2.04.100 Disadvantaged Business Program, Purpose and Authority:

(a) It is the purpose of this ordinance to establish and implement a program to encourage the utilization by Metro of disadvantaged and women-owned businesses by creating for such

businesses the maximum possible opportunity to compete for and participate in Metro contracting activities.

(b) The portions of this ordinance which relate to federally funded contracts are adopted pursuant to 49 CFR 23 and are intended to comply with all relevant federal regulations. Federal regulation 49 CFR 23 and its amendments implement section (105)(f) of the Surface Transportation Assistance Act of 1982 relating to the participation by Minority Business Enterprises in Department of Transportation programs.

(c) This ordinance shall be known and may be cited as the "Metro Disadvantaged Business Program," hereinafter referred to as the "Program."

(d) This ordinance supersedes the Metro "Minority Business Enterprise (MBE) Program" dated October 1980 and amended December 1982.

(Ordinance No. 83-165, Sec. 1; amended by Ordinance No. 84-181, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.105 Policy Statement:

(a) Through this Program, Metro:

- (1) Expresses its strong commitment to provide maximum opportunity to disadvantaged and women-owned businesses in contracting;
- (2) Informs all employees, governmental agencies and the general public of its intent to implement this policy statement; and
- (3) Assures conformity with applicable federal regulations as they exist or may be amended.

(b) It is the policy of Metro to provide equal opportunity to all persons to access and participate in the projects, programs and services of Metro. Metro and Metro contractors will not discriminate against any person or firm on the basis of race, color, national origin, sex, sexual orientation, age, religion, physical handicap, political affiliation or marital status.

(c) The policies, practices and procedures established by this ordinance shall apply to all Metro departments and project areas except as expressly provided in this ordinance.

(d) The objectives of the program shall be:

- (1) To assure that provisions of this ordinance are adhered to by all Metro departments, contractors, employees and USDOT subrecipients and contractors.
- (2) To initiate and maintain efforts to increase program participation by disadvantaged and women businesses.

(e) Metro accepts and agrees to the statements of 49 CFR §23.43(a)(1) and (2), and said statements shall be included in all USDOT agreements with USDOT subrecipients and in all USDOT assisted contracts between Metro or USDOT subrecipients and any contractor.

(Ordinance No. 83-165, Sec. 2; amended by Ordinance No. 84-181, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.110 Definitions: For purposes of this Ordinance, the following definitions shall apply:

(a) "Applicant" means one who submits an application, request or plan to be approved by a USDOT official or by Metro as a condition to eligibility for Department of Transportation (USDOT) financial assistance; and "application" means such an application, request or plan.

(b) "Construction Contract" means a contract for construction of buildings or other facilities, and includes reconstruction, remodeling and all activities which are appropriately associated with a construction project.

(c) "Contract" means a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of this ordinance a lease or a purchase order of \$500.00 or more is a contract.

(d) "Contractor" means the one who participates, through a contract or subcontract, in the Program and includes lessees.

(e) "Department or USDOT" means the United States Department of Transportation, including its operating elements.

(f) "Disadvantage Business Enterprise or DBE" means a small business concern which is certified by an authorized agency and:

- (1) Which is at least 51 percent owned by one or more socially and economically disadvantaged individuals, or, in the case of any publicly-owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and

- (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

For purposes of USDOT assisted contracts, the term Disadvantaged Business Enterprise shall be deemed to include Women-Owned Business Enterprises.

(g) "Executive Department" means the State of Oregon's Executive Department.

(h) "Joint Venture" is defined as an association of two or more businesses to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills and knowledge. In a joint venture between a DBE/WBE and non-DBE/WBE, the DBE/WBE must be responsible for a clearly defined portion of the work to be performed and must share in the ownership, control, management responsibilities, risks and profits of the joint venture. A joint venture of a DBE/WBE and a non-DBE/WBE must receive Metro approval prior to contract award to be counted toward any DBE/WBE contract goals.

(i) "Labor and Materials Contract" is a contract including a combination of service and provision of materials other than construction contracts. Examples may include plumbing repair, computer maintenance or electrical repair, etc.

(j) "Lessee" means a business or person that leases, or is negotiating to lease, property from a recipient or the Department on the recipient's or Department's facility for the purpose of operating a transportation-related activity or for the provision of goods or services to the facility or to the public on the facility.

(k) "Oregon Department of Transportation or ODOT" means the State of Oregon's Department of Transportation.

(l) "Personal Services Contract" means a contract for services of a personal or professional nature.

(m) "Procurement Contract" means a contract for the purchase or sale of supplies, materials, equipment, furnishings or other goods not associated with a construction or other contract.

(n) "Recipient" means any entity, public or private, to whom USDOT financial assistance is extended, directly or through another recipient for any program.

(o) "Small Business Concern" means a small business as defined pursuant to section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

(p) "Socially and Economically Disadvantaged Individuals or Disadvantaged Individuals" means those individuals who are

citizens of the United States (or lawfully admitted permanent residents) and who are Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans or Asian-Indian Americans and any other minorities or individuals found to be disadvantaged by the Small Business Administration pursuant to section 8(a) of the Small Business Act. Certifying recipients shall make a rebuttable presumption that individuals in the following groups are socially and economically disadvantaged. Certifying recipients also may determine, on a case-by-case basis, that individuals who are not a member of one of the following groups are socially and economically disadvantaged:

- (1) "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;
- (2) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Portuguese-American, Spanish culture or origin, regardless of race;
- (3) "Native Americans," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
- (4) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, and the Northern Marianas; and
- (5) "Asian-Indian Americans," which includes persons whose origins are from India, Pakistan, and Bangladesh.

(q) "USDOT Assisted Contract" means any contract or modification of a contract between Metro and a contractor which is paid for in whole or in part with USDOT financial assistance.

(r) "USDOT Financial Assistance" means financial aid provided by USDOT or the United States Railroad Association to a recipient, but does not include a direct contract. The financial aid may be provided directly in the form of actual money, or indirectly in the form of guarantees authorized by statute as financial assistance services of Federal personnel, title or other interest in real or personal property transferred for less than fair market value, or any other arrangement through which the recipient benefits financially, including licenses for the construction or operation of a Deep Water Port.

(s) "Women-Owned Business Enterprise or WBE" means a small business concern, as defined pursuant to section 3 of the Small

Business Act and implementing regulations which is owned and controlled by one or more women and which is certified by an authorized agency. "Owned and controlled" means a business which is at least 51 percent owned by one or more women or, in the case of a publicly owned business, at least 51 percent of the stock of which is owned by one or more women, and whose management and daily business operations are controlled by one or more women. For purposes of USDOT assisted contracts, the term Disadvantaged Business Enterprise shall be deemed to include Women-Owned Business Enterprises.

(Ordinance No. 165, Sec. 3; amended by Ordinance No. 84-181, Sec. 2; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1; and Ordinance No. 88-252, Sec. 1)

2.04.115 Notice to Contractors, Subcontractors and Subrecipients: Contractors, subcontractors and subrecipients of Metro accepting contracts or grants under the Program which are USDOT-assisted shall be advised that failure to carry out the requirements set forth in 49 CFR 23.43(a) shall constitute a breach of contract and, after notification by Metro, may result in termination of the agreement or contract by Metro or such remedy as Metro deems appropriate. Likewise, contractors of Metro accepting locally-funded contracts under the Program shall be advised that failure to carry out the applicable provisions of the Program shall constitute a breach of contract and, after notification by Metro, may result in termination or such other remedy as Metro deems appropriate.

(Ordinance No. 83-165, Sec. 4; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.120 Liaison Officer:

(a) The Executive Officer shall by executive order, designate a Disadvantaged Business Liaison Officer and, if necessary, other staff adequate to administer the Program. The Liaison Officer shall report directly to the Executive Officer on matters pertaining to the Program.

(b) The Liaison Officer shall be responsible for developing, managing and implementing the program, and for disseminating information on available business opportunities so that DBEs and WBEs are provided an equitable opportunity to bid on Metro contracts. In addition to the responsibilities of the Liaison Officer, all department heads and program managers shall have responsibility to assure implementation of the Program.

(Ordinance No. 83-165, Sec. 5; amended by Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.125 Directory: A directory of DBEs and WBEs certified by ODOT or the Executive Department, as applicable shall be maintained by the Liaison Officer to facilitate identifying such businesses with capabilities relevant to general contracting requirements and particular solicitations. The directory shall be available to contract bidders and proposers in their efforts to meet Program requirements.

(Ordinance No. 83-165, Sec. 6; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.130 Minority-Owned Banks: Metro will seek to identify minority-owned banks within the policies adopted by the Metro Council and make the greatest feasible use of their services. In addition, Metro will encourage prime contractors, subcontractors and consultants to utilize such services by sending them brochures and service information on certified DBE/WBE banks.

(Ordinance No. 83-165, Sec. 7; amended by Ordinance No. 84-181, Sec. 3; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.135 Affirmative Action and Equal Opportunity Procedures: Metro shall use affirmative action techniques to facilitate DBE and WBE participation in contracting activities. These techniques include:

(a) Arranging solicitations, time for the presentation of bids, quantities specifications, and delivery schedules so as to facilitate the participation of DBEs and WBEs.

(b) Referring DBEs and WBEs in need of management assistance to established agencies that provide direct management assistance to such businesses.

(c) Carrying out information and communications programs on contracting procedures and specific contracting opportunities in a timely manner, with such programs being bilingual where appropriate.

(d) Distribution of copies of the program to organizations and individuals concerned with DBE/WBE programs.

(e) Periodic reviews with department heads to insure that they are aware of the program goals and desired activities on their parts to facilitate reaching the goals. Additionally, departmental efforts toward and success in meeting DBE/WBE goals for department

contracts shall be factors considered during annual performance evaluations of the department heads.

(f) Monitor and insure that Disadvantaged and Women Business Enterprise planning centers and likely DBE/WBE contractors are receiving requests for bids, proposals and quotes.

(g) Study the feasibility of certain USDOT-assisted contracts and procurements being set aside for DBE/WBE participation.

(h) Distribution of lists to potential DBE/WBE contractors of the types of goods and services which Metro regularly purchases.

(i) Advising potential DBE/WBE vendors that Metro does not certify DBE/WBEs, and directing them to ODOT until December 31, 1987, and, thereafter, to the Executive Department.

(j) Specifying purchases by generic title rather than specific brand name whenever feasible.

(k) Establishing an interdepartmental contract management committee which will meet regularly to monitor and discuss, among other issues, potential DBE and WBE participation in contracts. In an effort to become more knowledgeable regarding DBE and WBE resources, the committee shall also invite potential DBE and WBE contractors to attend selected meetings.

(l) Requiring that at least one DBE or WBE vendor or contractor be contacted for all contract awards which are not exempt from Metro's contract selection procedures and which are 1) for more than \$500 but not more than \$15,001 in the case of non-personal services contracts; and 2) for more than \$2,500 but not more than \$10,001 for personal services contracts. The Liaison Officer may waive this requirement if he/she determines that there are no DBEs or WBEs on the certification list capable of providing the service or item. For contracts over the dollar amounts indicated in this section, all known DBEs and WBEs in the business of providing the service or item(s) required shall be mailed bid or proposal information.

(m) The Executive Officer or his/her designee, may establish and implement additional affirmative action techniques which are designed to facilitate participation of DBEs and WBEs in Metro contracting activities.

(Ordinance No. 83-165, Sec. 8; amended by Ordinance No. 84-181, Sec. 4; Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.140 Certification of Disadvantaged Business Eligibility:

(a) To participate in the Program as a DBE or WBE, contractors, subcontractors and joint ventures must have been certified by an authorized certifying agency as described in subsection (b) of this section.

(b) Metro will not perform certification or recertification of businesses or consider challenges to socially and economically disadvantaged status. Rather Metro will rely upon the certification and recertification processes of ODOT and will utilize ODOT's certification list until December 31, 1987, and, thereafter, the Executive Department's list in determining whether a prospective contractor or subcontractor is certified as a DBE or WBE. A prospective contractor or subcontractor must be certified as a DBE or WBE by one of the above agencies, as applicable, and appear on the respective certification list of said agency, prior to the pertinent bid opening or proposal submission date to be considered by Metro to be an eligible DBE or WBE and be counted toward meeting goals. Metro will adhere to the Recertification Rulings resulting from 105(f) or state law, as applicable.

(c) Prospective contractors or subcontractors which have been denied certification by one of the above agencies may appeal such denial to the certifying agency pursuant to applicable law. However, such appeal shall not cause a delay in any contract award by Metro. Decertification procedures for USDOT-assisted contractor or potential contractors will comply with the requirements of Appendix A "Section by Section Analysis" of the July 21, 1983, Federal Register, Vol. 45, No. 130, p. 45287, and will be administered by the agency which granted certification.

(d) Challenges to certification or to any presumption of social or economic disadvantage with regard to the USDOT-assisted portion of this Program, as provided for in 49 CFR 23.69, shall conform to and be processed under the procedures prescribed by each agency indicated in paragraph (b) of this section. That challenge procedure provides that:

- (1) Any third party may challenge the socially and economically disadvantaged status of any individual (except an individual who has a current 8(a) certification from the Small Business Administration) presumed to be socially and economically disadvantaged if that individual is an owner of a firm certified by or seeking certification from the certifying agency as a disadvantaged business. The challenge shall be made in writing to the recipient.
- (2) With its letter, the challenging party shall include all information available to it relevant to

a determination of whether the challenged party is in fact socially and economically disadvantaged.

- (3) The recipient shall determine, on the basis of the information provided by the challenging party, whether there is reason to believe that the challenged party is in fact not socially and economically disadvantaged.
 - (i) if the recipient determines that there is not reason to believe that the challenged party is not socially and economically disadvantaged, the recipient shall so inform the challenging party in writing. This terminates the proceeding.
 - (ii) if the recipient determines that there is reason to believe that the challenged party is not socially and economically disadvantaged, the recipient shall begin a proceeding as provided in paragraphs (b), (4), (5) and (6) of this paragraph.
- (4) The recipient shall notify the challenged party in writing that his or her status as a socially and economically disadvantaged individual has been challenged. The notice shall identify the challenging party and summarize the grounds for the challenge. The notice shall also require the challenged party to provide to the recipient, within a reasonable time, information sufficient to permit the recipient to evaluate his or her status as a socially and economically disadvantaged individual.
- (5) The recipient shall evaluate the information available to it and make a proposed determination of the social and economic disadvantage of the challenged party. The recipient shall notify both parties of this proposed determination in writing, setting forth the reasons for its proposal. The recipient shall provide an opportunity to the parties for an informal hearing, at which they can respond to this proposed determination in writing and in person.
- (6) Following the informal hearing, the recipient shall make a final determination. The recipient shall inform the parties in writing of the final determination, setting forth the reasons for its decision.

- (7) In making the determinations called for in paragraphs (b)(3)(5) and (6) of this paragraph, the recipient shall use the standards set forth in Appendix C of this subpart.
- (8) During the pendency of a challenge under this section, the presumption that the challenged party is a socially and economically disadvantaged individual shall remain in effect." 49 CFR 23.69.

(Ordinance No. 83-165, Sec. 9; amended by Ordinance No. 84-181, Sec. 5; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1; and Ordinance No. 88-252, Sec. 1)

2.04.145 Annual Disadvantaged Business Goals:

(a) The Metro Council shall, by resolution each June, establish annual DBE goals and for locally-funded contracts, separate WBE goals for the ensuing fiscal year. Such annual goals shall be established separately for construction contracts, labor and materials contracts, personal services contracts, procurement contracts, and USDOT assisted contracts regardless of type.

(b) Annual goals will be established taking into consideration the following factors:

- (1) Projection of the number and types of contracts to be awarded by Metro;
- (2) Projection of the number, expertise and types of DBEs and WBEs likely to be available to compete for the contracts;
- (3) Past results of Metro's efforts under the Program;
- (4) For USDOT-assisted contract goals, existing goals of other local USDOT recipients and their experience in meeting these goals; and
- (5) For locally-funded contract goals, existing goals of other Portland metropolitan area contracting agencies, and their experience in meeting these goals.

(c) Annual goals for USDOT-assisted contracts must be approved by the United States Department of Transportation. 49 CFR §23.45(g)(3).

(d) Metro will publish notice that the USDOT-assisted contract goals are available for inspection when they are submitted to USDOT or other federal agencies. They will be made available

for 30 days following publication of notice. Public comment will be accepted for 45 days following publication of the notice.

(e) Metro will publish notice regarding proposed locally-funded contract goals not later than ten (10) days prior to adoption of the goals.

(Ordinance No. 83-165, Sec. 10; amended by Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216; amended by Ordinance No. 87-231, Sec. 1; and Ordinance No. 88-252, Sec. 1)

2.04.150 Contract Goals:

(a) The annual goals established for construction contracts shall apply as individual contract goals for construction contracts over \$50,000.

(b) The Liaison Officer may set a contract goal for any contract other than construction contracts over \$25,000. The setting of such contract goal shall be made in writing prior to the solicitation of bids for such contract. Contract goals for contracts other than construction contracts over \$50,000 shall be set at the discretion of the Liaison Officer and shall not be tied, necessarily, to the annual goal for such contract type.

(c) Even though no DBE/WBE goals are established at the time that bid/proposal documents are drafted, the Liaison Officer may direct the inclusion of a clause in any RFP or bid documents for any contract described in this section which requires that the prime contractor, prior to entering into any subcontracts, make good faith efforts, as that term is defined in Section 2.04.160, to achieve DBE/WBE participation in the same goal amount as the current annual goal for that contract type.

(d) Contract goals may be complied with pursuant to Section 2.04.160 and/or 2.04.175. The extent to which DBE/WBE participation will be counted toward contract goals is governed by the latter section.

(Ordinance No. 83-165, Sec. 11; repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1; and Ordinance No. 88-252, Sec. 1)

2.04.155 Contract Award Criteria:

(a) To be eligible for award of contracts containing a DBE/WBE goal, prime contractors must either meet or exceed the specific goal for DBE and WBE participation, or prove that they have made good faith efforts to meet the goal prior to the time bids are opened or proposal are due. Bidders/Proposers are required to utilize the most current list of DBEs and WBEs

certified by ODOT until December 31, 1987, and, thereafter, by the Executive Department, in all of the bidders'/proposers' good faith efforts solicitations. The address where certified lists may be obtained shall be included in all applicable bid/proposal documents.

(b) All invitations to bid or request for proposals on contracts for which goals have been established shall require all bidders/proposers to submit with their bids and proposals a statement indicating that they will comply with the contract goal or that they have made good faith efforts as defined in Section 2.04.160 to do so. To document the intent to meet the goals, all bidders and proposers shall complete and endorse a Disadvantaged Business Program Compliance form and include said form with bid or proposal documents. The form shall be provided by Metro with bid/proposal solicitations.

(c) Agreements between a bidder/proposer and a DBE/WBE in which the DBE/WBE promises not to provide subcontracting quotations to other bidders/proposers are prohibited.

(d) Apparent low bidders/proposers shall, by the close of the next working day following bid opening (or proposal submission date when no public opening is had), submit to Metro detailed DBE and WBE Utilization Forms listing names of DBEs and WBEs who will be utilized and the nature and dollar amount of their participation. This form will be binding upon the bidder/proposer. Within five working days of bid opening or proposal submission date, such bidders/proposers shall submit to Metro signed Letters of Agreement between the bidder/proposer and DBE/WBE subcontractors and suppliers to be utilized in performance of the contract. A sample Letter of Agreement will be provided by Metro. The DBE and WBE Utilization Forms shall be provided by Metro with bid/proposal documents.

(e) An apparent low bidder/proposer who states in its bid/proposal that the DBE/WBE goals were not met but that good faith efforts were performed shall submit written evidence of such good faith efforts within two working days of bid opening or proposal submission in accordance with Section 2.04.160. Metro reserves the right to determine the sufficiency of such efforts.

(f) Except as provided in paragraph (g) of this section, apparent low bidders or apparent successful proposers who state in their bids/proposals that they will meet the goals or will show good faith efforts to meet the goals, but who fail to comply with paragraph (d) or (e) of this section, shall have their bids or proposals rejected and shall forfeit any required bid security or bid bond. In that event the next lowest bidder or, for personal services contracts, the firm which scores second highest shall, within two days of notice of such ineligibility of the low bidder, submit evidence of goal compliance or good faith effort as provided

above. This process shall be repeated until a bidder or proposer is determined to meet the provisions of this section or until Metro determines that the remaining bids are not acceptable because of amount of bid or otherwise.

(g) The Liaison Officer, at his or her discretion, may waive minor irregularities in a bidder's or proposer's compliance with the requirements of this section provided, however, that the bid or proposal substantially complies with public bidding requirements as required by applicable law.

(Ordinance No. 83-165, Sec. 12; amended by Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.160 Determination of Good Faith Efforts:

(a) Bidders or Proposers on USDOT-assisted contracts to which DBE goals apply must, to be eligible for contract award, comply with the applicable contract goal or show that good faith efforts have been made to comply with the goal. Good faith efforts should include at least the following standards established in the amendment to 49 CFR §23.45(h), Appendix A, dated Monday, April 27, 1981. A showing of good faith efforts must include written evidence of at least the following:

- (1) Attendance at any presolicitation or prebid meetings that were scheduled by Metro to inform disadvantaged and women business enterprises of contracting and subcontracting or material supply opportunities available on the project;
- (2) Advertisement in trade association, general circulation, minority and trade-oriented, women-focus publications, if any and through a minority-owned newspaper or minority-owned trade publication concerning the sub-contracting or material supply opportunities at least 10 days before bids or proposals are due.
- (3) Written notification to a reasonable number but no less than five (5) DBE firms that their interest in the contract is solicited. Such efforts should include the segmenting of work to be subcontracted to the extent consistent with the size and capability of DBE firms in order to provide reasonable subcontracting opportunities. Each bidder should send solicitation letters inviting quotes or proposals from DBE firms, segmenting portions of the work and specifically describing, as accurately as possible, the portions of the work for which quotes or proposals are solicited from

DBE firms and encouraging inquiries for further details. Letters that are general and do not describe specifically the portions of work for which quotes or proposals are desired are discouraged, as such letters generally do not bring responses. It is expected that such letters will be sent in a timely manner so as to allow DBE sufficient opportunity to develop quotes or proposals for the work described.

(4) Evidence of follow-up to initial solicitations of interest, including the following:

(A) The names, addresses, telephone numbers of all DBE contacted;

(B) A description of the information provided to DBE firms regarding the plans and specifications for portions of the work to be performed; and

(C) A statement of the reasons for non-utilization of DBE firms, if needed to meet the goal.

(5) Negotiation in good faith with DBE firms. The bidder shall not, without justifiable reason, reject as unsatisfactory bids prepared by any DBE firms;

(6) Where applicable, the bidder must provide advice and assistance to interested DBE firms in obtaining bonding, lines of credit or insurance required by Metro or the bidder;

(7) Overall, the bidder's efforts to obtain DBE participation must be reasonably expected to produce a level of participation sufficient to meet Metro's goals; and

(8) The bidder must use the services of minority community organizations, minority contractor groups, local, state and federal minority business assistance offices and other organizations identified by the Executive Department's Advocate for Minority and Women Business that provide assistance in the recruitment and placement of DBEs and WBEs.

(b) Bidders or proposers on locally-funded contracts to which DBE/WBE goals apply shall achieve the applicable contract goal or demonstrate that they have made good faith efforts to achieve the

goals. Good faith efforts shall include written documentation of at least the following actions by bidders:

- (1) Attendance at any presolicitation or prebid meetings that were scheduled by Metro to inform DBEs and WBEs of contracting and subcontracting or material supply opportunities available on the project;

Documentation required: Signature of representative of bidder or proposer on prebid meeting attendance sheet.

- (2) Identifying and selecting specific economically feasible units of the project to be performed by DBEs or WBEs to increase the likelihood of participation by such enterprises;

Minimum documentation required: At least the documentation required under subsection (4) below.

- (3) Advertising in, at a minimum, a newspaper of general circulation, and trade association, minority and trade oriented, women-focused publications, if any, concerning the subcontracting or material supply opportunities on the project at least ten (10) days before bids or proposals are due;

Documentation required: copies of ads published.

- (4) Providing written notice soliciting sub-bids/proposals to not less than five (5) DBEs or WBEs for each subcontracting or material supply work item selected pursuant to (2) above not less than ten (10) days before bids/proposals are due.

If there are less than five certified DBEs/WBEs listed for that work or supply specialty then the solicitation must be mailed to at least the number of DBEs/WBEs listed for that specialty. The solicitation shall include a description of the work for which subcontract bids/proposals are requested and complete information on bid/proposal deadlines along with details regarding where project specifications may be reviewed.

Documentation required: Copies of all solicitation letters sent to DBE/WBE along with a written statement from the bidder/proposer that all the letters were sent by regular or certified mail not less than 10 days before bids/proposals were due.

- (5) Making, not later than five days before bids/proposals are due, follow-up phone calls to all DBEs/WBEs who have not responded to the solicitation letters to determine if they would be submitting bids and/or to encourage them to do so.

Minimum documentation required: Log showing a) dates and times of follow-up calls along with names of individuals contacted and individuals placing the calls; and b) results attained from each DBE/WBE to whom a solicitation letter was sent (e.g., bid submitted, declined, no response). In instances where DBE/WBE bids were rejected, the dollar amount of the bid rejected from the DBE/WBE must be indicated along with the reason for rejection and the dollar amount of the bid which was accepted for that subcontract or material supply item.

- (6) Using the services of minority community organizations, minority contractor groups, local, state and federal minority business assistance offices and other organizations identified by the Executive Department's Advocate for Minority and Women Business that provide assistance in the recruitment and placement of DBEs and WBEs; where applicable, advising and assisting DBEs and WBEs in obtaining lines of credit or insurance required by Metro or the bidder/proposer; and, otherwise, making efforts to encourage participation by DBEs and WBEs which could reasonably be expected to produce a level of participation sufficient to meet the goals.

Minimum documentation required: Letter from bidder/proposer indicating all special efforts made to facilitate attainment of contract goals, the dates such actions were taken and results realized.

- (7) Notwithstanding any other provision of this section, bidders and proposers on locally-funded contracts to which DBE/WBE goals apply need not accept the bid of a DBE or WBE on any particular subcontract or material supply item if the bidder/proposer demonstrates that none of the DBEs or WBEs submitting bids were the lowest responsible, responsive and qualified bidders/proposers on that particular subcontract item and that the subcontract item was awarded to the lowest responsible, responsive bidder/proposer.

Metro reserves the right to require additional written documentation of good faith efforts and bidders and proposers shall comply with all such requirements by Metro. It shall be a rebuttable presumption that a bidder or proposer has made a good faith effort to comply with the contract goals if the bidder has performed and submits written documentation of all of the above actions. It shall be a rebuttable presumption that the bidder has not made a good faith effort if the bidder has not performed or has not submitted documentation of all of the above actions.

(Ordinance No. 83-165, Sec. 13; amended by Ordinance No. 84-181, Sec. 6 and Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1; and Ordinance No. 88-252, Sec. 1)

2.04.165 Replacement of DBE or WBE Subcontractors: Prime contractors shall not replace a DBE/WBE subcontractor with another subcontractor, either before contract award or during contract performance, without prior Metro approval. Prime contractors who replace a DBE or WBE subcontractor shall replace such DBE/WBE subcontractor with another certified DBE/WBE subcontractor or make good faith efforts as described in the preceding section to do so.

(Ordinance No. 83-165, Sec. 14; amended by Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.170 Records and Reports:

(a) Metro shall develop and maintain a recordkeeping system to identify and assess DBE and WBE contract awards, prime contractors' progress in achieving goals and affirmative action efforts. Specifically, the following records will be maintained:

- (1) Awards to DBEs and WBEs by number, percentage and dollar amount.
- (2) A description of the types of contracts awarded.
- (3) The extent to which goals were exceeded or not met and reasons therefor.

(b) All DBE and WBE records will be separately maintained. Required DBE and WBE information will be provided to federal agencies and administrators on request.

(c) The Liaison Officer shall prepare reports, at least semiannually, on DBE and WBE participation to include the following:

- (1) The number of contracts awarded;
- (2) Categories of contracts awarded;
- (3) Dollar value of contracts awarded;
- (4) Percentage of the dollar value of all contracts awarded to DBE/WBE firms in the reporting period; and
- (5) The extent to which goals have been met or exceeded.

(Ordinance No. 83-165, Sec. 15; amended by Ordinance No. 84-181, Sec. 7, and Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)

2.04.175 Counting Disadvantaged Business Participation Toward Meeting Goals:

(a) DBE/WBE participation shall be counted toward meeting the goals on each contract as follows:

- (1) Subject to the limitations indicated in paragraphs (2) through (8) below, the total dollar value of a prime contract or subcontract to be performed by DBEs or WBEs is counted toward the applicable goal for contract award purposes as well as annual goal compliance purposes.
- (2) The total dollar value of a contract to a disadvantaged business owned and controlled by both disadvantaged males and non-disadvantaged females is counted toward the goals for disadvantaged businesses and women, respectively, in proportion to the percentage of ownership and control of each group in the business.

The total dollar value of a contract with a disadvantaged business owned and controlled by disadvantaged women is counted toward either the disadvantaged business goal or the goal for women, but not to both. Metro shall choose the goal to which the contract value is applied.

- (3) Metro shall count toward its goals a portion of the total dollar value of a contract with an eligible joint venture equal to the percentage of the ownership and control of the disadvantaged or female business partner in the joint venture.

- (4) Metro shall count toward its goals only expenditures to DBEs and WBEs that perform a commercially useful function in the work of a contract. A DBE or WBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing and supervising the work involved. To determine whether a DBE or WBE is performing a commercially useful function, Metro shall evaluate the amount of work subcontracted, industry practices and other relevant factors.
- (5) Consistent with normal industry practices, a DBE or WBE may enter into subcontracts. If a DBE or WBE contractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the DBE or WBE shall be presumed not to be performing a commercially useful function. The DBE or WBE may present evidence to Metro to rebut this presumption. Metro's decision on the rebuttal of this presumption is subject to review by USDOT for USDOT-assisted contracts.
- (6) A DBE or WBE which provides both labor and materials may count toward its disadvantaged business goals expenditures for materials and supplies obtained from other than DBE or WBE suppliers and manufacturers, provided that the DBE or WBE contractor assumes the actual and contractual responsibility for the provision of the materials and supplies.
- (7) Metro shall count its entire expenditure to a DBE or WBE manufacturer (i.e., a supplier that produces goods from raw materials or substantially alters them before resale).
- (8) Metro shall count against the goals 60 percent of its expenditures to DBE or WBE suppliers that are not manufacturers, provided that the DBE or WBE supplier performs a commercially useful function in the supply process.
- (9) When USDOT funds are passed-through by Metro to other agencies, any contracts made with those funds and any DBE participation in those contracts shall only be counted toward Metro's goals. Likewise, any USDOT funds passed-through to Metro from other agencies and then used for contracting shall count only toward that agency's goals. Project managers

responsible for administration of pass-through agreements shall include the following language in those agreements:

- (a) Policy. It is the policy of the Department of Transportation that minority business enterprises as defined in 49 CFR Part 23 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds under this agreement. Consequently, the MBE requirements of 49 CFR Part 23 apply to this agreement.
- (b) MBE Obligation. The recipient or its contractor agrees to ensure that minority business enterprises as defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with federal funds provided under this agreement. In this regard, all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that minority business enterprises have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin or sex in the award and performance of USDOT-assisted contracts."

(b) DBE or WBE participation shall be counted toward meeting annual goals as follows:

- (1) Except as otherwise provided below, the total dollar value of any contract which is to be performed by a DBE or WBE is counted toward meeting annual goals.
- (2) The provisions of paragraphs (a)(2) through (a)(8) of this section, pertaining to contract goals, shall apply equally to annual goals.

(Ordinance No. 83-165, Sec. 16; amended by Ordinance No. 84-181, Sec. 8; and Ordinance No. 86-197, Sec. 1; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1; and Ordinance No. 88-252, Sec. 1)

2.04.180 Compliance and Enforcement:

(a) Metro shall reserve the right, at all times during the period of any contract, to monitor compliance with the terms of this chapter and the contract and with any representation made by

a contractor prior to contract award pertaining to DBE and WBE participation in the contract.

(b) The Liaison Officer may require, at any stage of contract completion, documented proof from the contractor of actual DBE and WBE participation.

(Ordinance No. 83-165, Sec. 17; all previous Ordinances repealed by Ordinance No. 87-216, Sec. 1; amended by Ordinance No. 87-231, Sec. 1)



METRO

2000 SW First Avenue
Portland, OR 97201-5398
(503) 221-1646
Fax 241-7417

October 22, 1991

Dear Potential Bidder/Proposer:

For the past ten years, the Metropolitan Service District has had a special contracting program to encourage participation in metro contracts by businesses owned by minorities including women. This program has been applied to both federally funded and locally funded projects.

We have now been advised by our General Counsel that the Metro Code provisions relating to participation by minority-owned businesses in locally funded contracts are unconstitutional.

Therefore, I must reluctantly advise you that until the Metro Council acts to correct this defect and/or adopts a new program, I cannot and will not act in probable violation of the law and attempt to enforce the present Metro DBE and WBE Program requirements on locally funded projects.

The economy of the Metro region is comprised of a multitude of emerging and small businesses which mirror the racial diversity within our boundaries. They're our customers and clients. They pay taxes. They hire the local work force. They determine the health of the local economy. Supporting those businesses should not be viewed as just a requirement. Supporting those businesses should be viewed as good business!

I, therefore encourage you to set the legal question aside and voluntarily follow good faith efforts to utilize Disadvantaged, Minority and Women Owned Business Enterprises as your subcontractors and suppliers.

Please consider these issues carefully. Talk to your legal counsel. Reflect upon the larger issue. If you have questions, please contact Rich Wiley at Metro 221-1646 x 116.

Respectfully,


Richard D. Engstrom
Deputy Executive Officer

**ATTACHMENT E.
METRO DISADVANTAGED BUSINESS PROGRAM FORMS**

DISADVANTAGED BUSINESS PROGRAM COMPLIANCE FORM

(To be submitted with Bid or Proposal)

Name of Metro Project: _____

Name of Bidder: _____

Address: _____

Telephone: _____

In accordance with Metro's Disadvantaged Business Program, the above-named Bidder has accomplished the following:

- _____ 1. Has fully met the Contract goals and will subcontract ___ percent of the Contract amount to DBEs and ___ percent to WBEs.

- _____ 2. Has partially met the Contract goals and will subcontract ___ percent of the Contract amount to DBEs and ___ percent to WBEs. The Contractor has made good faith efforts prior to Bid opening (or proposal submission date, as applicable) to meet the full goals and will submit documentation of the same to Metro within two working days of Bid opening (or proposal submission date).

- _____ 3. Will not subcontract any of the contract amount to DBEs or WBEs but has made good faith efforts prior to Bid opening (or proposal submission date, as applicable) to meet the contract goals and will submit documentation of such good faith efforts to Metro within two working days of Bid opening (or proposal submission date).

Authorized Signature

Date

DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION FORM

1. Name of Metro Project _____

2. Name of Bidder _____

Address of Bidder _____

3. The above-named bidder intends to subcontract _____ percent of the Total Bid Price to the following Disadvantaged Business Enterprises (DBEs):

Names, Contact Persons, _____
Addresses and Telephone Numbers _____

<u>Dollar of DBE Firms Bidder Anticipates Utilizing</u>	<u>Nature of Participation</u>	<u>Value of Participation</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total _____

Amount of Total Bid Price _____

DBE Percent of Total Bid Price _____

Authorized Signature

Date: _____

**THIS FORM IS TO BE COMPLETED, SIGNED AND SUBMITTED
BY THE CLOSE OF THE NEXT WORKING DAY FOLLOWING BID OPENING**

WOMEN-OWNED BUSINESS ENTERPRISES UTILIZATION FORM

1. Name of Metro Project _____

2. Name of Bidder _____

Address of Bidder _____

3. The above-named bidder intends to subcontract _____ percent of the Total Bid Price to the following Disadvantaged Business Enterprises (WBEs):

Names, Contact Persons, _____
Addresses and Telephone Numbers _____

<u>Dollar of DBE Firms Bidder Anticipates Utilizing</u>	<u>Nature of Participation</u>	<u>Value of Participation</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total _____

Amount of Total Bid Price _____

DBE Percent of Total Bid Price _____

Authorized Signature

Date: _____

**THIS FORM IS TO BE COMPLETED, SIGNED AND SUBMITTED
BY THE CLOSE OF THE NEXT WORKING DAY FOLLOWING BID OPENING**

ATTACHMENT F.
1991 VEHICLE TONNAGES DELIVERED TO DISPOSAL FACILITIES

ATTACHMENT F.
1991 VEHICLE TONNAGES DELIVERED TO DISPOSAL FACILITIES

Site	Rear Loaders	Front Loaders	Side Loaders	Loose Drop Box	Compacted Drop Box	Self Haul
Metro South	113,185	54,476	23,401	65,310	15,478	40,405
Metro Central	67,732	79,796	5,471	70,376	9,888	22,025
MSW Composter	54,729	5,635	28,916	4,830	1,334	449

**ATTACHMENT G.
SORT ESTIMATE TABLES**

ATTACHMENT G. SORT ESTIMATE TABLES

General Instructions:

Complete all three Sort Estimate Tables using the number of sorts per season given in the tables. Based on the different number of sorts to be performed, provide cost estimates for the separate sort types (general disposal facilities, single-family residential, multi-family residential, and non-residential generators).

ESTIMATE A

Sort Type	Hours per Day	Days per Season	# Sorts per Hour	# Sorts per Day	1 Season: # Sorts Cost	2 Seasons: # Sorts Cost	3 Seasons: # Sorts Cost	4 Seasons: # Sorts Cost
General Disposal Facility Sorts Per Facility: #Days = _____ #Sorts = _____	_____	_____	_____	_____	180 sorts \$ _____	360 sorts \$ _____	540 sorts \$ _____	720 sorts \$ _____
SF Residential	_____	_____	_____	_____	40 sorts \$ _____	80 sorts \$ _____	120 sorts \$ _____	160 sorts \$ _____
MF Residential	_____	_____	_____	_____	40 sorts \$ _____	80 sorts \$ _____	120 sorts \$ _____	160 sorts \$ _____
Commercial	_____	_____	_____	_____	40 sorts \$ _____	80 sorts \$ _____	120 sorts \$ _____	160 sorts \$ _____
Totals Average Cost per Sort = \$ _____					300 sorts \$ _____	600 sorts \$ _____	900 sorts \$ _____	1200 sorts \$ _____

ATTACHMENT G SORT ESTIMATE TABLES

ESTIMATE B

Sort Type	Hours per Day	Days per Season	# Sorts per Hour	# Sorts per Day	1 Season: #Sorts Cost	2 Seasons: # Sorts Cost	3 Seasons: # Sorts Cost	4 Seasons: # Sorts Cost
General Disposal Facility Sorts Per Facility: #Days = _____ #Sorts = _____	_____	_____	_____	_____	325 sorts \$ _____	650 sorts \$ _____	975 sorts \$ _____	1300 sorts \$ _____
SF Residential	_____	_____	_____	_____	75 sorts \$ _____	150 sorts \$ _____	225 sorts \$ _____	300 sorts \$ _____
MF Residential	_____	_____	_____	_____	75 sorts \$ _____	150 sorts \$ _____	225 sorts \$ _____	300 sorts \$ _____
Commercial	_____	_____	_____	_____	75 sorts \$ _____	150 sorts \$ _____	225 sorts \$ _____	300 sorts \$ _____
Totals Average Cost per Sort = \$ _____					550 sorts \$ _____	1100 sorts \$ _____	1650 sorts \$ _____	2200 sorts \$ _____

ATTACHMENT G SORT ESTIMATE TABLES

ESTIMATE C

Sort Type	Hours per Day	Days per Season	# Sorts per Hour	# Sorts per Day	1 Season: #Sorts Cost	2 Season: # Sorts Cost	3 Seasons: # Sorts Cost	4 Seasons: # Sorts Cost
General Disposal Facility Sorts Per Facility: #Days = _____ #Sorts = _____	_____	_____	_____	_____	400 sorts \$ _____	800 sorts \$ _____	1200 sorts \$ _____	1600 sorts \$ _____
SF Residential	_____	_____	_____	_____	200 sorts \$ _____	400 sorts \$ _____	600 sorts \$ _____	800 sorts \$ _____
MF Residential	_____	_____	_____	_____	200 sorts \$ _____	400 sorts \$ _____	600 sorts \$ _____	800 sorts \$ _____
Commercial	_____	_____	_____	_____	200 sorts \$ _____	400 sorts \$ _____	600 sorts \$ _____	800 sorts \$ _____
Totals Average Cost per Sort = \$ _____					1000 sorts \$ _____	2000 sorts \$ _____	3000 sorts \$ _____	4000 sorts \$ _____

ATTACHMENT G - SORT ESTIMATE TABLE D						
Cost Estimate Work Sheet by Study Element and Task						
Study Element I						Cost
Sample and classify waste as delivered to disposal sites						
Task 1	Finalize sampling plan					\$
Task 2	Hauler coordination					\$
Task 3	Selection and training of crew					\$
Task 4a	Field work - commercial load sampling					\$
Task 4b	Field work - self haul load sampling					\$
				Subtotal		\$
Study Element II						
Sample and classify waste from points of generation						
Task 1	Finalize sampling plan					\$
Task 2	Hauler coordination					\$
Task 3	Selection and training of crew					\$
Task 4a	Field work - sort & classify single-family residential waste					\$
Task 4b	Field work - sort & classify multi-family residential waste					\$
Task 4c	Field work - sort & classify non-residential waste					\$
				Subtotal		\$
Study Element III						
Survey of users and visual characterization at disposal facilities						
Task 1	Finalize plan					\$
Task 2	Survey and collect data on facility users					\$
Task 3	Field work - visual characterization of waste disposed					\$
				Subtotal		\$
MISCELLANEOUS COSTS						
	Equipment rental or purchase					\$
	Hauler assistance reimbursement					\$
				Subtotal		\$
				TOTAL		\$

ATTACHMENT H.
METRO 1989/90 WASTE CHARACTERIZATION STUDY
FINAL REPORT

METRO WASTE CHARACTERIZATION STUDY

1989-90 FINAL REPORT

**Solid Waste Department
Metropolitan Service District**

Project Managers:

**Terry Petersen
Metropolitan Service District
2000 S.W. First Avenue
Portland, OR 97201-5398
(503) 221-1646**

**David Luneke
Wilsey and Ham Pacific
1099 S.W. Columbia Street
Portland, OR 97201
(503) 227-0455**

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
INTRODUCTION	1
METHODS	1
Facilities	1
Sampling	1
Hauler Interviews	2
Sampling Method	2
Waste Categories	2
Waste Streams	3
Calculation of Waste Generation Rates	3
Analysis	3
RESULTS	4
Waste Composition	4
Waste Stream Characterization	4
Comparison to 1987 Waste Composition	5
Per Capita Disposal Rates	5

LIST OF FIGURES

Figure 1. Composition of waste delivered to all regional facilities during the 1989/1990 sample period.	6
Figure 2. Annual quantity of construction/demolition debris, residential waste, and non-residential waste delivered to regional disposal facilities during the 1989/1990 sample period.	9
Figure 3. Comparison of the 1987 and 1989 waste compositions.	11

LIST OF TABLES

Table 1. Composition of waste delivered to each of the three study sites during the four sample seasons.	7
Table 2. Quantity of construction/demolition debris, residential waste, and non-residential waste delivered to regional facilities during each of the four sample seasons.	8
Table 3. Composition of three waste streams: (1) construction and demolition debris, (2) residential waste, and (3) non-residential waste delivered to each of the three study sites.	10
Table 4. Change in waste composition from 1987 to 1989 at each of the three study sites.	12
Table 5. Comparison of per capita disposal rates in 1987 and 1989.	13

LIST OF APPENDICES

APPENDIX A	DEFINITIONS OF WASTE CATEGORIES	15
APPENDIX B	FIELD DATA FORM	16

ACKNOWLEDGEMENTS

The waste sort was conducted by Wilsey and Ham Pacific under contract with the Metropolitan Service District. The project manager for Wilsey and Ham was David Luneke. Brad Crement and Bill Stewart of Wilsey and Ham supervised field crews. Metro staff also appreciates the assistance and cooperation of Mike Sandburg of Hillsboro Landfill, Mike Casetta with BFI at St. Johns Landfill, and Bruce Burgoyne with Waste Management of Oregon at Metro South Station.

INTRODUCTION

This report presents the results of the waste characterization study conducted during 1989/1990. The study consists of four seasonal sorts.

The waste characterization study is part of Metro's system measurement program. The objectives of this study are to:

- (1) determine the composition of the total waste stream in the Metro region,
- (2) determine the composition of major waste substreams produced by residential and non-residential generators, and
- (3) estimate waste generation rates for residential and non-residential generators.

Interim reports were prepared after each of the four seasonal sorts. This final report summarizes the seasonal data. It also compares the current waste composition to the previous waste composition study conducted in 1987.

The data will be used in developing waste reduction programs, projecting waste flow within the region, and designing the regional system of solid waste facilities.

METHODS

Facilities

Sampling was conducted at three facilities: Hillsboro Landfill, St. Johns Landfill, and Metro South Station. Hillsboro Landfill is a limited-purpose landfill located in Hillsboro. St. Johns Landfill is a general-purpose landfill located in north Portland. Metro South is a transfer station located in Oregon City.

Sampling

Sorts were conducted during the winter, spring, summer, and fall seasons. Winter sampling was conducted February 15-16, 1990 at Hillsboro Landfill, February 20-23 at St. Johns Landfill, and February 27 - March 2 at Metro South Station. Spring sampling was conducted May 16-20, 1989 at Hillsboro Landfill, May 9-13 at St. Johns Landfill, and May 2-6 at Metro South Station. Summer sampling was conducted September 7-9, 1989 at Hillsboro Landfill, September 12-16 at St. Johns Landfill, and September 19-23 at Metro South Station. Fall sampling was conducted November 2-3, 1989 at Hillsboro Landfill, November 7-10 at St. Johns Landfill, and November 14-17 at Metro South Station.

Different truck types (front packer, side packer, rear packer, loose drop box, compacted drop box, and self-haul) were sampled in proportion to the amount of waste each truck delivered to the facility. For example, if side packer trucks delivered 10% of all waste to the facility, approximately 10% of the samples were from side packer loads. Loads of each truck type were selected according to their sequence of arrival at the facility.

An average of 30 loads were sampled each day. A total of 1239 loads were sampled at all facilities during the entire study. All data was recorded on the field form shown in the Appendix.

Hauler Interviews

Haulers were asked for information about the origin and type of waste being delivered. When appropriate, the address of the load origin was obtained. If the address was not available, the intersection nearest the center of the route was recorded. Haulers were also asked to estimate the percentage of waste present in the load from residential and non-residential generators. The fall and winter sorts included more detailed analysis of non-residential generators. This additional information is reported in the separate reports for those seasons.

Sampling Method

Loads selected for sampling were directed to a sorting area after the driver was interviewed. After unloading, a single sample of approximately 300 pounds was taken from the center of the load with a front-end loader. This sample was then deposited on tarps for sorting. Large pieces of material were first extracted and weighed. The remaining waste was then placed in sorting boxes for final separation.

Waste Categories

The main categories of waste were paper, plastic, yard debris, wood, glass, aluminum, ferrous metal, miscellaneous organics, and miscellaneous inorganics. A total of 39 subcategories were identified within these main groupings. Changes from sorts prior to September 1989 were: (1) the addition of polystyrene foam in the plastic category, (2) the addition of food containers in the paper category, (3) the addition of other food containers in the plastic category, (4) the addition of food containers in the glass category, and (5) the addition of medical waste. Definitions and examples of each subcategory are given in the Appendix.

Waste Streams

For this final report, the compositions of three waste substreams are analyzed. These substreams are: (1) construction and demolition debris, (2) residential waste excluding construction and demolition debris, and (3) non-residential waste excluding construction and demolition debris.

Calculation of Waste Generation Rates

The rates (lbs/person/day and lbs/household/day) at which waste is produced by residential and non-residential generators were calculated using the following procedures. Based on the hauler interviews, the percentage of the regional wastestream produced by residential and non-residential generators was estimated.

The annual tonnage produced by each generator was estimated using the total tons delivered to all regional facilities from April 1989 to March 1990. The source of disposal tonnage is Metro's May 15, 1990 Solid Waste Information System quarterly report. The total number of households and employees in the region were then used to calculate daily production rates. The source of demographic data was The Regional Forecast (Transportation Department, Metropolitan Services District).

This methodology depends on accurate estimates by the hauler of the generator percentages in mixed loads. While such estimation may be a source of error in calculating the substream percentages, the majority of loads delivered to regional facilities are from single-source generators (e.g. residential packer routes, single account commercial drop boxes). Less than 20% of the loads sampled in this study were from a mixture of generator types.

Analysis

Sample percentages were calculated by dividing the weight of each material present in the sample by the total weight of the sample. The percentages express the percent of tons delivered, not a percent of tons generated. Percentages are on a wet-weight basis, not dry weight.

Weighted averaging was used to calculate the average composition of site and regional waste. For the analysis of waste within each site, the weighting variable was truck type. For the analysis of each season, the sample percentages were weighted by both truck type and the percentage of regional waste delivered to the facility. Similarly, average annual percentages were calculated using the seasonal distribution of waste delivery to regional facilities. All data analysis was conducted using the Statistical Analysis System for personal computers.

Demolition, construction, remodeling, and yard debris was attributed to the type of generator where the material originated. For example, roofing debris from single-family dwellings was attributed to the residential sector.

RESULTS

Waste Composition

The composition of the regional waste stream is shown in Figure 1. Paper (30%) was the most common material, followed by construction wood (12%), yard debris (11%), plastics (9%), and food wastes (7%).

Site and seasonal data for all 39 waste categories are given in Table 1. Waste delivered to Hillsboro Landfill consisted mostly of construction wood (24%), yard debris (14%), and miscellaneous organic (13%) and inorganic (18%) waste (e.g. roofing debris and industrial wastes). In contrast, the most common materials at Metro South Station and St. Johns Landfill were paper (35% and 39% respectively) and plastics (11% at both sites).

Yard debris was the only material that had significant seasonal variation, ranging from a low of 7% during the winter season to a high of 15% during the spring season.

Waste Stream Characterization

Of the 1,132,165 tons delivered to all regional facilities during the 12 month period of April 1989 to March 1990, 192,468 tons (17%) are estimated to be construction/demolition debris based on the hauler interviews and waste sorting in this project (see Table 1 and Figure 2). Of the waste that was not construction/demolition debris, 350,971 tons were estimated to be from residential generators and 588,726 tons were from non-residential generators.

350,971 tons of residential waste is equivalent to 4.2 lbs/household/day or 29.4 lbs/household/week (based on 458,147 single- and multi-family households in the tri-county area). Haulers who collect residential waste have reported rates ranging from 15 to 40 lbs/single-family household/week depending on the demographics of the collection area.

The composition of each waste substream is given in Table 3. Construction and demolition debris consisted mostly of construction wood (27%), and miscellaneous organic (15%) and inorganic (32%) waste.

Paper (28%) was the most common material in the residential waste stream followed by yard debris (26%) (Table 3). This includes all yard debris generated by single- and multi-family households regardless of the method of delivery to disposal facilities (e.g. commercial haul of regular residential routes, self-haul by landscaping services or homeowners, and drop box deliveries of cleanups).

Major categories in the non-residential waste stream were paper (35%), wood (15%), and plastics (11%) (Table 3). Corrugated paper (18%) was the primary type of paper in the non-residential waste stream.

The composition of waste streams varied among facilities. For example, yard debris was 75% of residential waste delivered to Hillsboro but only 16% and 17% of the residential waste delivered to St. Johns and Metro South respectively. Hillsboro does not accept residential loads containing putrescible waste. As a result, most deliveries of residential waste to Hillsboro are self-haul which contain a much higher percentage of yard debris.

Comparison to 1987 Waste Composition

Figure 3 compares the percentages of materials in the current waste to those reported in 1987. All 39 types of waste and the percent change are shown in Table 4. Percentages for most materials were not significantly different than in 1987.

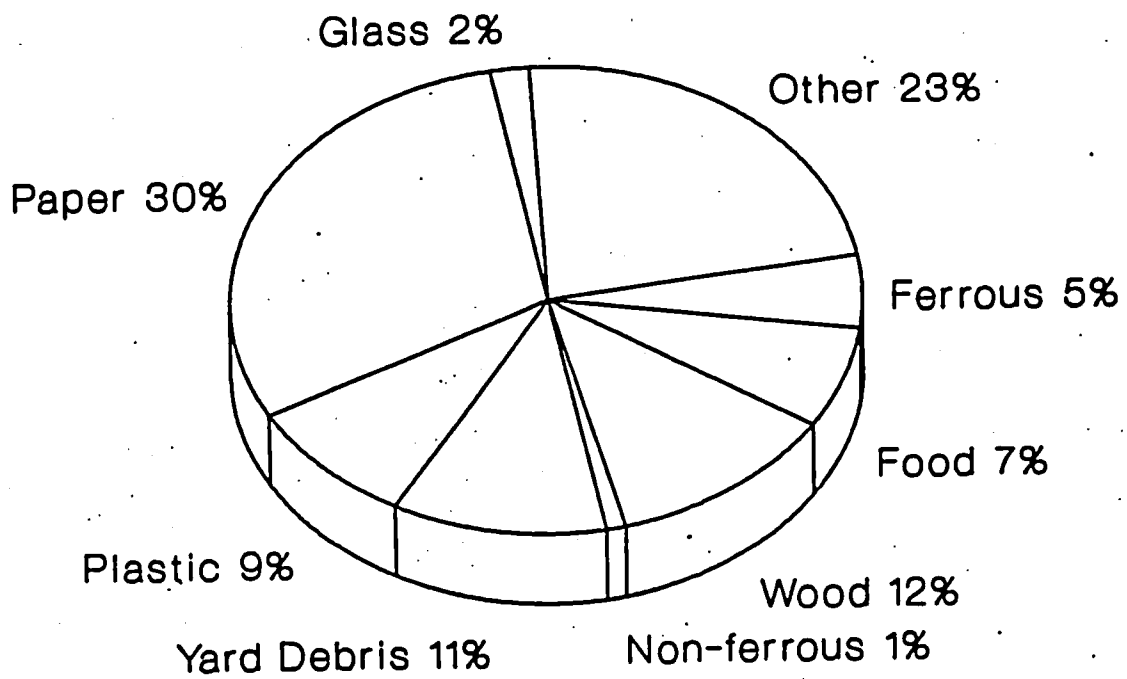
The two materials that did significantly change were plastics and ferrous metal. Plastics increased from 7% to 9% while ferrous metal decreased from 7% to 5%.

Per Capita Disposal Rates

Table 5 compares the estimated tonnages of each material disposed of in 1987 and 1989. Total disposal increased by about 81,000 tons. Plastics increased from 72,000 tons in 1987 to 100,000 tons in 1989. In contrast, ferrous metals decreased from 72,000 tons in 1987 to 51,000 tons in 1989.

The regional population did not increase at the same relative rate as the disposal tonnage. As a result, the per capita disposal rate increases from 5.0 lbs/person/day in 1987 to 5.2 lbs/person/day in 1989. This change is part of a trend of increasing per capita disposal rates from 1983 to the present (see Solid Waste Information System quarterly reports, Metro Solid Waste Department).

Figure 1. Composition of waste (percent of wet weight) delivered to all regional facilities during the 1989/1990 sample period. See Table 1 for details.



	Winter				Spring (see note)				Summer				Fall				1989/90 Average (see note)			
	HB	MS	SJ	Region	HB	MS	SJ	Region	HB	MS	SJ	Region	HB	MS	SJ	Region	HB	MS	SJ	Region
PAPER	8.08	26.14	38.81	31.09	11.78	29.37	40.10	29.37	14.75	36.04	39.22	27.29	14.75	36.04	39.22	32.54	12.80	34.83	39.37	29.97
food container	0.71	2.90	2.07	1.99	NA	NA	NA	NA	0.00	2.60	1.28	1.08	0.00	2.00	1.28	1.48	NA	NA	NA	NA
corrugated	6.53	12.52	14.72	11.77	6.11	14.13	11.44	10.94	8.75	13.14	18.42	12.35	8.75	13.14	18.42	14.34	7.55	13.27	15.72	12.32
newspaper	0.42	4.50	5.42	3.76	0.89	3.84	5.24	3.67	1.28	5.01	4.78	2.75	1.28	5.01	4.78	4.06	0.98	4.58	5.04	3.54
office	0.94	3.89	5.22	3.61	1.68	1.69	4.37	2.81	1.13	2.64	4.77	1.92	1.13	2.64	4.77	3.18	1.24	2.06	4.78	2.84
magazine	0.05	1.58	1.44	1.11	0.83	0.57	1.71	1.12	0.89	3.04	1.38	0.90	0.89	3.04	1.38	1.86	0.99	2.05	1.48	1.24
book	0.51	4.23	3.09	2.79	0.77	1.28	3.25	1.98	0.30	3.53	2.58	1.28	0.30	3.53	2.58	2.41	0.47	3.08	2.87	2.08
other	0.43	0.54	8.85	8.06	1.49	7.86	14.09	8.85	2.40	6.08	6.03	7.01	2.40	6.08	6.03	5.23	1.88	9.29	8.49	7.95
PLASTIC	10.35	10.58	8.89	8.78	5.35	9.89	9.11	8.39	6.29	11.74	12.14	8.36	6.29	11.74	12.14	10.08	6.94	10.98	10.58	9.25
food jug	0.04	0.54	0.39	0.35	0.00	0.42	0.44	0.32	0.00	0.64	0.47	0.27	0.00	0.64	0.47	0.43	0.01	0.58	0.44	0.34
non-food container	0.01	0.37	0.23	0.22	0.71	1.02	1.07	1.22	0.00	0.46	0.43	0.21	0.00	0.46	0.43	0.35	0.19	0.59	0.72	0.62
durable	1.82	1.78	2.02	1.88	1.95	3.26	2.17	2.47	1.38	2.05	2.86	1.21	1.38	2.05	2.86	2.23	1.63	2.32	2.49	1.95
film	2.69	3.99	3.85	3.56	2.33	3.95	4.20	3.64	3.13	4.29	5.38	3.73	3.13	4.29	5.38	4.48	2.81	4.13	4.72	3.85
styrofoam	2.06	1.25	0.89	1.25	NA	NA	NA	NA	1.19	0.95	0.93	0.48	1.19	0.95	0.93	0.99	NA	NA	NA	NA
other food container	0.43	1.36	0.81	0.90	NA	NA	NA	NA	0.00	2.40	1.73	0.81	0.00	2.40	1.73	1.58	NA	NA	NA	NA
other	3.31	1.30	0.73	1.62	0.35	1.24	0.62	0.75	0.59	0.95	0.34	1.67	0.59	0.95	0.34	0.62	2.29	2.39	2.18	2.60
YARD DEBRIS	6.43	12.89	2.48	7.14	20.81	18.46	10.03	15.44	14.78	8.77	8.71	11.71	14.78	8.77	8.71	10.10	14.47	12.29	7.08	11.51
prunings	4.34	4.73	1.30	3.30	8.81	7.04	3.23	5.89	4.03	2.55	2.77	5.51	4.03	2.55	2.77	2.97	5.39	4.24	2.57	4.51
bulky	0.55	0.98	0.00	0.48	6.56	0.31	0.00	1.78	0.08	0.17	0.76	0.87	0.08	0.17	0.76	0.40	1.93	0.38	0.39	0.91
leaf	1.54	7.20	1.18	3.36	5.14	11.11	6.80	7.77	10.67	6.05	5.18	5.33	10.67	6.05	5.18	6.73	7.16	7.67	4.73	5.89
WOOD	23.48	4.07	13.43	12.89	21.03	9.96	7.32	11.69	25.45	4.83	7.72	13.31	25.45	4.83	7.72	10.68	23.83	6.04	8.88	12.14
construction	13.94	3.07	6.65	7.37	16.88	7.17	3.90	8.24	18.81	3.38	5.31	9.22	18.81	3.38	5.31	7.66	17.21	4.33	5.20	8.17
packaging	9.55	1.00	6.78	5.52	4.15	2.79	3.52	3.45	6.64	1.45	2.41	4.09	6.64	1.45	2.41	3.02	6.62	1.71	3.08	3.98
TEXTILE	5.23	8.30	4.74	4.38	1.55	2.02	4.63	3.00	1.44	5.11	4.19	4.02	1.44	5.11	4.19	3.90	2.31	3.88	4.43	3.90
FOOD	0.15	8.23	12.92	7.88	0.04	9.81	11.40	7.97	0.03	8.28	6.37	5.38	0.03	8.28	6.37	5.63	0.06	8.06	9.18	6.66
DIAPERS	0.02	2.16	1.06	1.17	0.00	1.66	1.30	1.08	0.00	1.61	1.16	0.71	0.00	1.61	1.16	1.06	0.00	1.75	1.18	1.00
MISC. ORGANIC	22.11	4.78	1.42	8.12	9.27	4.92	4.21	5.74	9.97	6.38	4.23	7.02	9.97	6.38	4.23	6.30	12.50	6.63	3.60	6.80
GLASS	0.71	2.52	2.07	1.96	0.99	2.84	3.67	2.72	0.28	3.71	2.53	2.19	0.28	3.71	2.53	2.44	0.57	3.21	2.73	2.32
beverage	0.07	1.19	0.78	0.73	0.06	1.34	2.43	1.47	0.00	1.93	1.28	0.61	0.00	1.93	1.28	1.22	0.03	1.61	1.47	1.02
non-food container	0.00	0.38	0.03	0.14	0.26	1.31	1.02	0.92	0.00	0.11	0.05	0.21	0.00	0.11	0.05	0.06	0.07	0.49	0.31	0.36
food container	0.05	0.58	0.35	0.35	NA	NA	NA	NA	0.00	1.28	0.63	0.61	0.00	1.28	0.63	0.72	NA	NA	NA	NA
other	0.59	0.36	0.93	0.94	0.68	0.19	0.22	0.33	0.28	0.39	0.57	0.78	0.28	0.39	0.57	0.44	0.47	1.11	0.95	0.95
ALUMINUM	0.93	0.45	0.34	0.54	0.20	0.74	0.85	0.65	0.65	1.15	0.66	0.72	0.65	1.15	0.66	0.84	0.69	0.88	0.64	0.69
food container	0.04	0.28	0.26	0.21	0.00	0.31	0.39	0.27	0.00	0.91	0.48	0.42	0.00	0.91	0.48	0.53	0.01	0.61	0.41	0.36
other	0.89	0.17	0.08	0.33	0.20	0.43	0.46	0.38	0.65	0.24	0.18	0.30	0.65	0.24	0.18	0.31	0.58	0.28	0.23	0.33
FERROUS METAL	1.19	5.43	3.89	3.69	9.06	4.25	3.41	5.13	1.93	4.45	4.15	5.19	1.93	4.45	4.15	3.76	3.69	4.61	2.69	4.78
food container	0.15	2.02	1.47	1.30	4.53	1.24	1.35	2.13	0.00	1.77	1.13	1.67	0.00	1.77	1.13	1.11	1.25	1.68	1.26	1.58
other	1.04	3.41	2.42	2.39	4.52	3.01	2.05	3.00	1.93	2.68	3.02	4.52	1.93	2.68	3.02	2.65	2.43	2.93	2.63	3.18
NON-FERROUS META	0.02	0.00	0.94	0.37	0.12	0.26	0.06	0.14	5.71	0.15	0.11	0.59	5.71	0.15	0.11	1.39	2.94	0.18	0.28	0.61
MISC. INORGANIC	19.38	5.03	5.01	8.87	14.42	4.24	1.48	5.69	18.70	5.48	5.51	10.51	18.70	5.48	5.51	8.48	17.70	5.08	4.31	8.36
APPLIANCE	0.03	0.21	1.05	0.48	0.00	0.00	0.10	0.19	0.00	0.88	0.22	0.54	0.00	0.88	0.22	0.41	0.17	0.49	0.37	0.46
WHITE GOODS	0.00	0.00	0.00	0.00	0.09	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.01
FURNITURE	0.01	0.28	2.62	1.14	4.85	0.41	0.30	1.50	0.00	0.74	1.09	0.55	0.00	0.74	1.09	0.97	1.21	0.97	1.52	1.12
HAZARDOUS WASTE	0.34	0.14	0.48	0.33	0.05	0.62	0.95	0.61	0.02	0.53	0.16	0.14	0.02	0.53	0.16	0.26	0.10	0.47	0.44	0.34
MEDICAL WASTE	0.01	0.06	0.06	0.04	NA	NA	NA	NA	0.00	0.16	1.22	0.06	0.00	0.16	1.22	0.56	NA	NA	NA	NA
OTHER MATERIAL	0.00	0.85	0.00	0.23	0.11	0.53	1.07	0.65	0.00	0.00	0.03	0.22	0.00	0.00	0.03	0.01	0.03	0.39	0.82	0.45

HB=Hillsboro Landfill; SJ=St. Johns Landfill; MS=Metro South Transfer Station.

NOTE: The following sub-categories were not measured in the spring sort: 1) paper food containers, 2) styrofoam, 3) plastic other food container, 4) glass food container, and 5) medical waste. For the calculation of the 1989/90 averages, the summer, fall, and winter values were added to the "other" sub-category within each main category.

Table 1. Composition of waste (percent of wet weight) delivered to each of the three study sites during each of the four sample seasons. Regional values are averages of the site values.

Table 2. Quantity of construction/demolition debris, residential waste (excluding construction/demolition), and non-residential waste (excluding construction/demolition) delivered to regional disposal facilities during each of the four sample seasons.

	% of Waste Disposed			Tons Disposed			
	C/D	O/R	O/NR	C/D	O/R	O/NR	Total
Winter (Jan-Mar 1990)	16	29	55	43,110	78,137	148,191	269,438
Spring (Apr-Jun 1989)	NA	NA	NA	NA	NA	NA	298,470
Summer (Jul-Sep 1989)	16	37	47	47,233	109,225	138,746	295,204
Fall (Oct-Dec 1989)	19	27	54	51,120	72,644	145,289	269,053
Annual	17	31	52	192,468	350,971	588,726	1,132,165

C/D=Construction/Demolition debris (from both residential and non-residential sources)

O/R=Other/Residential waste (all waste from residential generators except for construction/demolition debris)

O/NR=Other/Non-Residential (all waste from non-residential generators except for construction/demolition debris)

NOTE: The percent of all waste that was construction/demolition was not estimated in the spring sort.
The annual averages are based on the other three sorts.

Figure 2. Annual quantity of construction/demolition debris, residential waste (excluding construction/demolition), and non-residential waste (excluding construction/demolition) delivered to regional disposal facilities.

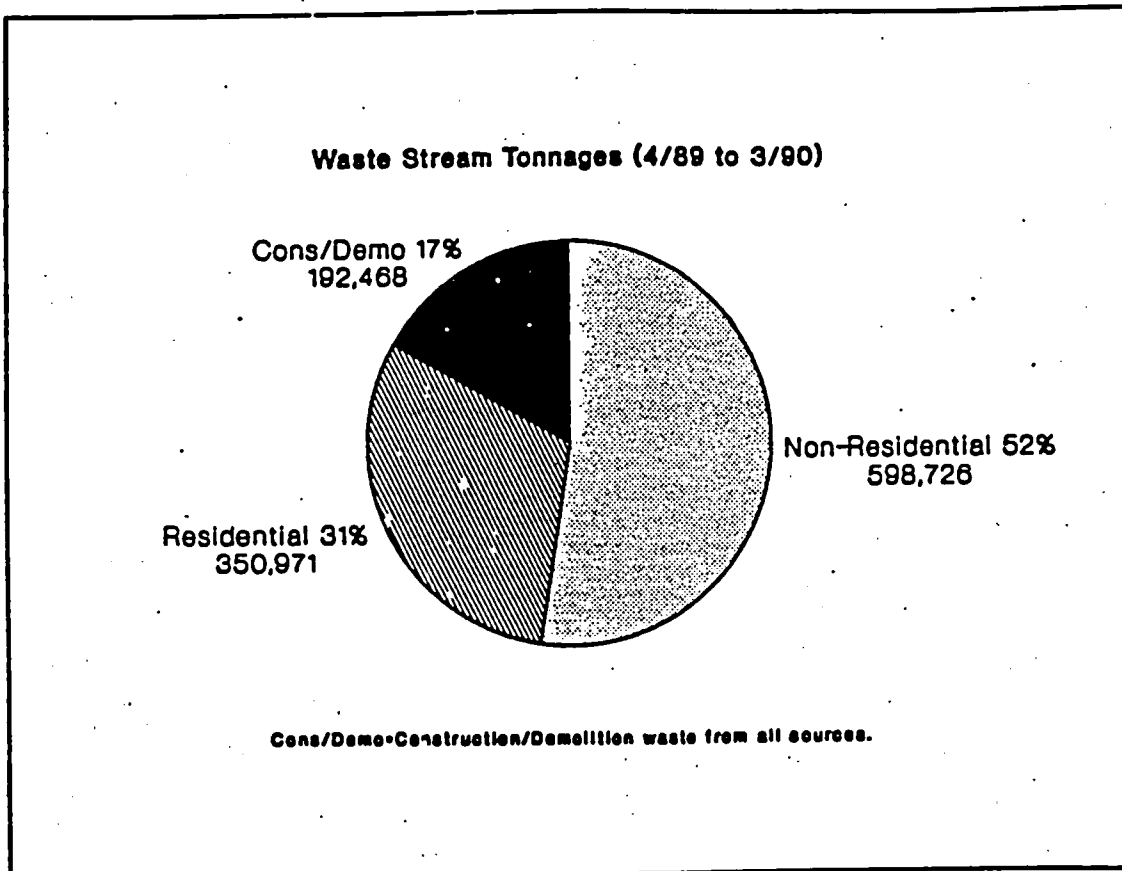


Table 3. Composition of waste (percent of wet weight) of three waste streams: (1) construction/demolition debris, (2) residential waste (excluding construction/demolition), and (3) non-residential waste (excluding construction/demolition) delivered to each of the three study sites.

Waste Stream (see code):	Hillsboro			St. Johns			Metro South			Region		
	C/D	O/R	O/NR	C/D	O/R	O/NR	C/D	O/R	O/NR	C/D	O/R	O/NR
PAPER	8.07	8.83	17.74	11.90	25.78	43.27	11.52	26.20	38.95	7.77	27.98	38.16
food container	0.00	0.00	0.70	0.14	1.08	1.48	0.10	2.41	2.02	0.04	1.59	1.41
corrugated	4.48	3.19	8.71	8.07	11.24	23.91	7.17	12.65	17.47	5.39	10.73	18.03
newspaper	0.33	0.37	1.05	1.29	3.78	3.37	1.41	6.34	3.07	0.84	4.57	2.85
office	0.25	1.85	1.37	2.15	1.84	4.77	0.31	1.61	4.53	0.51	1.66	3.77
magazine	0.00	0.00	0.78	0.00	1.95	0.86	0.20	1.82	1.35	0.03	1.58	0.87
book	0.16	0.13	0.74	0.10	3.20	1.91	0.18	2.32	3.14	0.18	2.27	1.91
other	0.88	0.29	4.41	0.15	2.92	7.17	2.15	8.05	7.37	1.00	5.16	8.46
PLASTIC	2.33	2.24	10.52	4.59	8.68	11.43	3.64	9.80	11.24	2.85	8.25	11.13
food jug	0.00	0.00	0.01	0.03	0.26	0.43	0.00	0.47	0.31	0.00	0.33	0.28
non-food container	0.00	0.00	0.09	0.00	0.14	0.32	0.00	0.20	0.25	0.00	0.16	0.24
durable	0.38	0.82	2.33	1.80	1.29	2.51	1.85	0.88	1.21	0.79	1.00	2.12
film	0.95	0.78	3.47	1.97	4.43	4.84	0.52	4.35	5.71	1.01	3.83	4.80
styrofoam	0.42	0.11	0.92	0.79	0.78	0.86	0.01	0.75	1.51	0.40	0.88	1.05
other food container	0.00	0.00	0.03	0.14	1.01	1.44	0.05	1.42	1.37	0.03	1.07	1.03
other	0.58	0.53	3.67	0.06	0.79	1.23	1.21	1.73	0.88	0.62	1.24	1.81
YARD DEBRIS	4.56	75.06	8.98	8.91	15.61	2.55	2.01	17.46	9.84	4.43	23.74	5.44
prunings	3.29	36.41	2.26	1.80	6.67	1.12	0.49	8.09	4.97	2.63	11.99	2.45
bulky	0.86	5.79	0.08	0.10	0.54	0.24	0.00	1.23	0.10	0.61	1.70	0.15
leaf	0.41	32.86	3.68	4.91	8.40	1.19	1.52	8.17	4.87	1.19	12.05	2.84
WOOD	28.75	4.17	23.61	25.44	7.00	12.00	27.96	2.63	5.85	26.79	4.31	14.87
construction	22.96	4.14	11.38	18.07	3.71	5.18	26.74	2.47	5.88	22.97	3.14	7.07
packaging	3.79	0.03	12.23	7.37	3.29	7.48	1.22	0.18	2.97	3.82	1.17	7.80
TEXTILE	3.06	3.73	4.79	8.71	5.69	5.17	6.72	3.38	4.21	4.85	4.18	4.51
FOOD	0.05	0.12	0.90	0.40	10.53	6.68	0.99	8.51	6.85	0.26	7.89	5.13
DIAPERS	0.00	0.00	0.02	0.00	1.17	0.29	0.82	2.65	0.46	0.09	1.75	0.25
MISC. ORGANIC	17.48	3.24	17.99	6.15	4.18	3.73	10.75	3.39	4.84	14.85	3.63	7.85
GLASS	0.20	0.67	0.52	1.69	2.71	1.82	0.28	4.52	2.14	0.40	3.39	1.46
beverage	0.03	0.00	0.00	0.42	0.74	0.84	0.03	2.08	1.17	0.06	1.32	0.70
non-food container	0.00	0.91	0.01	0.00	0.12	0.07	0.00	0.14	0.08	0.00	0.28	0.06
food container	0.00	0.00	0.05	0.27	0.75	0.30	0.02	1.47	0.81	0.04	1.01	0.31
other	0.17	0.06	0.48	1.00	1.10	0.41	0.21	0.83	0.28	0.28	0.90	0.39
ALUMINUM	0.06	0.00	0.25	0.80	0.81	0.54	0.25	0.57	0.59	0.16	0.80	0.83
food container	0.00	0.00	0.04	0.00	0.73	0.39	0.00	0.49	0.37	0.00	0.80	0.29
other	0.06	0.00	0.21	0.80	0.18	0.15	0.25	0.08	0.19	0.16	0.10	0.34
FERROUS METAL	1.06	3.84	3.11	13.89	4.12	4.13	2.07	5.48	5.53	2.91	4.79	4.31
food container	0.00	0.00	0.14	0.09	1.90	1.27	0.00	2.05	1.58	0.01	1.89	1.03
other	1.06	3.84	2.97	13.80	2.52	2.86	2.07	3.43	3.97	2.90	3.19	3.18
NON-FERROUS METAL	2.36	0.07	1.24	0.89	0.50	0.36	0.27	0.01	0.14	1.81	0.18	0.54
MISC. INORGANIC	35.17	0.72	11.51	17.50	5.84	5.25	31.73	1.22	5.54	32.27	2.80	7.05
APPLIANCE	0.02	0.00	0.00	0.31	0.83	0.03	0.82	1.88	0.26	0.20	1.50	0.58
WHITE GOODS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FURNITURE	0.00	0.00	1.03	1.04	8.66	1.07	0.45	2.78	0.28	0.21	2.62	0.25
HAZARDOUS WASTE	0.23	0.00	0.20	0.00	0.08	0.27	0.00	0.16	0.12	0.16	0.11	0.21
MEDICAL WASTE	0.01	0.00	0.00	0.00	0.01	1.02	0.00	0.03	0.02	0.01	0.02	0.48
OTHER MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.17	0.06	0.01	0.08	0.02

C/D=Construction/Demolition debris (from both residential and non-residential sources);

O/R=Other/Residential waste (all waste from residential generators except for construction/demolition debris)

O/NR=Other/Non-Residential (all waste from non-residential generators except for construction/demolition debris)

Figure 3. Comparison of the 1987 and 1989 waste compositions.

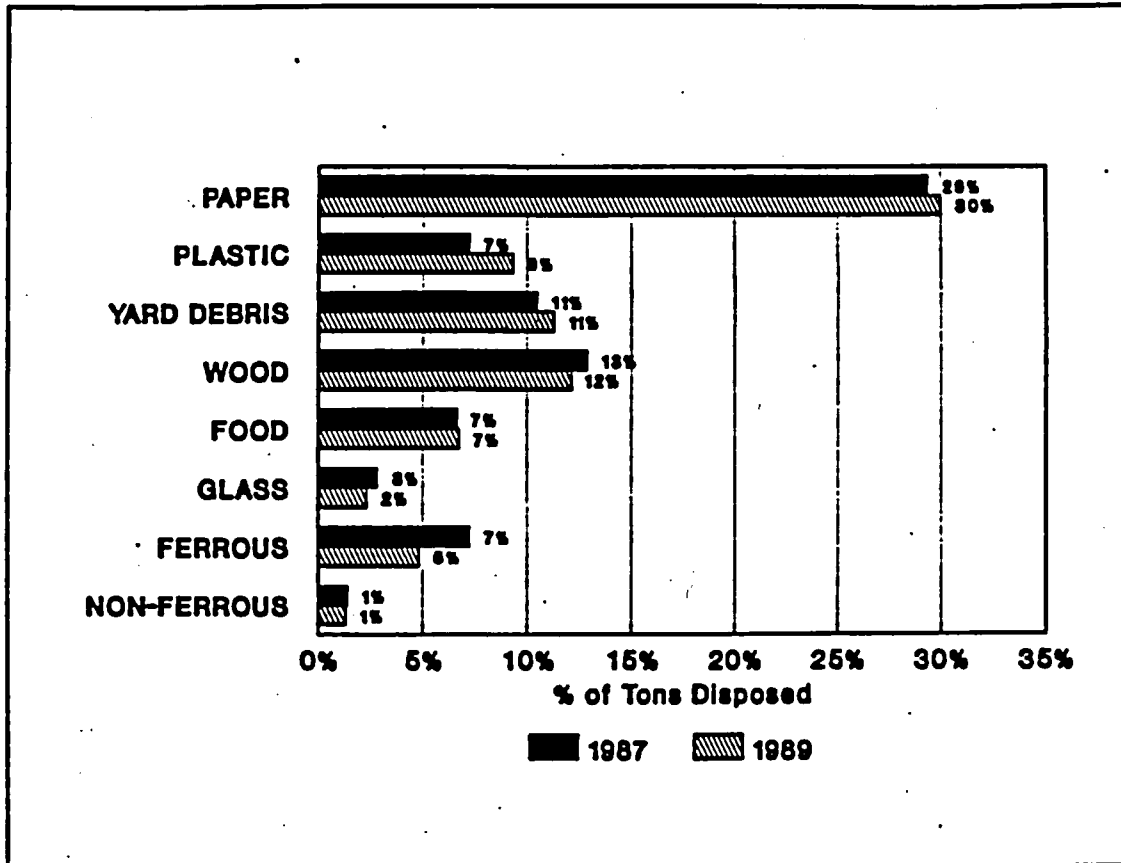


Table 4. Change in waste composition from 1987 to 1989 at each of the three study sites.

	KFD			HB			MS			SJ			Region		
	1987	1989	Change	1987	1989	Change	1987	1989	Change	1987	1989	Change	1987	1989	Change
PAPER	13.4	12.8	-0.6	34.5	34.9	0.4	35.1	39.4	4.3	29.4	30.0	0.6			
corrugated	5.8	7.6	1.8	8.8	13.3	4.5	11.0	15.7	4.7	9.0	12.3	3.3			
newspaper	1.0	1.0	-0.0	4.5	4.6	0.1	4.1	5.0	0.9	3.4	3.5	0.1			
office	1.6	1.2	-0.4	3.1	2.7	-0.4	6.0	4.8	-1.2	3.9	2.8	-1.1			
other	5.1	3.0	-2.1	18.2	14.4	-3.8	14.0	13.8	-0.2	13.1	11.3	-1.8			
PLASTIC	5.3	6.9	1.6	7.6	11.0	3.4	8.1	10.6	2.5	7.2	9.3	2.1			
food jug	0.0	0.0	0.0	0.4	0.6	0.2	0.3	0.4	0.1	0.3	0.3	0.0			
non-food container	0.3	0.2	-0.1	0.8	0.6	-0.2	1.0	0.7	-0.3	0.8	0.5	-0.3			
durable	1.3	1.6	0.3	0.6	2.3	1.7	1.0	2.5	1.5	0.9	2.0	1.1			
other	3.6	5.1	1.5	5.8	6.5	0.7	5.6	6.9	1.3	5.3	6.5	1.2			
YARD DEBRIS	11.9	14.5	2.6	9.0	12.3	3.3	10.8	7.7	-3.1	10.5	11.3	0.8			
prunings	7.3	5.4	-1.9	1.9	4.2	2.3	3.9	2.6	-1.3	4.1	4.5	0.4			
leaf	4.7	9.1	4.4	7.1	8.1	1.0	6.9	5.1	-1.8	6.4	6.8	0.4			
WOOD	26.8	23.8	-3.0	7.7	6.0	-1.7	8.4	8.9	0.5	12.9	12.1	-0.8			
TEXTILE	3.3	2.3	-1.0	3.1	3.9	0.8	4.3	4.4	0.1	3.7	3.8	0.1			
FOOD	0.3	0.1	-0.2	9.4	8.7	-0.7	8.2	9.2	1.0	6.6	6.7	0.1			
DIAPERS	0.0	0.0	0.0	1.7	1.8	0.1	1.3	1.2	-0.1	1.1	1.0	-0.1			
MISC. ORGANIC	7.6	12.5	4.9	10.1	5.6	-4.5	7.4	3.6	-3.8	8.3	6.8	-1.5			
GLASS	0.3	0.6	0.3	3.8	3.2	-0.6	3.5	2.7	-0.8	2.8	2.3	-0.5			
beverage	0.2	0.0	-0.2	2.0	1.6	-0.4	2.1	1.5	-0.6	1.6	1.0	-0.6			
other	0.1	0.5	0.4	1.8	1.6	-0.2	1.4	1.3	-0.1	1.2	1.3	0.1			
ALUMINUM	1.2	0.6	-0.6	0.9	0.9	-0.0	0.9	0.6	-0.3	1.0	0.7	-0.3			
food container	0.0	0.0	0.0	0.3	0.6	0.3	0.3	0.4	0.1	1.2	0.4	-0.8			
other	1.2	0.6	-0.6	0.7	0.3	-0.4	0.6	0.2	-0.4	0.8	0.3	-0.5			
FERROUS METAL	10.7	3.7	-7.0	6.1	4.6	-1.5	5.9	3.9	-2.0	7.2	4.8	-2.4			
food container	0.1	1.3	1.2	2.1	1.7	-0.4	2.1	1.3	-0.8	1.6	1.6	-0.0			
other	10.6	2.4	-8.2	4.0	2.9	-1.1	3.8	2.6	-1.2	5.6	3.2	-2.4			
NON-FERROUS METAL	0.9	2.9	2.0	0.2	0.2	-0.1	0.2	0.3	0.1	0.4	0.6	0.2			
MISC. INORGANIC	16.7	17.7	1.0	5.7	5.1	-0.6	5.3	4.3	-1.0	8.3	8.4	0.1			
HAZARDOUS WASTE	0.6	0.1	-0.5	0.1	0.5	0.4	0.0	0.4	0.4	0.2	0.3	0.1			
OTHER MATERIAL	0.9	1.5	0.6	0.3	1.5	1.2	0.6	2.8	2.2	0.6	2.0	1.4			

KFD=Killingsworth Fast Disposal; HB=Hillsboro Landfill; SJ=St. Johns Landfill; MS=Metro South Transfer Station.

NOTE: Sub-categories in the 1989/90 sort were combined to correspond to the categories in the 1987 sort.

Table 5. Comparison of per capita disposal rates in 1987 and 1989.

	% of Waste Disposed			Tons Disposed			Per Capita Disposal Rate (lbs/person/day)		
	1987	1989	Change	1987	1989	Change	1987	1989	Change
PAPER	29.4	30.0	0.6	293,609	324,185	30,577	1.47	1.55	0.09
corrugated	9.0	12.3	3.3	89,880	133,265	43,385	0.45	0.64	0.19
newspaper	3.4	3.5	0.1	33,955	38,292	4,337	0.17	0.18	0.01
office	3.9	2.8	-1.1	38,948	30,720	(8,228)	0.19	0.15	-0.05
other	13.1	11.3	-1.8	130,826	121,908	(8,918)	0.65	0.58	-0.07
PLASTIC	7.2	9.3	2.1	71,904	100,057	28,153	0.36	0.48	0.12
food jug	0.3	0.3	0.0	2,996	3,678	682	0.01	0.02	0.00
non-food container	0.8	0.5	-0.3	7,989	5,625	(2,365)	0.04	0.03	-0.01
durable	0.9	2.0	1.1	8,988	21,093	12,105	0.04	0.10	0.06
other	5.3	6.5	1.2	52,930	69,770	16,840	0.26	0.33	0.07
YARD DEBRIS	10.5	11.3	0.8	104,860	122,340	17,480	0.52	0.59	0.06
prunings	4.1	4.5	0.4	40,945	48,785	7,839	0.20	0.23	0.03
leaf	6.4	6.8	0.4	63,915	73,556	9,641	0.32	0.35	0.03
WOOD	12.9	12.1	-0.8	128,828	131,318	2,490	0.64	0.63	-0.01
TEXTILE	3.7	3.8	0.1	36,951	41,105	4,154	0.18	0.20	0.01
FOOD	6.6	6.7	0.1	65,912	72,366	6,454	0.33	0.35	0.02
DIAPERS	1.1	1.0	-0.1	10,985	10,817	(168)	0.05	0.05	-0.00
MISC. ORGANIC	8.3	6.8	-1.5	82,890	73,556	(9,334)	0.41	0.35	-0.06
GLASS	2.8	2.3	-0.5	27,963	25,095	(2,867)	0.14	0.12	-0.02
beverage	1.6	1.0	-0.6	15,979	11,033	(4,945)	0.08	0.05	-0.03
other	1.2	1.3	0.1	11,984	14,062	2,078	0.06	0.07	0.01
ALUMINUM	1.0	0.7	-0.3	9,987	7,464	(2,523)	0.05	0.04	-0.01
food container	1.2	0.4	-0.8	11,984	3,894	(8,090)	0.06	0.02	-0.04
other	0.8	0.3	-0.5	7,989	3,570	(4,420)	0.04	0.02	-0.02
FERROUS METAL	7.2	4.8	-2.4	71,904	51,489	(20,415)	0.36	0.25	-0.11
food container	1.6	1.6	-0.0	15,979	17,091	1,112	0.08	0.08	0.00
other	5.6	3.2	-2.4	55,926	34,398	(21,527)	0.28	0.16	-0.11
NON-FERROUS METAL	0.4	0.6	0.2	3,995	6,598	2,604	0.02	0.03	0.01
MISC. INORGANIC	8.3	8.4	0.1	82,890	90,430	7,541	0.41	0.43	0.02
HAZARDOUS WASTE	0.2	0.3	0.1	1,997	3,678	1,680	0.01	0.02	0.01
OTHER MATERIAL	0.6	2.0	1.4	5,992	21,418	15,426	0.03	0.10	0.07
TOTAL	100	100		1,000,667	1,081,916	81,249	5.00	5.19	0.19

NOTE: Sub-categories in the 1989/90 sort were combined to correspond to the categories in the 1987 sort.

LIST OF APPENDICES

- A. DEFINITIONS OF WASTE CATEGORIES**
- B. FIELD DATA FORM**

DEFINITIONS OF WASTE STREAM COMPONENTS

1. Paper

- a. Corrugated Cardboard (OCC)/Kraft Paper - Kraft linerboard and containerboard cartons and shipping boxes with corrugated paper medium (unwaxed). This category also include Kraft (brown) paper bags.
- b. Newspaper (News) - Printed ground-wood newsprint (minimally bleached fiber); referred to as #1 news. This category also include some glossy non-recyclable paper typically used in newspaper insert advertisements, unless found separately.
- c. Office Paper (Supermix) - Printing, writing and computer papers, including both ground wood and thermo-chemical pulps. Both virgin pulp substitutes and high-grade de-ink fibers are included. This category is composed of high-grade paper, which includes white ledger, colored ledger, computer printouts, computer tab cards, bond and copy machine paper.
- d. Magazines - This category includes publications done on glossy paper with a thickness of less than 1/2".
- e. Books, Manuals and Junk Mail - This category includes bound paper reference manuals, textbooks, phone books and junk mail materials.
- f. Other Paper - This category includes construction paper, non-corrugated paperboard (such as boxboard and chipboard), carbon paper, tissue, paper food cartons, waxed paper and waxed cardboard.

2. Plastics

- a. Food Grade Jugs - Rigid plastic containers for milk, juices, and distilled water, including crushed, split or broken jugs.
- b. Non-Food Container Plastics - This category includes rigid brittle, rigid pliable, "crystal" and expanded or foamed polystyrene plastics. Among these groups are household product containers (e.g., disposable razors, food trays, vitamin bottles), empty chemical containers and other materials.
- c. Durable Plastics - This category is composed of thermoplastics (recyclable) and thermoset plastics (non-recyclable) products that cannot be reformed after

heating. Items in this category include toys, foam pads, plastic shells, plastic formica, trash cans, automotive products, toilet seats, etc.

- d. Plastic Films and Bags - This category is composed mostly of low density polyethylene such as dry cleaning and merchandise bags, bread sacks, and bubble pack packaging material.
- e. Plastic Food Containers - (polystyrene foam) - this category includes expanded or foamed polystyrene food containers (e.g. hot cups, "clamshells" for hamburgers, egg cartons, dairy tubs).
- f. Other plastic food containers (non-films, non polystyrene) this includes beverage containers and returnable pop bottles.
- g. Other Plastics - Plastic materials not included in the previous plastic categories.

3. Yard Debris

- a. Pruning - Naturally occurring wood material from trees, plants, and shrubs, including trimmings less than two inches in diameter. The source of materials in this category is from garden, park, and landscape maintenance.
- b. Bulky Wood Yard Waste - This category is composed of land clearing debris: trees, large branches, stumps, dirt and other similar material which can not be composted due to their size, weight and composition.
- c. Leaves and Grass Clippings - Naturally occurring vegetative material and other fine organic waste from park, lawn and garden maintenance. Typically leaves and grass clippings.

4. Wood

- a. Construction Lumber - Dimension lumber construction materials resulting from remodeling, repair, demolition, or construction of residences, buildings and other structures.
- b. Packaging Lumber - Dimension lumber material used in pallets and crates.

5. Textiles

Fabric materials including natural and man-made textile materials such as cottons, wools, silks, woven nylon, rayon, polyesters, and other materials. This category includes clothing, rags, curtains, carpets and other fabric materials.

6. Food Waste (Putrescibles)

Material capable of being decomposed by microorganisms with sufficient rapidity as to cause nuisances from odors and gases. Kitchen wastes, offal, dead animals and food from containers are examples.

7. Disposable Diapers

Disposable diapers, including fecal materials contained within. Cloth diapers are to be sorted under textiles.

8. Miscellaneous Organics

This category consists of carbon-containing materials which oxidize or burn easily, contain nitrogen or sulfur or both, and usually give off odorous by-products. Wastes not otherwise categorized, include fines and other non-sortable combustibles.

9. Glass

- a. Beverage Glass - All beverage container glass, including broken glass that could be clearly identified as beverage glass. Included are wine bottles, wine cooler bottles, liquor bottles, pop bottles, beer bottles, juice bottles and other glass beverage containers.
- b. Container Glass (non-food, non-beverage) - This category includes glass jars, medicine bottles.
- c. Glass food containers (non-beverage) - includes glass food jars, ketchup/mustard bottles, baby food jars, pickle jars, and mayonnaise jars.
- d. Other Glass - This category includes flat, pressed, and blown products, such as light bulbs, window, auto and cooking ware glass and etc.

10. Aluminum

- a. Food Containers - All aluminum food and beverage containers, which are generally unalloyed.
- b. Other Aluminum - All aluminum materials that do not appear to contain alloys, including foil, non-food containers, furniture, house siding, cooking ware and scrap from industrial sources.

11. Ferrous Metals

- a. Food Containers - All coated (tin, zinc) and other ferrous food and beverage containers, including alloyed materials. This category includes soup cans, vegetable cans, food tins etc.
- b. Other Ferrous Metals - Ferrous and alloyed ferrous scrap materials derived from iron, including household, industrial and commercial products not containing significant contaminants. This category includes scrap iron and steel to which a magnet adheres.

12. Non-ferrous Metals

Metals that are not materials derived from iron, including copper, brass, bronze, aluminum bronze, lead, pewter, zinc, and other metals to which a magnet will not adhere. Metals that are significantly contaminated are not included.

13. Miscellaneous Inorganics

This category includes non-combustible waste materials composed of matter other than plant, animal or certain chemical compounds of carbon and excludes non recyclable glass. Examples of materials includes rocks, dirt, asphalt, cement, plaster, drywall, and other inert materials. Also included are contaminated metals and plastics that can not be separated such as electrical components.

OTHER

14. Appliances

- a. White Goods - This category is composed of discarded stoves, washers, dryers, refrigerators and other large household appliances.
- b. Other Appliances - This category includes household appliances such as television, toasters, broilers, can openers, blender, etc.

15. Furniture and Furnishings

This includes reusable and non-reusable household items that are large such as chairs, tables, and mattresses.

16. Household Hazardous Wastes

Household Hazardous Wastes category is made up of such materials as car batteries, dry cell batteries, used motor oil, solvents (non water-based), paints, pesticides and non-pesticide poisons ("poison" on label).

17. Medical Wastes - includes syringes, tubing, gauge, etc.

18. Other

This category includes materials that could not be classified in any of the above categories and subcategories.

Figure 1. Composition of waste (percent of wet weight) delivered to all regional facilities during the 1989/1990 sample period. See Table 1 for details.

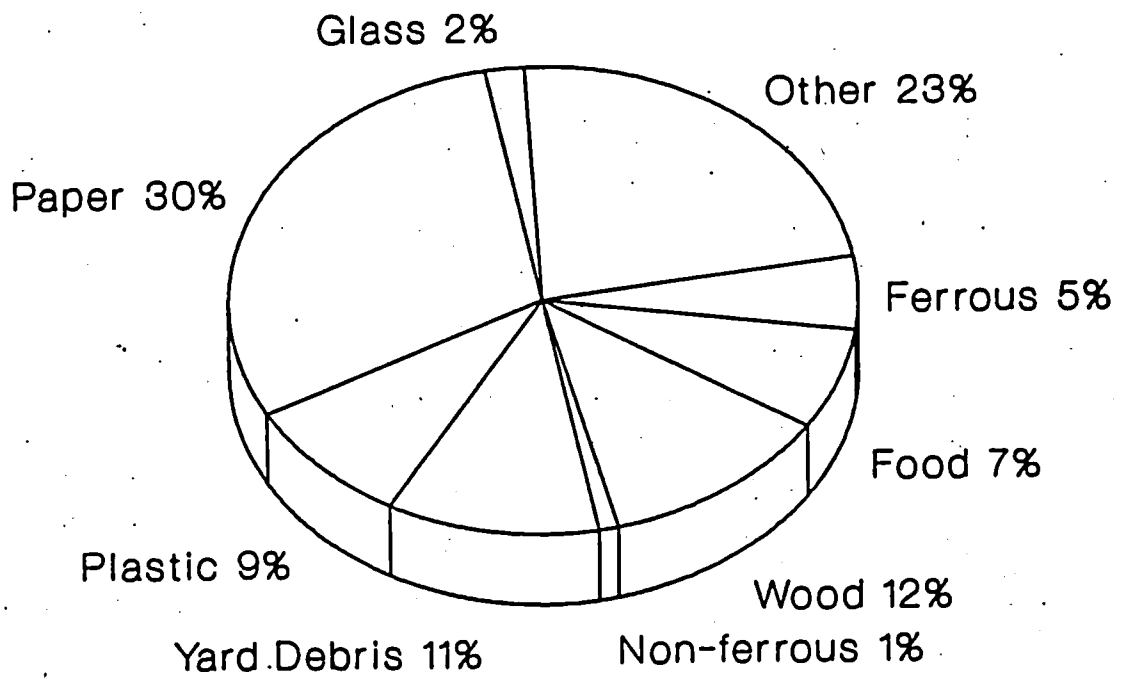


Table 1. Composition of waste (percent of wet weight) delivered to each of the three study sites during each of the four sample seasons. Regional values are averages of the site values.

	Winter			Spring (see notes)			Summer			Fall			1988/89 Average (see notes)			
	HB	MS	SJ	HB	MS	SJ	HB	MS	SJ	HB	MS	SJ	HB	MS	SJ	
	Region	Region	Region	Region	Region	Region	Region	Region	Region	Region	Region	Region	Region	Region	Region	
PAPER	9.59	30.14	30.21	11.76	29.37	30.10	29.37	14.78	36.04	39.22	27.29	14.76	36.04	39.22	32.64	39.37
food container	0.71	2.60	2.07	1.99	NA	NA	NA	0.00	2.00	1.28	1.08	0.00	2.00	1.28	1.46	NA
corrugated	6.53	12.52	14.72	11.77	6.11	14.13	11.44	8.75	13.14	18.42	12.35	8.75	13.14	18.42	14.34	7.55
newspaper	0.42	4.50	6.42	3.78	0.89	3.84	5.24	1.28	5.01	4.76	2.75	1.28	5.01	4.76	4.06	0.98
office	0.94	3.89	5.22	3.61	1.08	1.89	4.37	1.13	2.64	4.77	1.92	1.13	2.64	4.77	3.18	1.24
magazine	0.05	1.58	1.44	1.11	0.83	0.57	1.71	0.89	3.04	1.38	0.90	0.89	3.04	1.38	1.95	0.69
book	0.51	4.23	3.09	2.79	0.77	1.28	3.25	0.30	3.53	2.58	1.28	0.30	3.53	2.58	2.41	0.47
other	0.43	6.54	6.85	6.06	1.49	7.86	14.09	2.40	6.08	6.03	7.01	2.40	6.08	6.03	5.23	1.88
PLASTIC	10.35	10.56	8.09	9.78	5.35	9.89	9.11	6.29	11.74	12.14	8.36	6.29	11.74	12.14	10.68	6.94
food jug	0.04	0.54	0.39	0.35	0.00	0.42	0.44	0.00	0.64	0.47	0.27	0.00	0.64	0.47	0.43	0.01
non-food container	0.01	0.37	0.23	0.22	0.71	1.02	1.67	0.00	0.46	0.43	0.21	0.00	0.46	0.43	0.35	0.19
durable	1.82	1.78	2.02	1.88	1.95	3.26	2.17	1.38	2.05	2.86	1.21	1.38	2.05	2.86	2.23	1.63
film	2.06	3.98	3.85	3.56	2.33	3.95	4.20	3.13	4.29	5.38	3.73	3.13	4.29	5.38	4.48	2.81
styrofoam	2.08	1.25	0.68	1.25	NA	NA	NA	1.19	0.95	0.93	0.48	1.19	0.95	0.93	0.99	NA
other food container	0.43	1.36	0.81	0.90	NA	NA	NA	0.00	2.40	1.73	0.81	0.00	2.40	1.73	1.58	NA
other	3.31	1.30	0.73	1.62	0.35	1.24	0.62	0.59	0.95	0.34	1.67	0.59	0.95	0.34	0.62	2.29
YARD DEBRIS	6.43	12.89	2.48	7.14	20.51	18.46	10.03	14.78	8.77	8.71	11.71	14.78	8.77	8.71	10.10	14.47
prunings	4.34	4.73	1.30	3.30	8.81	7.04	3.23	4.03	2.55	2.77	5.51	4.03	2.55	2.77	2.97	5.39
bulky	0.55	0.96	0.00	0.48	0.58	0.31	0.80	0.08	0.17	0.78	0.87	0.08	0.17	0.78	0.40	1.93
leaf	1.54	7.20	1.18	3.36	5.14	11.11	6.80	10.67	6.05	5.18	5.33	10.67	6.05	5.18	6.73	7.16
WOOD	23.49	4.07	13.43	12.89	21.03	9.96	7.32	25.45	4.83	7.72	13.31	25.45	4.83	7.72	10.68	23.83
construction	13.94	3.07	6.95	7.37	16.88	7.17	3.80	18.81	3.38	5.31	9.22	18.81	3.38	5.31	7.06	17.21
packaging	9.55	1.00	6.78	5.52	4.15	2.79	3.52	6.64	1.45	2.41	4.09	6.64	1.45	2.41	3.02	6.62
TEXTILE	5.23	3.30	4.74	4.38	1.55	2.02	4.63	1.44	5.11	4.19	4.02	1.44	5.11	4.19	3.90	2.31
FOOD	0.15	8.23	12.92	7.88	0.04	9.81	11.40	0.03	8.28	6.37	5.38	0.03	8.28	6.37	5.63	0.06
DIAPERS	0.02	2.16	1.08	1.17	0.00	1.06	1.30	0.00	1.01	1.16	0.71	0.00	1.01	1.16	1.06	0.00
MISC. ORGANIC	22.11	4.78	1.42	8.12	9.27	4.92	4.21	9.97	6.38	4.23	7.02	9.97	6.38	4.23	6.30	12.50
GLASS	0.71	2.52	2.07	1.86	0.99	2.84	3.67	0.28	3.71	2.53	2.19	0.28	3.71	2.53	2.44	0.57
beverage	0.07	1.19	0.76	0.73	0.00	1.34	2.43	0.00	1.93	1.28	0.61	0.00	1.93	1.28	1.22	0.03
non-food container	0.00	0.38	0.03	0.14	0.26	1.31	1.02	0.00	0.11	0.05	0.21	0.00	0.11	0.05	0.06	0.07
food container	0.05	0.59	0.35	0.35	NA	NA	NA	0.00	1.28	0.63	0.81	0.00	1.28	0.63	0.72	NA
other	0.59	0.36	0.63	0.64	0.68	0.19	0.22	0.28	0.39	0.57	0.78	0.28	0.39	0.57	0.44	0.47
ALUMINUM	0.83	0.45	0.34	0.54	0.20	0.74	0.85	0.65	1.18	0.66	0.72	0.65	1.18	0.66	0.84	0.69
food container	0.04	0.28	0.26	0.21	0.00	0.31	0.39	0.00	0.91	0.48	0.42	0.00	0.91	0.48	0.53	0.01
other	0.89	0.17	0.08	0.33	0.20	0.43	0.46	0.65	0.24	0.18	0.30	0.65	0.24	0.18	0.31	0.58
FERROUS METAL	1.19	6.43	3.89	3.69	9.06	4.25	3.41	1.93	4.45	4.15	6.19	1.93	4.45	4.15	3.76	3.69
food container	0.15	2.02	1.47	1.30	1.53	1.24	1.35	0.00	1.77	1.13	1.67	0.00	1.77	1.13	1.11	1.25
other	1.04	3.41	2.42	2.39	4.52	3.01	2.05	1.93	2.68	3.02	4.52	1.93	2.68	3.02	2.65	2.43
NON-FERROUS METAL	0.02	0.00	0.94	0.37	0.12	0.26	0.06	0.14	0.15	0.11	0.59	0.00	0.15	0.11	1.39	2.94
MISC. INORGANIC	19.38	5.03	5.01	5.87	14.42	4.24	1.48	18.70	5.48	5.51	10.51	18.70	5.48	5.51	8.48	17.70
APPLIANCE	0.53	0.21	1.05	0.48	0.00	0.00	0.10	0.00	0.88	0.22	0.64	0.00	0.88	0.22	0.41	0.17
WHITE GOODS	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
FURNITURE	0.01	0.38	2.02	1.14	4.95	0.41	0.30	0.00	0.74	1.09	0.89	0.00	0.74	1.09	0.97	1.31
HAZARDOUS WASTE	0.34	0.14	0.48	0.33	0.05	0.62	0.95	0.02	0.53	0.16	0.14	0.02	0.53	0.16	0.26	0.10
OTHER WASTE	0.01	0.09	0.00	0.04	NA	NA	NA	0.00	0.16	1.22	0.06	0.00	0.16	1.22	0.56	NA
OTHER MATERIAL	0.00	0.05	0.00	0.23	0.11	0.53	1.07	0.00	0.00	0.03	0.22	0.00	0.00	0.03	0.01	0.03

HB=Hillsboro Landfill; SJ=St. Johns Landfill; MS=Metro South Transfer Station.
 NOTE: The following sub-categories were not measured in the spring sort: 1) paper food containers, 2) styrofoam, 3) plastic other food container, 4) glass food container, and 5) medical waste. For the calculation of the 1988/89 averages, the summer, fall, and winter values were added to the "other" sub-category within each main category.

Table 2. Quantity of construction/demolition debris, residential waste (excluding construction/demolition), and non-residential waste (excluding construction/demolition) delivered to regional disposal facilities during each of the four sample seasons.

	% of Waste Disposed			Tons Disposed			
	C/D	O/R	O/NR	C/D	O/R	O/NR	Total
Winter (Jan-Mar 1990)	16	29	55	43,110	78,137	148,191	269,438
Spring (Apr-Jun 1989)	NA	NA	NA	NA	NA	NA	298,470
Summer (Jul-Sep 1989)	16	37	47	47,233	109,225	138,746	295,204
Fall (Oct-Dec 1989)	19	27	54	51,120	72,644	145,289	269,053
Annual	17	31	52	192,468	350,971	588,726	1,132,165

C/D=Construction/Demolition debris (from both residential and non-residential sources)

O/R=Other/Residential waste (all waste from residential generators except for construction/demolition debris)

O/NR=Other/Non-Residential (all waste from non-residential generators except for construction/demolition debris)

NOTE: The percent of all waste that was construction/demolition was not estimated in the spring sort.
The annual averages are based on the other three sorts.

Figure 2. Annual quantity of construction/demolition debris, residential waste (excluding construction/demolition), and non-residential waste (excluding construction/demolition) delivered to regional disposal facilities.

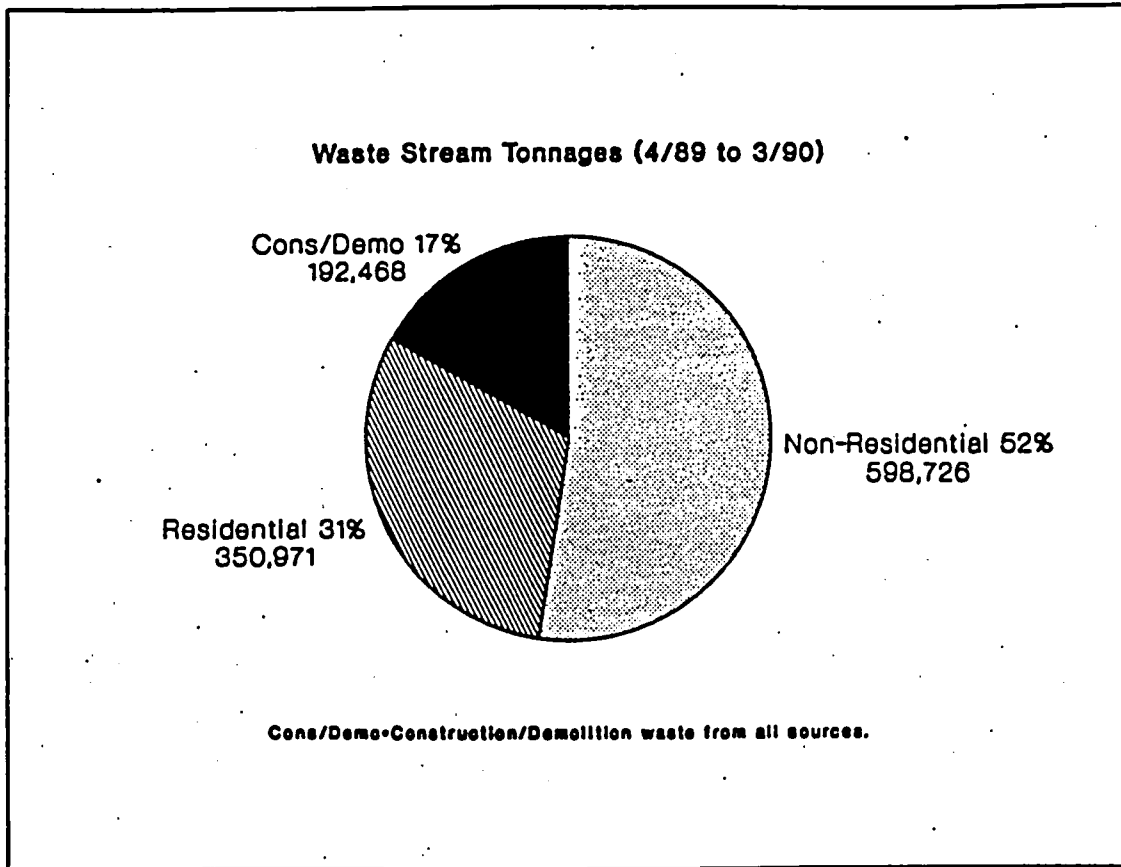


Table 3. Composition of waste (percent of wet weight) of three waste streams: (1) construction/demolition debris, (2) residential waste (excluding construction/demolition), and (3) non-residential waste (excluding construction/demolition) delivered to each of the three study sites.

Waste Stream (see code):	Hillsboro			St. Johns			Metro South			Region		
	C/D	O/R	O/NR	C/D	O/R	O/NR	C/D	O/R	O/NR	C/D	O/R	O/NR
PAPER	8.07	5.83	17.74	11.90	25.79	43.27	11.52	35.20	38.95	7.77	27.59	38.19
food container	0.00	0.00	0.70	0.14	1.06	1.48	0.10	2.41	2.02	0.04	1.59	1.41
corrugated	4.45	3.19	8.71	8.07	11.24	23.91	7.17	12.65	17.47	5.39	10.73	18.03
newspaper	0.33	3.37	1.05	1.29	3.78	3.37	1.41	6.34	3.07	0.64	4.57	2.65
office	0.25	1.85	1.37	2.15	1.64	4.77	0.31	1.61	4.53	0.51	1.68	3.77
magazine	0.00	0.00	0.78	0.00	1.95	0.66	0.20	1.82	1.35	0.03	1.58	0.87
book	0.16	0.13	0.74	0.10	3.20	1.91	0.18	2.32	3.14	0.16	2.27	1.91
other	0.88	0.29	4.41	0.15	2.92	7.17	2.15	8.05	7.37	1.00	5.16	6.46
PLASTIC	2.33	2.24	10.52	4.59	8.68	11.43	3.64	9.80	11.24	2.85	8.28	11.13
food jug	0.00	0.00	0.01	0.03	0.26	0.43	0.00	0.47	0.31	0.00	0.33	0.28
non-food container	0.00	0.00	0.09	0.00	0.14	0.32	0.00	0.20	0.25	0.00	0.15	0.24
durable	0.38	0.82	2.33	1.90	1.29	2.51	1.85	0.88	1.21	0.79	1.00	2.12
film	0.95	0.78	3.47	1.97	4.43	4.64	0.52	4.35	5.71	1.01	3.83	4.60
styrofoam	0.42	0.11	0.92	0.78	0.76	0.86	0.01	0.75	1.51	0.40	0.66	1.05
other food container	0.00	0.00	0.03	0.14	1.01	1.44	0.05	1.42	1.37	0.03	1.07	1.03
other	0.58	0.53	3.67	0.06	0.79	1.23	1.21	1.73	0.88	0.62	1.24	1.81
YARD DEBRIS	4.56	75.06	5.98	6.91	15.61	2.56	2.01	17.49	9.94	4.43	25.74	6.44
prunings	3.29	36.41	2.28	1.90	6.67	1.12	0.49	8.09	4.97	2.63	11.99	2.45
bulky	0.86	5.79	0.66	0.10	0.54	0.24	0.00	1.23	0.10	0.61	1.70	0.15
leaf	0.41	32.86	3.06	4.91	8.40	1.19	1.52	8.17	4.87	1.19	12.05	2.84
WOOD	26.75	4.17	23.61	25.44	7.00	12.66	27.96	2.63	8.85	26.79	4.31	14.67
construction	22.96	4.14	11.38	18.07	3.71	5.18	26.74	2.47	5.88	22.97	3.14	7.07
packaging	3.79	0.03	12.23	7.37	3.29	7.48	1.22	0.16	2.97	3.82	1.17	7.60
TEXTILE	3.66	3.73	4.79	6.71	5.59	5.17	6.72	3.38	4.21	4.85	4.16	4.81
FOOD	0.05	0.12	0.90	0.40	10.53	6.68	0.99	8.51	6.85	0.26	7.89	5.13
DIAPERS	0.00	0.00	0.02	0.00	1.17	0.26	0.52	2.66	0.46	0.09	1.75	0.25
MISC. ORGANIC	17.48	3.24	17.99	6.15	4.18	3.73	10.75	3.39	4.84	14.85	3.63	7.95
GLASS	0.29	0.97	0.52	1.69	2.71	1.62	0.26	4.52	2.14	0.40	3.39	1.46
beverage	0.03	0.00	0.00	0.42	0.74	0.84	0.03	2.08	1.17	0.06	1.32	0.70
non-food container	0.00	0.91	0.01	0.00	0.12	0.07	0.00	0.14	0.08	0.00	0.26	0.06
food container	0.00	0.00	0.05	0.27	0.75	0.30	0.02	1.47	0.81	0.04	1.01	0.31
other	0.17	0.06	0.46	1.00	1.10	0.41	0.21	0.83	0.28	0.28	0.80	0.39
ALUMINUM	0.06	0.00	0.85	0.80	0.91	0.54	0.25	0.57	0.56	0.16	0.60	0.83
food container	0.00	0.00	0.04	0.00	0.73	0.39	0.00	0.49	0.37	0.00	0.50	0.29
other	0.06	0.00	0.81	0.80	0.18	0.15	0.25	0.08	0.19	0.16	0.10	0.34
FERROUS METAL	1.06	3.84	3.11	13.89	4.12	4.13	2.07	5.48	5.53	2.91	4.78	4.31
food container	0.00	0.00	0.14	0.09	1.60	1.27	0.00	2.05	1.56	0.01	1.59	1.03
other	1.06	3.84	2.97	12.80	2.52	2.86	2.07	3.43	3.97	2.90	3.19	3.18
NON-FERROUS METAL	2.36	0.07	1.24	0.88	0.50	0.35	0.27	0.01	0.14	1.81	0.18	0.54
MISC. INORGANIC	35.17	0.72	11.51	17.50	5.64	5.25	31.73	1.22	5.84	32.27	2.60	7.06
APPLIANCE	0.02	0.00	0.00	0.31	0.83	0.03	0.82	1.99	0.26	0.20	1.30	0.68
WHITE GOODS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FURNITURE	0.00	0.00	1.03	1.04	6.65	1.07	0.45	2.76	0.28	0.21	3.82	0.85
HAZARDOUS WASTE	0.23	0.00	0.20	0.00	0.08	0.27	0.00	0.16	0.12	0.16	0.11	0.21
MEDICAL WASTE	0.01	0.00	0.00	0.00	0.01	1.32	0.00	0.03	0.02	0.01	0.02	0.48
OTHER MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.17	0.06	0.01	0.09	0.02

C/D=Construction/Demolition debris (from both residential and non-residential sources);

O/R=Other/Residential waste (all waste from residential generators except for construction/demolition debris)

O/NR=Other/Non-Residential (all waste from non-residential generators except for construction/demolition debris)

Figure 3. Comparison of the 1987 and 1989 waste compositions.

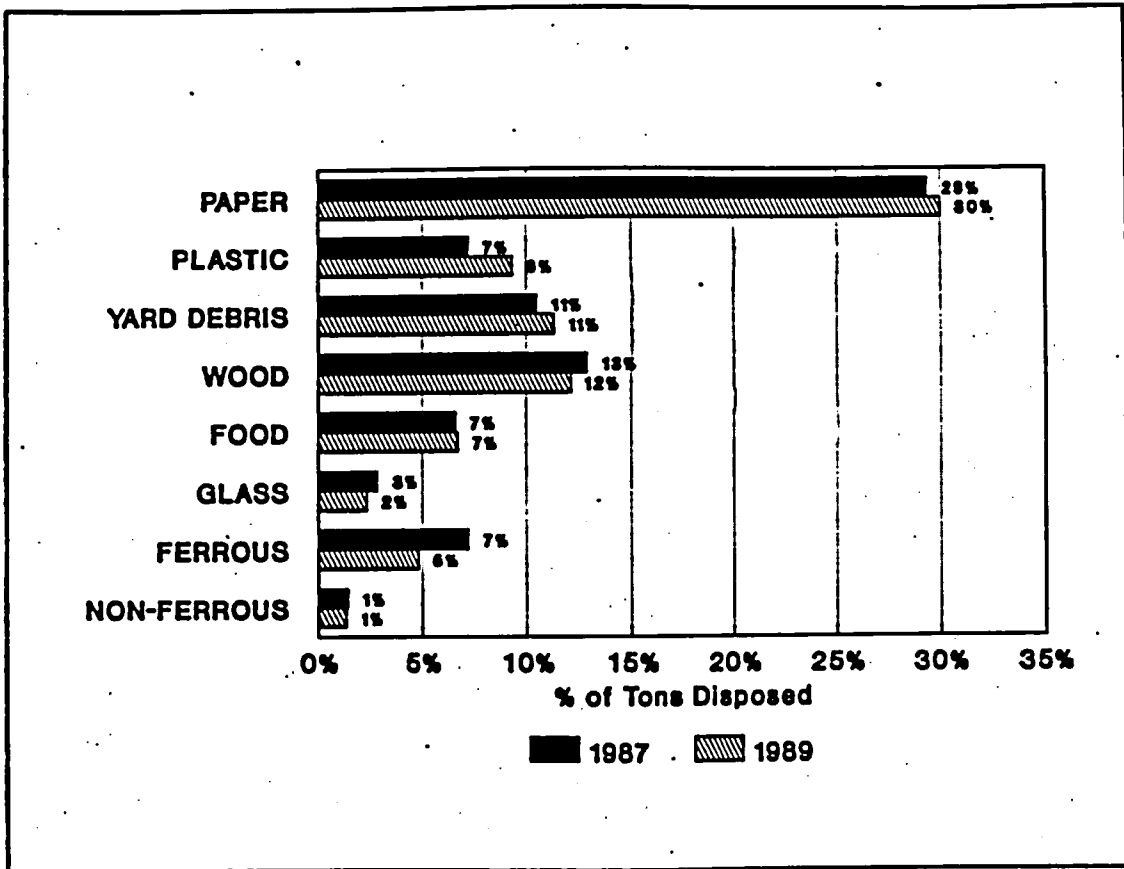


Table 4. Change in waste composition from 1987 to 1989 at each of the three study sites.

	KFD			HB			MS			SJ			Region		
	1987	1989	Change	1987	1989	Change	1987	1989	Change	1987	1989	Change	1987	1989	Change
PAPER	13.4	12.8	-0.6	34.5	34.9	0.4	35.1	39.4	4.3	29.4	30.0	0.6			
corrugated	5.8	7.6	1.8	8.8	13.3	4.5	11.0	15.7	4.7	9.0	12.3	3.3			
newspaper	1.0	1.0	-0.0	4.5	4.6	0.1	4.1	5.0	0.9	3.4	3.5	0.1			
office	1.6	1.2	-0.4	3.1	2.7	-0.4	6.0	4.8	-1.2	3.9	2.8	-1.1			
other	5.1	3.0	-2.1	18.2	14.4	-3.8	14.0	13.8	-0.2	13.1	11.3	-1.8			
PLASTIC	5.3	6.9	1.6	7.6	11.0	3.4	8.1	10.6	2.5	7.2	9.3	2.1			
food jug	0.0	0.0	0.0	0.4	0.6	0.2	0.3	0.4	0.1	0.3	0.3	0.0			
non-food container	0.3	0.2	-0.1	0.8	0.6	-0.2	1.0	0.7	-0.3	0.8	0.5	-0.3			
durable	1.3	1.6	0.3	0.6	2.3	1.7	1.0	2.5	1.5	0.9	2.0	1.1			
other	3.6	5.1	1.5	5.8	6.5	0.7	5.6	6.9	1.3	5.3	6.5	1.2			
YARD DEBRIS	11.9	14.5	2.6	9.0	12.3	3.3	10.8	7.7	-3.1	10.5	11.3	0.8			
prunings	7.3	5.4	-1.9	1.9	4.2	2.3	3.9	2.6	-1.3	4.1	4.5	0.4			
leaf	4.7	9.1	4.4	7.1	8.1	1.0	6.9	5.1	-1.8	6.4	6.8	0.4			
WOOD	26.8	23.8	-3.0	7.7	6.0	-1.7	8.4	8.9	0.5	12.9	12.1	-0.8			
TEXTILE	3.3	2.3	-1.0	3.1	3.9	0.8	4.3	4.4	0.1	3.7	3.8	0.1			
FOOD	0.3	0.1	-0.2	9.4	8.7	-0.7	8.2	9.2	1.0	6.6	6.7	0.1			
DIAPERS	0.0	0.0	0.0	1.7	1.8	0.1	1.3	1.2	-0.1	1.1	1.0	-0.1			
MISC. ORGANIC	7.6	12.5	4.9	10.1	5.6	-4.5	7.4	3.6	-3.8	8.3	6.8	-1.5			
GLASS	0.3	0.6	0.3	3.8	3.2	-0.6	3.5	2.7	-0.8	2.8	2.3	-0.5			
beverage	0.2	0.0	-0.2	2.0	1.6	-0.4	2.1	1.5	-0.6	1.6	1.0	-0.6			
other	0.1	0.5	0.4	1.8	1.6	-0.2	1.4	1.3	-0.1	1.2	1.3	0.1			
ALUMINUM	1.2	0.6	-0.6	0.9	0.9	-0.0	0.9	0.6	-0.3	1.0	0.7	-0.3			
food container	0.0	0.0	0.0	0.3	0.6	0.3	0.3	0.4	0.1	1.2	0.4	-0.8			
other	1.2	0.6	-0.6	0.7	0.3	-0.4	0.6	0.2	-0.4	0.8	0.3	-0.5			
FERROUS METAL	10.7	3.7	-7.0	6.1	4.6	-1.5	5.9	3.9	-2.0	7.2	4.8	-2.4			
food container	0.1	1.3	1.2	2.1	1.7	-0.4	2.1	1.3	-0.8	1.6	1.6	-0.0			
other	10.6	2.4	-8.2	4.0	2.9	-1.1	3.8	2.6	-1.2	5.6	3.2	-2.4			
NON-FERROUS METAL	0.9	2.9	2.0	0.2	0.2	-0.1	0.2	0.3	0.1	0.4	0.6	0.2			
MISC. INORGANIC	16.7	17.7	1.0	5.7	5.1	-0.6	5.3	4.3	-1.0	8.3	8.4	0.1			
HAZARDOUS WASTE	0.6	0.1	-0.5	0.1	0.5	0.4	0.0	0.4	0.4	0.2	0.3	0.1			
OTHER MATERIAL	0.9	1.5	0.6	0.3	1.5	1.2	0.6	2.8	2.2	0.6	2.0	1.4			

KFD=Killingsworth Fast Disposal; HB=Hillsboro Landfill; SJ=St. Johns Landfill; MS=Metro South Transfer Station.
 NOTE: Sub-categories in the 1989/90 sort were combined to correspond to the categories in the 1987 sort.

Table 5. Comparison of per capita disposal rates in 1987 and 1989.

	% of Waste Disposed		Tons Disposed		Per Capita Disposal Rate (lbs/person/day)	
	1987	1989	1987	1989	1987	1989
	Change	Change	Change	Change	Change	Change
PAPER	29.4	30.0	293,609	324,185	1.47	1.55
corrugated	9.0	12.3	89,880	133,265	0.45	0.64
newspaper	3.4	3.5	33,955	38,292	0.17	0.18
office	3.9	2.8	38,948	30,720	0.19	0.15
other	13.1	11.3	130,826	121,908	0.65	0.58
PLASTIC	7.2	9.3	71,904	100,057	0.36	0.48
food jug	0.3	0.3	2,996	3,678	0.01	0.02
non-food container	0.8	0.5	7,989	5,625	0.04	0.03
durable	0.9	2.0	8,988	21,093	0.04	0.10
other	5.3	6.5	52,930	69,770	0.26	0.33
YARD DEBRIS	10.5	11.3	104,860	122,340	0.52	0.59
prunings	4.1	4.5	40,945	48,785	0.20	0.23
leaf	6.4	6.8	63,915	73,556	0.32	0.35
WOOD	12.9	12.1	128,828	131,318	0.64	0.63
TEXTILE	3.7	3.8	36,951	41,105	0.18	0.20
FOOD	6.6	6.7	65,912	72,366	0.33	0.35
DIAPERS	1.1	1.0	10,985	10,817	0.05	0.05
MISC. ORGANIC	8.3	6.8	82,890	73,556	0.41	0.35
GLASS	2.8	2.3	27,963	25,095	0.14	0.12
beverage	1.6	1.0	15,979	11,033	0.08	0.05
other	1.2	1.3	11,984	14,062	0.06	0.07
ALUMINUM	1.0	0.7	9,987	7,464	0.05	0.04
food container	1.2	0.4	11,984	3,894	0.06	0.02
other	0.8	0.3	7,989	3,570	0.04	0.02
FERROUS METAL	7.2	4.8	71,904	51,489	0.36	0.25
food container	1.6	1.6	15,979	17,091	0.08	0.08
other	5.6	3.2	55,926	34,398	0.28	0.16
NON-FERROUS METAL	0.4	0.6	3,995	6,598	0.02	0.03
MISC. INORGANIC	8.3	8.4	82,890	90,430	0.41	0.43
HAZARDOUS WASTE	0.2	0.3	1,987	3,678	0.01	0.02
OTHER MATERIAL	0.6	2.0	5,992	21,418	0.03	0.10
TOTAL	100	100	1,000,667	1,081,916	5.00	5.19

NOTE: Sub-categories in the 1989/90 sort were combined to correspond to the categories in the 1987 sort.

LIST OF APPENDICES

- A. DEFINITIONS OF WASTE CATEGORIES**
- B. FIELD DATA FORM**

APPENDIX A
DEFINITIONS OF WASTE CATEGORIES

**APPENDIX B
FIELD DATA FORM**



METRO

3000 S. W. First Avenue
Portland, OR 97201-5398
503/221-3444

Waste Characterization Survey

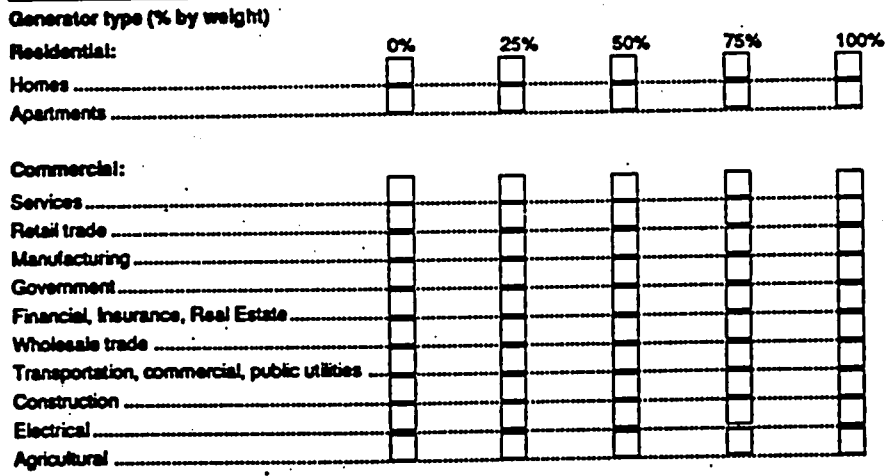
Field sort form

Date _____ Time _____ am/pm _____ High-grade Full waste stream
 Sample number _____ St. Johns Metro South Hillsboro
 Recorder _____

Vehicle data
 Metro no. _____ Truck type _____
 Company _____ Packers: rear side front
 Volume _____ Drop boxes: compacted loose
 Net weight _____ Self-haul: car pick-up trailer
 Other (describe) _____

Lead source
 Address (or nearest intersection) _____
 City _____ County _____ Census tract _____
 *Name (if single source) _____
 Description of source (type of business, etc.) _____

Description of waste
 Commercial Residential Mixed Includes construction/demolition debris? yes no



Waste classification	Subsample Weights	Total wt.	Waste classification	Subsample Weights	Total wt.
Paper			Reverse Container		
Food Container			Container		
Corrugated			Food Container		
Newsp			Other		
Office			Metals		
Magazines			Food Container		
Books, manuals, junk mail			Other		
Other			Non-ferrous		
Plastics			Misc. Inorganics		
Jugs			Other		
Non-food container			Appliances		
Durable			White goods		
Film and tape			Furniture		
Food container			Household hazardous		
Styrofoam			Medical		
Other			Other		
Yard Debris			Count		
Prunings			Returnables		
Bulky woody			Wine coolers		
Leaves and grass			Milk jugs		
Wood					
Construction Lumber					
Packaging Lumber					
Textiles					
Food Wastes					
Diapers					
Misc. Organics					

TRANSPORTATION AND PLANNING COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 92-1695, FOR THE PURPOSE OF
ADOPTION OF SMITH AND BYBEE LAKES RECREATION MASTER PLAN

Date: November 12, 1992

Presented by: Councilor McLain

Committee Recommendation: At the November 10 meeting, the Transportation and Planning Committee voted 4-0 to recommend Council adoption of Resolution No. 92-1695. Voting in favor: Councilors Devlin, McLain, Moore, and Washington. Excused: Councilor Buchanan.

Committee Issues/Discussion: Jim Morgan, Senior Regional Planner, presented the original staff report at the October 13, 1992 meeting. He gave a brief background of the project and explained that this resolution is to adopt the final Master Plan. The Plan has been reviewed by the Smith and Bybee Lakes Committee and the Management Advisory Committee.

Zari Santner, Parks Planner with the City of Portland, appeared before the committee on October 13 to describe the Lakes area improvements. She explained that the goal is to minimize the impact on natural resources by limiting the number of trails and concentrating activities to certain areas of the land.

She reviewed the improvement plans for trails, buildings and parking. The north Marine Drive area has existing parking. Trails are designed to be six feet wide, made of stone or gravel, similar to the Veteran's Memorial Trail. There will be observation platforms and sites for canoe and boat ramps. In the southeast area, there will be an Interpretive Center, complete with caretaker's residence, maintenance operation facility, 20 foot wide gravel access road and 20 parking spaces. There will be trails to both lakes, canoe access, boardwalks, and destination markers along the 40 Mile Loop.

Not all of the trails will be surfaced. The use of asphalt is inconsistent with the natural environment and encourages speeding. Experimentation is being conducted to determine other suitable surfaces. Paths will be placed in such a way to encourage public use of the area in specified areas only, thereby controlling public access and potential damage to the remaining area.

The cost of the project is estimated at between \$1.5 and 2.5 million. It will be phased-in as needed or as public demand increases and evaluation of initial portions are completed.

The Committee spent considerable time discussing architectural impediments relative to the American's with Disabilities Act (ADA). Councilor Moore made several suggestions regarding the surface of

trails and parking areas and the width of trails and roadways. There was also a discussion of the caretaker's residence and the source of revenue for the Interpretive Center. Mr. Morgan explained that additional revenues will be needed but that a double-wide trailer is now being considered, which may minimize expense to some extent.

Councilor Washington suggested the group consider ways to recycle used automobile tires within the area. Ms. Santner said it was being considered, but that initial estimates show the cost to be expensive.

After more discussion of the hard surfaces of trails and parking, the differences between primary and secondary trails, and the widths of trails and roadways, the Committee voted to return the Master Plan to the management committee and request changes.

On November 10, Mr. Morgan appeared before the Committee to submit the revised, October, 1992, version of the Master Plan. He explained the changes made on pages 24-26, which are identified in detail in an addendum to his original staff report. The changes accommodate the problems identified during the October 13 Transportation and Planning Committee meeting.

The Committee approved of the new changes, made further changes, which are also identified in the addendum to the original staff report, and approved recommending passage of the resolution to the Council.

STAFF REPORT

CONSIDERATION OF RESOLUTION NO.92-1695 FOR THE PURPOSE OF ADOPTION OF SMITH AND BYBEE LAKES RECREATION MASTER PLAN

Date: November 2, 1992

Presented by: Jim Morgan

BACKGROUND AND ANALYSIS

With the approval of the St. Johns Landfill Agreement and the adoption of the Natural Resources Management Plan for Smith and Bybee Lakes on November 8, 1990, by the Council of the Metropolitan Service District, Metro assumed the role as Trust Fund Manager of the newly established Smith and Bybee Lakes Trust Fund. Part of Metro's responsibility for managing the lakes area is the development of a recreation plan.

Through an intergovernmental agreement with Metro, Portland Parks Bureau developed the draft Recreation Master Plan for the Management Area, as specified in the St. Johns Landfill Agreement and the Smith and Bybee Lakes Management Plan. The Landfill Agreement specifies that:

"Metro shall afford to Portland Bureau of Parks and Recreation each year a right of first refusal for an intergovernmental contract to supervise, manage and operate recreation programs and projects recommended for Trust Fund expenditures in the Lakes Plan....Bureau participation shall be based on a scope of work developed by Management Committee recommendation and Metro budget approval".

This is iterated in the Management Plan under Policy 13, which states that:

"The Portland Bureau of Parks and Recreation shall develop a detailed recreation policy and facility development plan in conformance with the provision of this Management Plan. The Management Committee shall review and recommend this recreation plan to the Trust Fund Manager for adoption...."

The development of the recreation plan was funded by the Lakes Trust Fund, as authorized in the FY91-92 and FY92-93 budget approved by the Metro Council. The plan was developed over one year, guided by the citizen-based Master Plan Advisory Committee and numerous public meetings in the St. Johns community. The Smith and Bybee Lakes Management Committee was kept abreast during its development and thoroughly reviewed and approved the final draft.

The Recreation Master Plan is consistent with the goals and follows the policies outlined in the Management Plan. The goal of the Management Plan is to protect and manage Smith and Bybee Lakes area as an environmental and recreational resource for the region. They will be maintained and enhanced, to the extent possible, in a manner that is faithful to their original condition. Only those recreational uses that are compatible with environmental objectives of the Management Plan will be encouraged. Smith Lake and adjacent uplands will be the principle location for recreational activities. Bybee Lake will be less accessible,

with its primary use as an environmental preserve.

The Recreation Master Plan includes a set of goals; a description of proposed facilities such as trails, viewpoints, and an interpretive center; a list of projects; and, a schedule for implementation with estimated costs. Implementation of the recreation plan will be done through a cooperative effort of Metro and Portland Parks Bureau. Bureau participation will be based on a scope of work developed by Management Committee recommendation and subject to Metro budget approval.

BUDGET IMPACTS

The estimated total cost for all of the projects recommended in the Recreation Master Plan range from \$1,300,000 to \$2,500,000, the range being based on two different sizes for the interpretive center. Implementation is proposed to occur over many years, as funding allows, in three phases. The plan recommends gradual development of recreational improvements, allowing assessment of environmental and financial impacts to ensure developments will not compromise the Management Plan objectives.

The current balance of the Lakes Trust Fund is approximately \$2.1 million. Additional funds committed to the Trust Fund, which are not obligated to be transferred from City of Portland to the Lakes Trust Fund until December, 1993, would bring the total in the Trust Fund to approximately \$3.2 million. Financing all of the proposed projects in the recreation plan at this time using only the Lakes Trust Fund will result in severe depletion of the Lakes Trust Fund.

Policy 4 of the Management Plan states that the Trust fund shall be maintained as an endowment fund to provide for the ongoing operation and maintenance of recreational, educational, and environmental facilities and programs. Appropriations from the Trust Fund may also be made for acquisition of land and for development of facilities outlined in the Management Plan provided that these appropriations do not endanger the facilities and programs dependent on the endowment income.

Phase I can proceed without significantly impacting the Trust Fund. The total estimated cost for Phase I is \$88,400. As much as half of this estimate may be off-set by a grant currently being proposed. Similar opportunities for obtaining external funding sources will be sought throughout all phases of recreational development of the lakes area. Phase II and III of the recreation plan will be developed as funding allows. A priority will be placed in allocating Metro staff time for seeking external funding.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No.92-1695 adopting the Smith and Bybee Lakes Recreation Master Plan.

ADDENDUM TO NOVEMBER 2, 1992 STAFF REPORT TO RESOLUTION 92-1695
November 12, 1992

Changes in the Smith and Bybee Lakes Recreation Master Plan were made after the initial approval of the plan by the Master Plan Advisory Committee and the Smith and Bybee Lakes Management Committee. At the request of the Council's Transportation and Planning Committee, the Master Plan was referred back to the Management Committee with suggested changes. The intent of the suggested changes were to (1) develop all trails in a manner that will be accessible and barrier-free where possible and (2) reduce or eliminate asphalt-paved roads and trails within the Lakes Management Area where possible.

After reviewing the changes suggested by Transportation and Planning Committee, the Management Committee adopted language in the Master Plan to reflect these changes. When the Plan was returned to Council on November 10, additional changes for clarification were suggested that would maintain consistency throughout the document. These two sets of changes are listed below.

Changes Made by Smith/Bybee Management Committee 10/15/92

Page 24, the following paragraph was deleted: "Wherever possible and practical, trails at the lakes will be accessible for visitors in wheelchairs. Some trails however, will not be accessible in areas where the environmental integrity of the lakes will be compromised with "standard" trail designs. In these areas, narrower trails or different surfacing materials will be used, which will make them inaccessible for visitors in wheelchairs."

Page 24, paragraph 3, addition to the end: "Some areas, such as the St. Johns Landfill, will not be open for public use for 15-20 years, although a perimeter trail is a possibility by 1996."

Page 24, paragraph 4, second sentence: "~~Most of the~~ All trails will be accessible for disabled visitors and shall conform to the intent of the Americans with Disabilities Act."

Page 24, last paragraph: "Primary trails will be surfaces with compacted, crushed rock or other non-asphalt hard surface material and will be 6' wide."

Page 25, last paragraph: "Secondary trails will be 3 5' wide and will be surfaced with crushed rock."

Page 25, third paragraph, last sentence: "The Loop Trail will be a 12' wide trail of compacted gravel with a surface suitable for strollers and wheelchair users."

Page 25, paragraph 6, second sentence: "An asphalt trail, for example, is proposed over the loose sand that links the parking lot on North Marine Drive with the Peninsula Trail or a mulched trail connecting the Pond Trail to the asphalt trail."

Page 26, third paragraph, added the following sentence at the end: "Surfacing of this trail will be crushed rock or other wheelchair-accessible, non-asphalt surface."

Page 26, last paragraph, the following sentence was added: "The trail will be surfaced with crushed rock."

Page 27: "	<u>Width</u>	<u>Surface</u>
Smith Lake Spur Trail	3' 5'	Compacted-muleh Crushed Rock
Smith Channel Spur Trail	3' 5'	Compacted-muleh Crushed Rock
	<u>Type</u>	
Pond Spur Trail	Secondary Special	

Page 33, last paragraph: "If built, the trail will be 3' 5' wide, will consist of compacted muleh, and will not be accessible for wheelchair-users wheelchair-accessible."

Changes Made By Transportation & Planning Committee 11/10/92

Page 24, paragraph 4, second sentence: "All trails, except for those sections where hard surfaces are in direct conflict with management goals, will be accessible for disabled visitors and shall conform to the intent of the Americans with Disabilities Act."

Page 25, last paragraph: "Secondary trails will be 5' wide and will be hard surfaced with crushed rock."

Page 26, last paragraph, last sentence: "The trail will be surfaced with crushed rock hard surfaced."

Page 27, throughout: Replace "Crushed Rock" with Hard Surface.

Page 41, under Roads & Parking: "Asphalt Hard Surface Entrance Rd. 36' wide"
"Asphalt Hard Surface Road 20' wide (includes 2' shoulder)"

Smith & Bybee Lakes

Recreation Master Plan

Prepared for:

Metropolitan Service District
Portland, Oregon

Prepared by:

Planning Section
Bureau of Parks & Recreation
City of Portland

October 1992

EXHIBIT A

**Recreation Master Plan
for Smith and Bybee Lakes**

November 1992

Table of Contents

Chapter One: Introduction and Background

1.1	Purpose of the Plan	1
1.2	Location	1
1.3	Planning Process	2

Chapter Two: Environmental Issues & Recreation Assessment

2.1	Environmental Issues	6
2.2	Recreational Assessment	7
2.3	Recreational Activities	9

Chapter Three: Master Plan Recommendations

3.1	Introduction	14
3.2	Planning Concepts	14
3.3	Goals and Objectives	16
3.3.1	Natural Resources Management Plan - Goals & Policies	
	A. Goal Statement	16
	B. Selected Policies	16
3.3.2	Recreational Master Plan Goals & Objectives	
	A. Activities	18
	B. Facilities	19
	C. Access & Trails	19
	D. Education	21
3.3.3	Development Plan	
	A. Trail System	24
	B. Roads and Parking	28
	C. Educational Facilities and Programs	28
	D. Interpretive Center	31
	E. Pond and Peninsula Area	35
	F. Canoe Launch	36
3.4	Implementation and Phasing	38

1 Introduction

1.1 Purpose of the Plan

The purpose of the Smith & Bybee Lakes Recreation Master Plan is to define and locate recreational and educational improvements for Smith and Bybee Lakes. The plan is intended to augment the Natural Resources Management Plan for Smith and Bybee Lakes prepared in 1990 by the Portland Park Bureau and the Port of Portland. The Management Plan established the overall direction and future for the lakes.

The goals of this recreation plan are consistent with and follow the goals outlined in the Management Plan.

The *Recreation Master Plan* includes:

- a set of goals and policies;
- a description of proposed facilities such as trails, viewpoints, and an interpretive center;
- a list of projects; and
- a schedule for implementation

1.2 Location

The Smith and Bybee Lakes Management Area comprise about 2,000 acres in north Portland. Located just below the confluence of the Willamette and Columbia Rivers, the lakes form the western terminus of a broad lowland floodplain that stretches from Kelley Point Park to Blue Lake Park, 15 miles to the east.

The lakes are connected to a series of sloughs that connect the Willamette River with Blue Lake Park. The main channel in this slough system, Columbia Slough, flows to the south of Smith and Bybee Lakes.

As shown in the photograph on page 3, Smith and Bybee Lakes are a remnant of what was an extensive system of wetlands and waterways that once existed on the south shore of the Columbia River. Between the 1960s and mid 1980s, much of the area around the lakes was filled for industrial development and the St. John's Landfill (see diagrams on page 4). What remains is about 2,000 acres that comprise the Smith and Bybee Lakes Management Area. The area is now managed by the Metropolitan Service District.

1.3 Planning Process

The plan was prepared by the Planning Section of the Portland Park Bureau, under contract to the Metropolitan Service District (METRO). The master plan process was initiated in the fall of 1991 and was completed in August, 1992.

Preparation of the Recreation Master Plan was guided by three committees. The Smith and Bybee Lakes Management Committee is responsible for overall management of the lakes. The lakes' Technical Advisory Committee offers scientific and technical recommendations to the Management Committee. For purposes of this project, a Master Plan Advisory Committee also was established, and was discharged once the Recreation Master Plan was completed.

One of the first actions in the project was to establish a nine-person Master Plan Advisory Committee (MPAC), comprising representatives from different groups (See Appendix A for a list of MPAC members).

The planning process formally began with a series of meetings in fall, 1991 with three different groups: the general public, the MPAC, and the Friends of Smith and Bybee Lakes. These meetings were essentially "listening sessions". After basic inventory information was presented, staff spent most of the meeting listening to ideas and comments from meeting participants.

A second series of meetings was held in February and March of 1992. Like the first set, these meetings were held with the three groups mentioned above. At these meetings, alternative improvement plans were reviewed and public comment was solicited. It was at these meetings that a general policy towards the recreational development of the lakes was established.

Over the next few months, a draft plan was prepared by the Park Bureau. In June and July, the plan was reviewed by the lakes' Management Committee and Technical Advisory Committee. A final draft was subsequently prepared and adopted by the Management Advisory Committee in August, 1992.



Smith and Bybee Lakes in 1956. Hayden Island is at the top of the photo.

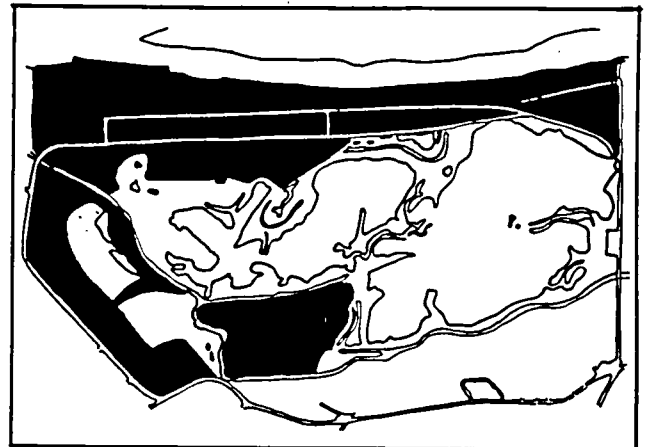
Smith and Bybee Lakes from 1939-1991.
The black areas represent filling of wetlands.



1974



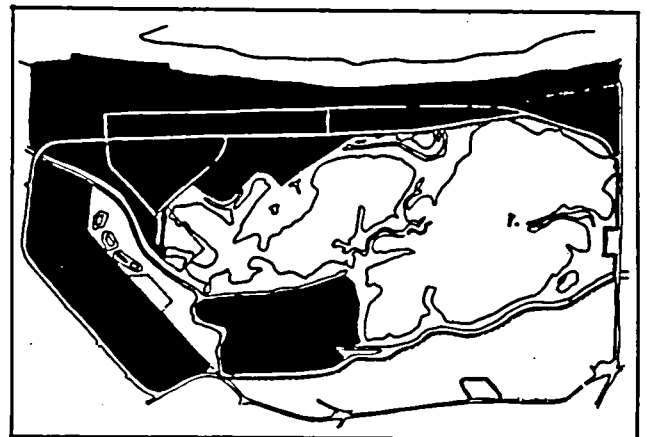
1939



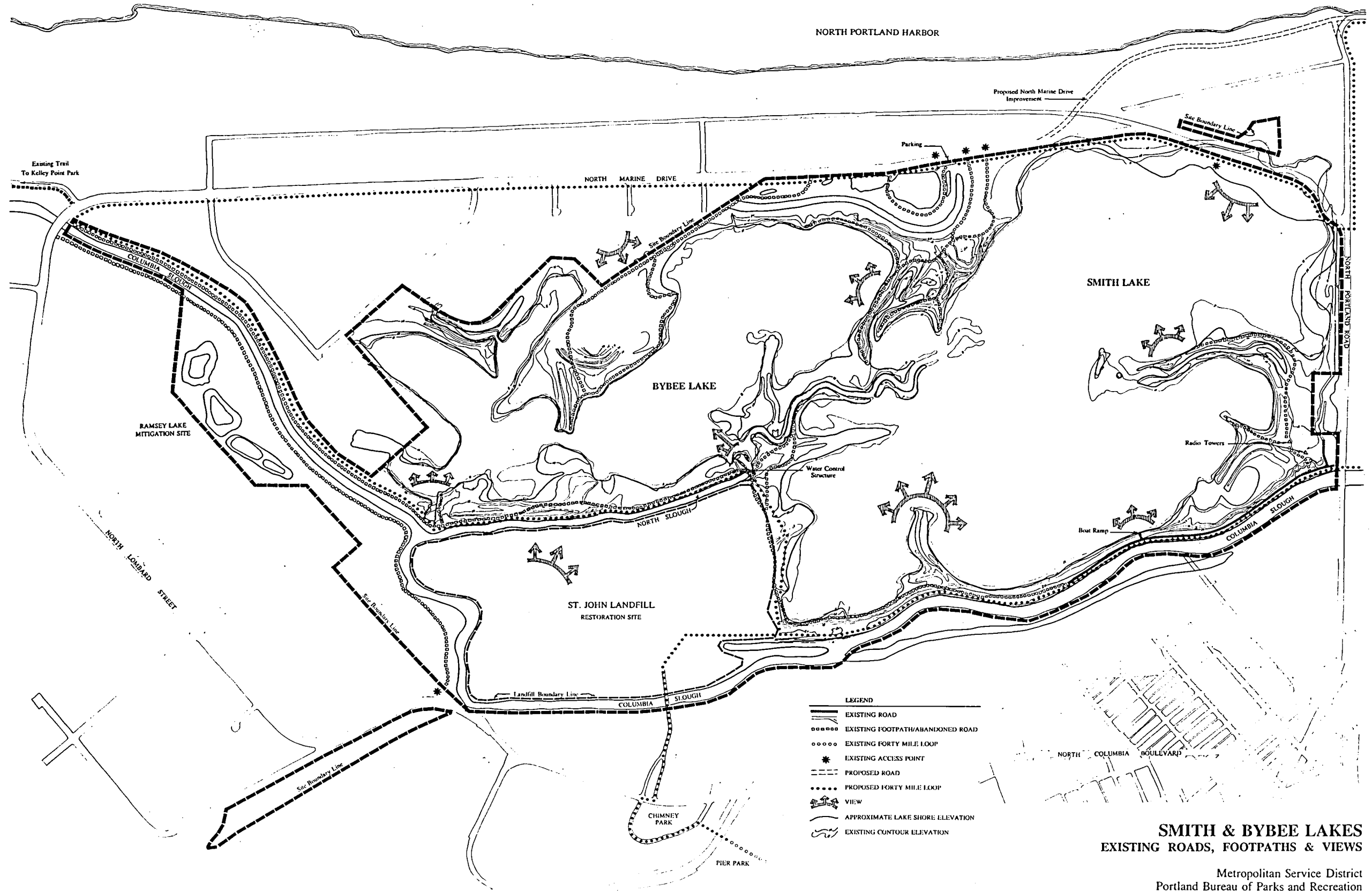
1986



1956



1991



SMITH & BYBEE LAKES
EXISTING ROADS, FOOTPATHS & VIEWS

Metropolitan Service District
 Portland Bureau of Parks and Recreation
 Portland, Oregon

0 200 400 800

Date:

2 Environmental Issues & Recreation Assessment

The purpose of this chapter is to identify critical environmental issues that were considered in the master plan, discuss projected recreational demand, and describe potential recreational activities.

2.1 Environmental Issues

The main issue in developing recreational improvements at Smith and Bybee Lakes concerns the impact of additional people on the lakes' vegetation and wildlife. Human impacts in wetland areas can be detrimental, especially for *vegetation* and *wildlife*.

Vegetation

Human activities disturb vegetation primarily by trampling. Studies have shown that the greatest impact is caused by "consistent, directed walking" which changes plant species composition and diversity.¹

The vegetation of wet soils are especially susceptible to trampling because soil compaction can damage roots, reduce aeration, reduce water retention, and decrease seed germination and survival. In addition, soil compaction can lower surface elevations and thus change the degree to which vegetation and soils are inundated (see maps on pages 11 and 12).

Wildlife

Although human activities will always have some impact on wildlife, the magnitude of these impacts vary according to species and life-cycle stage. Impacts can range from the temporal -- a brief movement away from humans -- to the more serious, such as changes in reproductive success.

Another impact is caused by trampling, grazing, or the collection of wood for fires, which alters habitat. The effects of these activities is to reduce cover for animals that depend on it for protection or for food. As human use increases, so does the population of rats, racoons,

¹ Information on human impacts is based on a report, Public Access and Wetlands: Impacts of Recreational Use, by Michael Josselyn, Molly Martindale, and Joan Duffield, published by Romberg Tiburon Centers, California, 1989.

mice, and other animals adapted to human activity.

The concerns over the environmental impacts on vegetation and wildlife are addressed by:

- (1) limiting trail development in general,
- (2) restricting trails and human activities in sensitive areas,
- (3) concentrating human activity areas in two zones, where some development has already occurred, and
- (4) adopting the priority of wildlife over humans as a goal for the plan (see the section on Goals).

2.2 Recreational Assessment

Smith and Bybee Lakes represent a major resource that can provide low-intensity and passive recreation for residents throughout the region. The lakes also have the potential, if managed properly, to be among the city's most popular sites for walking, bicycling, birding, and environmental education. This potential is suggested by the recreational assessment, which included a review of comparable sites, public meetings, surveys, and an assessment of the site relative to the region and adjacent neighborhoods.

Regional Context

Any assessment of the lakes' recreational value would have to begin first with its relationship to the Portland-Vancouver metropolitan area. In this context, the Smith and Bybee Lakes management area represents one of the largest contiguous wetland complexes in the region, second only to the Ridgefield National Wildlife Refuge (at 4,627 acres).

The lakes also represent an uncommon resource that can provide a number of non-consumptive activities to a large number of people. It is the only easily accessible site in the metropolitan area that offers -- in one place -- large open areas of water and opportunities for boating, wildlife observation, environmental education, walking, and bicycling.

Moreover, the lakes are an area that can be linked with other regional and urban trails such as the 40 Mile Loop along the Columbia Slough.

The importance of the lakes is underscored in the draft of the Green-spaces Master Plan (prepared by the Metropolitan Service District),

which classifies them as "regionally significant". According to the plan, these sites are major components of and will serve as anchors in the overall Greenspace system.

City and Neighborhood Context

On a neighborhood or urban level, Smith and Bybee Lakes represents a unique and close-in resource for North and Northeast Portland residents. For many of the 48,000 residents of North Portland, the lakes are within a 5-minute drive or a 10-15 minute walk. Perhaps because of its proximity, there is substantial interest in the lakes' preservation among area residents, as evidenced by comments expressed at public meetings.

Recreational Use of Natural Resource Sites

One indicator of potential recreational demand is provided by reviewing the visitation of other similar sites in the metropolitan area. Although much of the participation data is qualitative, several conclusions and projections can be made.

Powell Butte and Oaks Bottom, as examples, are extremely popular among Portland residents. Visitation of these sites, especially Powell Butte, has exceeded expectations of planners. Both parks are used by individuals and families, but are also used often for organized hikes by groups such as Portland Audubon, Metro Greenspaces, Portland Park Bureau, and Friends' groups. Both sites are popular throughout the year although use is heaviest during spring and fall.

Demographic Changes

In addition to participation trends, demographic changes in the city's population will affect future use of the lakes. Of these changes, one of the most important affecting future recreational needs is the aging of the baby boomers, as they grow out of the 30s and 40s and into middle age and beyond. Because of its size, the baby boomer cohort will have a major impact on recreational patterns and activities.

At least one study, *Recreation Trends to the Year 2000*, has speculated that the boomer cohort "may be transferring from physically demand

ing activities to other styles of engagement with natural environments." Consequently, sites such as Smith and Bybee Lakes will likely be popular among many city residents.

2.3 Recreational Activities

Because of the lakes' environmental conditions and management policies, recreational activities are limited to those that are low-intensity, passive, and non-consumptive. The Management Plan includes several key sections that essentially define what recreational activities are to be considered.

- The Plan's overall goal statement notes that "*only those recreational uses that are compatible with the preservation of wildlife habitat will be encouraged.*"
- The Management Plan also lists "examples of appropriate recreation" such as:
 - non-motorized boating (canoeing and canoe/sailing),
 - recreational education (wetland biology and ecology),
 - observing nature (e.g. birdwatching),
 - hiking/walking,
 - fishing, and
 - bicycling.

According to the plan, "low cost, passive recreation opportunities will be needed at levels that are unprecedented and not presently available at parks facilities within the region."

Activities that will likely be the most popular are those that are compatible with the passive orientation of the plan and are compatible with other activities. The activities noted below are those that will likely exhibit the highest participation by visitors.

- *Hiking and walking* will probably be among the most popular activities at the lakes. Several studies across the country and locally have documented the popularity of this activity and the increased demand for walking trails.

In a survey of 1,200 residents conducted by the Portland Park Bureau in 1988, "walking for recreation" was the most popular

activity, with 88 percent saying they did this "often" or "sometimes".²

- *Canoeing* is expected to be popular because the lakes are easily accessible, provide over 600 acres of water, and offers opportunities to observe wildlife -- all of this in an environment that is relatively unspoiled.

- *Fishing* will likely continue to be a popular activity at Smith and Bybee Lakes. The lakes are now used frequently for fishing and the development of an improved boat ramp could increase participation in this activity.

Environmental Education

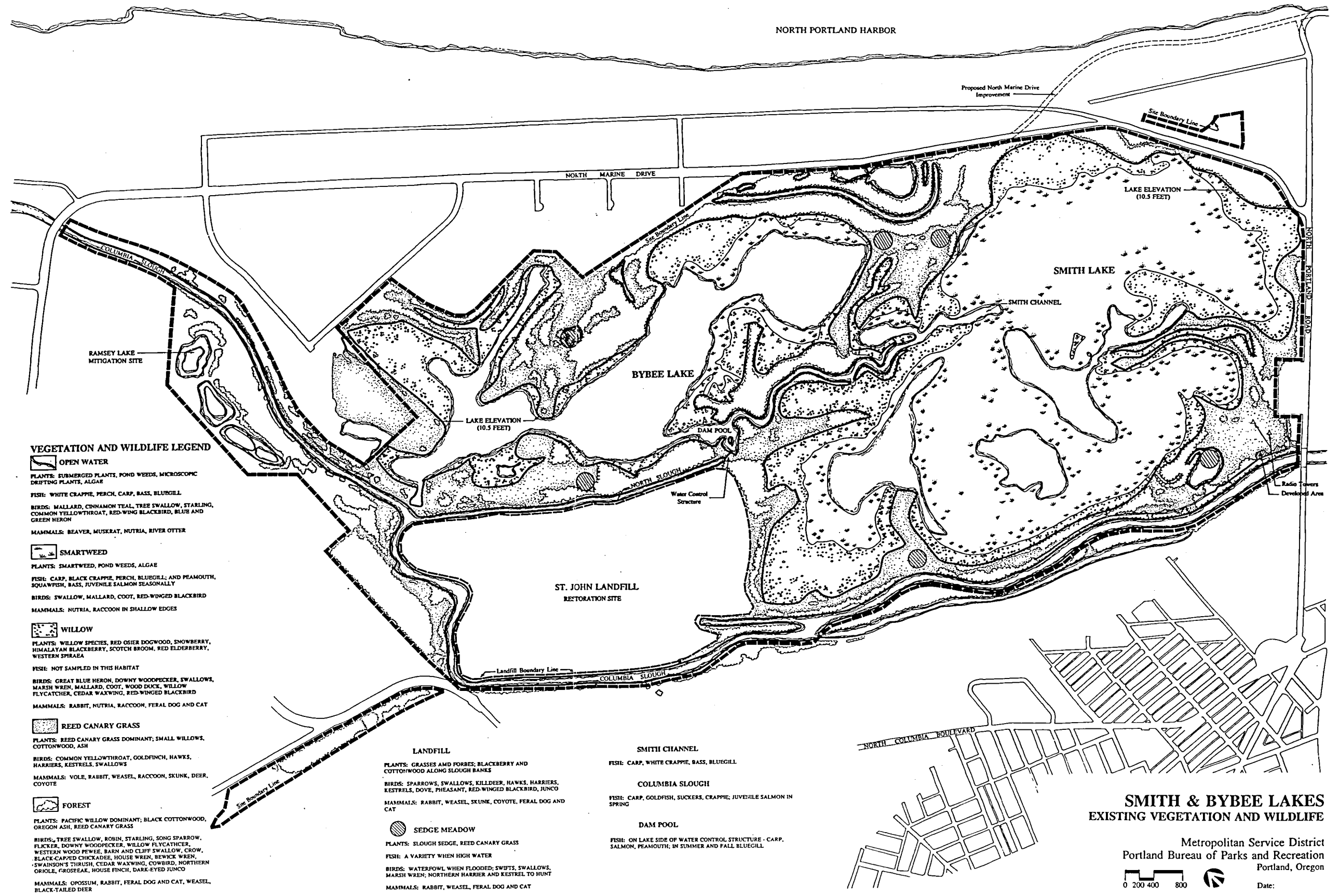
The educational potential of the lakes is also significant. As one of the largest, if not the largest, wetland complex in the metropolitan area, Smith and Bybee Lakes offer an unparalleled opportunity for environmental education. The area is large enough to provide habitat to a variety of wildlife, and includes a variety of habitat types.

Moreover, the lakes are easily accessible for much of the city's population. For some schools or neighborhoods, the lakes can be reached with a five-minute drive or 15 minute walk. Consequently, the educational element is an important part of the recreation master plan.

The value of the lakes for environmental education has been demonstrated through two projects involving George Middle School in 1991. The first project, which lasted about three months, consisted of field trips, classroom instruction, and preparation of a three-panel mural by students. Students learned about the ecology, wildlife, and vegetation of the lakes. In producing the mural, students also studied specific animals in more detail.

In the second project, GreenCity Data, George School students conducted inventories of environmental conditions at the lakes. The results of the inventory were then summarized and presented at a conference with five other schools at Portland State University.

² The survey also established participation rates for other activities such as day hiking (45 percent), fishing (40 percent), bicycling (39 percent), jogging (28 percent) and sailing, canoeing or kayaking (22 percent).



VEGETATION AND WILDLIFE LEGEND

- OPEN WATER**
PLANTS: SUBMERGED PLANTS, POND WEEDS, MICROSCOPIC DRIFTING PLANTS, ALGAE
FISH: WHITE CRAPPIE, PERCH, CARP, BASS, BLUEGILL
BIRDS: MALLARD, CINNAMON TEAL, TREE SWALLOW, STARLING, COMMON YELLOWTHROAT, RED-WING BLACKBIRD, BLUE AND GREEN HERON
MAMMALS: BEAVER, MUSKRAT, NUTRIA, RIVER OTTER
- SMARTWEED**
PLANTS: SMARTWEED, POND WEEDS, ALGAE
FISH: CARP, BLACK CRAPPIE, PERCH, BLUEGILL, AND PEAMOUTH, SQUAWFISH, BASS, JUVENILE SALMON SEASONALLY
BIRDS: SWALLOW, MALLARD, COOT, RED-WINGED BLACKBIRD
MAMMALS: NUTRIA, RACCOON IN SHALLOW EDGES
- WILLOW**
PLANTS: WILLOW SPECIES, RED OSIER DOGWOOD, SNOWBERRY, HIMALAYAN BLACKBERRY, SCOTCH BROOM, RED ELDERBERRY, WESTERN SPIRAEA
FISH: NOT SAMPLED IN THIS HABITAT
BIRDS: GREAT BLUE HERON, DOWNY WOODPECKER, SWALLOWS, MARSH WREN, MALLARD, COOT, WOOD DUCK, WILLOW FLYCATCHER, CEDAR WAXWING, RED-WINGED BLACKBIRD
MAMMALS: RABBIT, NUTRIA, RACCOON, FERAL DOG AND CAT
- REED CANARY GRASS**
PLANTS: REED CANARY GRASS DOMINANT, SMALL WILLOWS, COTTONWOOD, ASH
BIRDS: COMMON YELLOWTHROAT, GOLDFINCH, HAWKS, HARRIERS, KESTRELS, SWALLOWS
MAMMALS: VOLE, RABBIT, WEASEL, RACCOON, SKUNK, DEER, COYOTE
- FOREST**
PLANTS: PACIFIC WILLOW DOMINANT; BLACK COTTONWOOD, OREGON ASH, REED CANARY GRASS
BIRDS: TREE SWALLOW, ROBIN, STARLING, SONG SPARROW, FLICKER, DOWNY WOODPECKER, WILLOW FLYCATCHER, WESTERN WOOD PEWEE, BARN AND CLIFF SWALLOW, CROW, BLACK-CAPED CHICKADEE, HOUSE WREN, BEWICK WREN, SWAINSON'S THRUSH, CEDAR WAXWING, COWBIRD, NORTHERN ORIOLE, GROUSELARK, HOUSE FINCH, DARK-EYED JUNCO
MAMMALS: OPOSSUM, RABBIT, FERAL DOG AND CAT, WEASEL, BLACK-TAILED DEER

LANDFILL

- LANDFILL**
PLANTS: GRASSES AND FORBES; BLACKBERRY AND COTTONWOOD ALONG SLOUGH BANKS
BIRDS: SPARROWS, SWALLOWS, KILLDEER, HAWKS, HARRIERS, KESTRELS, DOVE, PHEASANT, RED-WINGED BLACKBIRD, JUNCO
MAMMALS: RABBIT, WEASEL, SKUNK, COYOTE, FERAL DOG AND CAT
- SEDE MEADOW**
PLANTS: SLOUGH SEDGE, REED CANARY GRASS
FISH: A VARIETY WHEN HIGH WATER
BIRDS: WATERFOWL WHEN FLOODED; SWIFTS, SWALLOWS, MARSH WREN; NORTHERN HARRIER AND KESTREL TO HUNT
MAMMALS: RABBIT, WEASEL, FERAL DOG AND CAT

SMITH CHANNEL

- SMITH CHANNEL**
FISH: CARP, WHITE CRAPPIE, BASS, BLUEGILL

COLUMBIA SLOUGH

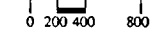
- COLUMBIA SLOUGH**
FISH: CARP, GOLDFISH, SUCKERS, CRAPPIE; JUVENILE SALMON IN SPRING

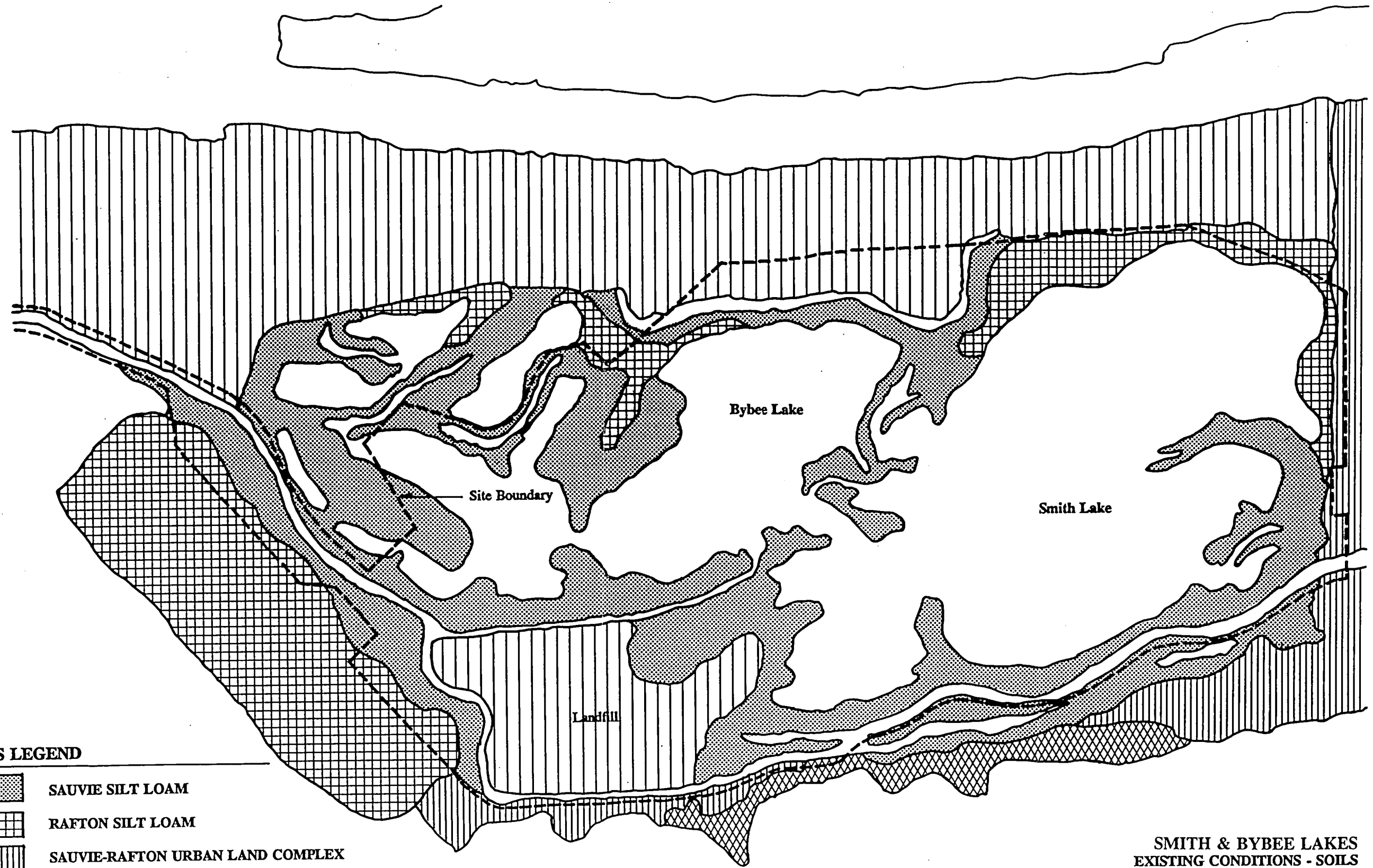
DAM POOL

- DAM POOL**
FISH: ON LAKE SIDE OF WATER CONTROL STRUCTURE - CARP, SALMON, PEAMOUTH; IN SUMMER AND FALL BLUEGILL

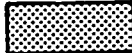
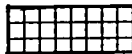



**SMITH & BYBEE LAKES
EXISTING VEGETATION AND WILDLIFE**

Metropolitan Service District
Portland Bureau of Parks and Recreation
Portland, Oregon
Date: _____



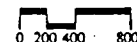


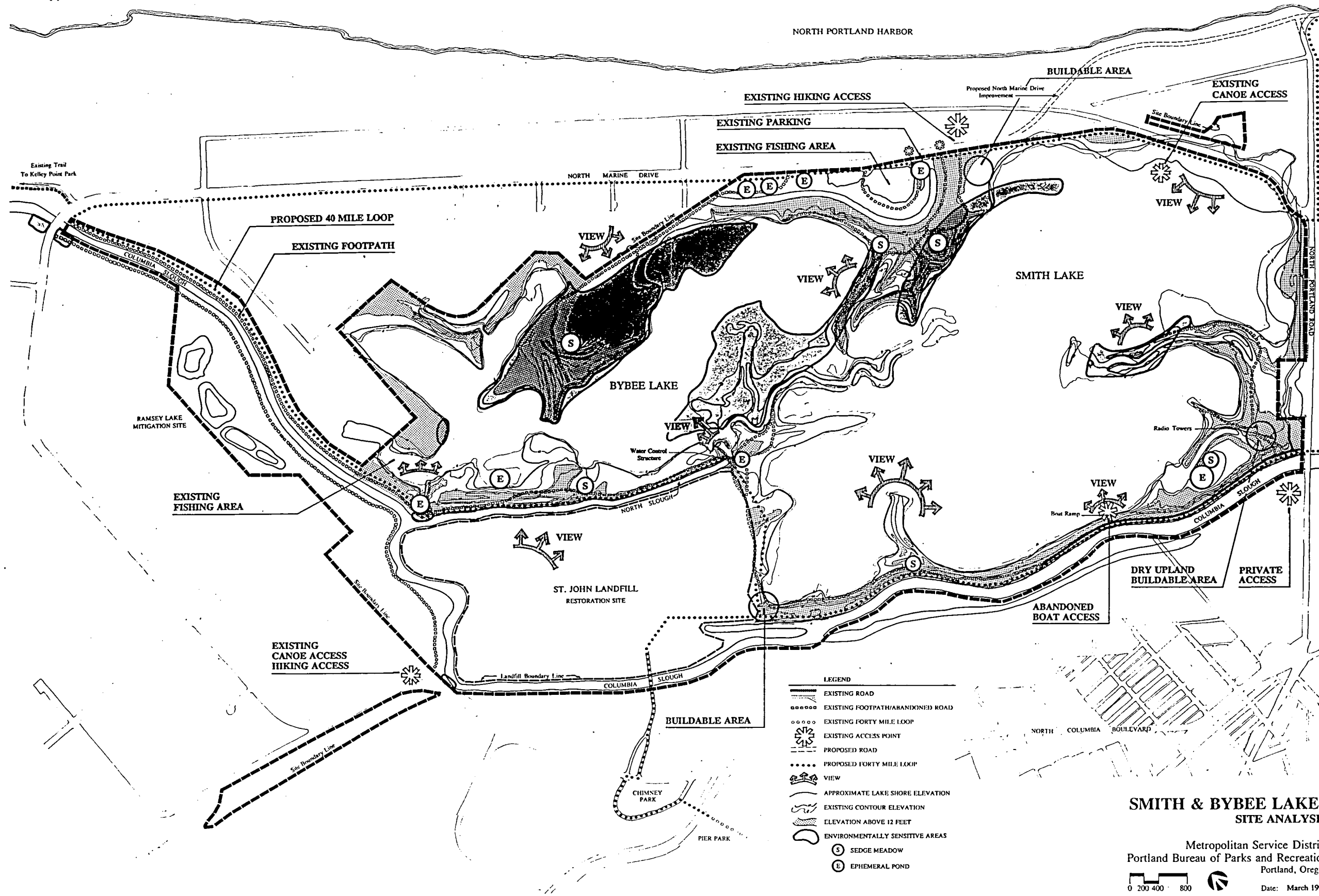
SOILS LEGEND

-  SAUVIE SILT LOAM
-  RAFTON SILT LOAM
-  SAUVIE-RAFTON URBAN LAND COMPLEX
-  PILCHUCK-URBAN LAND COMPLEX
-  URBAN LAND-QUAFENO COMPLEX

**SMITH & BYBEE LAKES
EXISTING CONDITIONS - SOILS**

Metropolitan Service District
 Portland Bureau of Parks and Recreation
 Portland, Oregon
 Date: March 1992

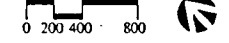




- LEGEND**
- EXISTING ROAD
 - EXISTING FOOTPATH/ABANDONED ROAD
 - EXISTING FORTY MILE LOOP
 - PROPOSED ROAD
 - PROPOSED FORTY MILE LOOP
 - VIEW
 - ~ APPROXIMATE LAKE SHORE ELEVATION
 - ~ EXISTING CONTOUR ELEVATION
 - ~ ELEVATION ABOVE 12 FEET
 - ~ ENVIRONMENTALLY SENSITIVE AREAS
 - (S) SEDGE MEADOW
 - (E) EPHEMERAL POND

**SMITH & BYBEE LAKES
SITE ANALYSIS**

Metropolitan Service District
Portland Bureau of Parks and Recreation
Portland, Oregon
Date: March 1992



3 Master Plan Recommendations

3.1 INTRODUCTION

The master plan recommendations for Smith and Bybee Lakes are organized into the four sections listed below.

- 3.2 Planning Concepts - describes the basic assumptions and policies that govern the recreation master plan;
- 3.3 Goals & Objectives - outlines the basic principles to be followed in providing recreational improvements at the lakes;
- 3.4 Development Plan - identifies specific actions and projects to realize the goals of the Recreation Master Plan. Specific actions are listed for major facilities.
- 3.5 Implementation - describes how the plan's objectives will be realized. Projects and actions are divided into specific phases. Estimated costs for projects also are identified. Some of the recommended actions in this section are contingent upon property acquisition.

3.2 PLANNING CONCEPTS

The Smith and Bybee Lakes Recreation Master Plan is based on a few fundamental concepts that define its overall structure and direction. Much of this is based on the Management Plan but other concepts were identified through the planning process for recreational facilities. These basic concepts are described below.

Recreational activities are limited to those that are low-intensity, passive, and non-consumptive.

The lakes are considered to be an environmentally sensitive area whose basic values are its wildlife, beauty, and provision of habitat. The basis for this approach was established in the management plan for the lakes, prepared in 1990 (see page 16 for an overview of that plan).

Establishment of limits on human activities and recreational facilities in some areas.

Because of the need to minimize environmental impacts, recreational facilities and human activities are limited to a few areas and along trail corridors. In addition, certain activities, such as canoeing, may be monitored to ensure that the lakes' environmental integrity and recreational experience are not compromised.

Development of facilities on an as-needed basis.

The lakes are one of the last remnants of an extensive wetland system along the Columbia River and should be managed to protect its environmental integrity. Consequently, facilities identified in this plan shall be developed as user demand warrants. Construction of facilities not expressly authorized by this Plan could occur only if an amendment to the Plan was approved to permit construction.

3.3 GOALS & OBJECTIVES

Goals and objectives for the Recreation Master Plan are described on the following pages. The purpose of the goals is to serve as a guide whenever recreational improvements are planned or built. The goals in this section are based in part, on the goals and policies defined in the Natural Resources Management Plan for Smith and Bybee Lakes, prepared in 1990 by , METRO, the Port of Portland, and the Portland Park Bureau.

3.3.1 Natural Resources Management Plan - Goals & Policies

The policies in the Natural Resources Management Plan for Smith and Bybee Lakes plan establish the overall direction towards recreational development at the lakes and any actions in the Recreation Master Plan must conform to the Management Plan. The basic Goal Statement of the Natural Resources Management Plan is shown below, along with two policies that related directly to recreation use at Smith and Bybee Lakes.

A. Goal Statement

The goal of the Management Plan is to protect and manage Smith and Bybee Lakes area as an environmental and recreational resource for the Portland region. The lakes will be preserved as historical remnants of the Columbia River riparian and wetlands system.

They will be maintained and enhanced, to the extent possible, in a manner that is faithful to their original condition. Only those recreational uses that are compatible with environmental objectives of the Management Plan will be encouraged. Smith Lake and adjacent uplands will be the principal location for recreational activities. Bybee Lake will be less accessible. Its primary use will be as an environmental preserve.

B. Selected Policies

Policy 15

Smith Lake will be the principal area for water related recreational activities such as canoeing, rowing, fishing, and birdwatching. Smith Lake will also be managed as a wildlife habitat and preservation area. No hunting, motorized boating, or other obtrusive forms of recreation will be allowed.

Policy 16

Bybee Lake and surrounding wetlands will be managed primarily as an environmental preserve. Bybee Lake will be available for recreation use, although access by foot and boat will be more difficult than Smith Lake. No vehicular access will be provided to Bybee Lake.

3.3.1 Recreational Master Plan Goals & Objectives

A. Activities

Wildlife and wildlife habitat shall have priority over human use.

- Facilities and activities that degrade or create unacceptable impacts on the lakes' wildlife, wildlife habitat, or environmental integrity shall be removed or modified.
- An ongoing program of monitoring the lakes' wildlife and habitat conditions shall be initiated.
- If needed, "test trails" or facilities shall be developed first to determine the environmental impacts on the lakes' wildlife and habitat.

Develop facilities for activities that are compatible with the Management and Recreation Master Plans.

- Compatible activities are those that are low-intensity and non-consumptive such as hiking, walking, birdwatching, bicycling, canoeing, and fishing.
- Other activities may be considered to be appropriate if they do not generate unacceptable impacts and can be accommodated in a way that is consistent with the intent and goals of this Master Plan.

[Model airplane flying is not considered to be an appropriate recreational activity for the study area. It may be accommodated on the landfill when that area is deemed "safe" for human use. The landfill was not included in the study area for this plan.]

Develop "activity areas" in which facilities, trailheads, and other support facilities will be provided.

- Locate these activity areas where:
 - o support facilities are now provided;
 - o environmental impacts can be minimized;
 - o a variety of activities can be accommodated; and
 - o access from major roads and other site conditions are appropriate.

B. Facilities

Structures and other man-made improvements shall be limited to those that provide or accommodate activities that are low-intensity, non-consumptive, or educational.

- Recreational facilities shall be limited to trails, interpretive exhibits and signs, access points (e.g. trailheads, canoe launches) an educational center, and support facilities that are needed for the center, recreational activities, and for site management.
- The education center shall be located and developed to minimize environmental impacts on the lakes, its wildlife, wildlife habitat, or vegetation.

C. Access & Trails

Provide public access into the lakes in a manner that minimizes human impact on wildlife, wildlife habitat, and vegetation.

- Limit the number of access points into the lakes.
- Locate trails to minimize impacts on the lakes' wildlife and vegetation.
- Develop "spur trails", wherever possible and appropriate, that have one access point from the main trail.
- Loop trails that encircle either one lake, or both lakes, shall not be provided.
- Minimize or seriously limit trail development and access around Bybee Lake.

Trails shall be carefully sited to comply with the Recreational Plan's goals.

- Trails will be located to:
 - minimize impacts on wildlife, wildlife habitat, and vegetation;
 - provide views of the lakes, wildlife, or other significant features;
 - provide interpretive signs and exhibits along trails to inform visitors about the lakes' wildlife, vegetation, water quality, and;
 - be accessible to visitors in wheelchairs.

Integrate the main trail system into existing and planned trail networks.

- Develop the trail along the southern border of Smith Lake as a part of the 40 Mile Loop to Kelley Point Park and to Pier Park.
- Coordinate trail improvement projects with the 40 Mile Loop Land Trust, City of Portland, and other relevant agencies or groups.

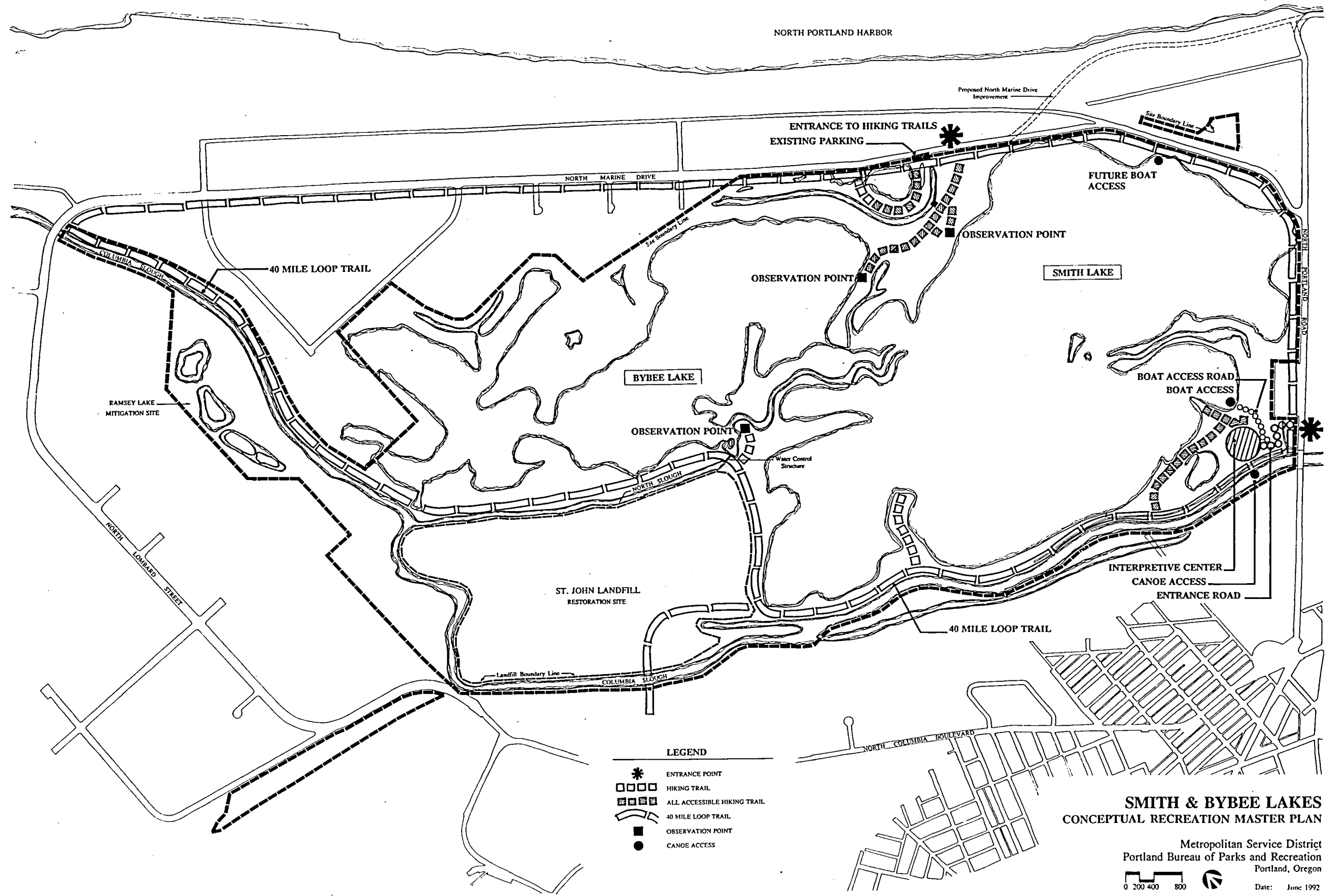
D. Education

Develop a public information program to educate visitors about appropriate recreational practices while in the management area and the Columbia Slough.

- Provide interpretive signs and information at all access points to the lakes.
- Provide signs, exhibits, and brochures that outline "proper" visitor behavior in the lakes.
- Provide signs at trailheads and canoe access points that outline acceptable recreational uses.
- Develop a team of "park hosts", as funding allows, to answer questions, act as guides, and to ensure that public activities are appropriate.

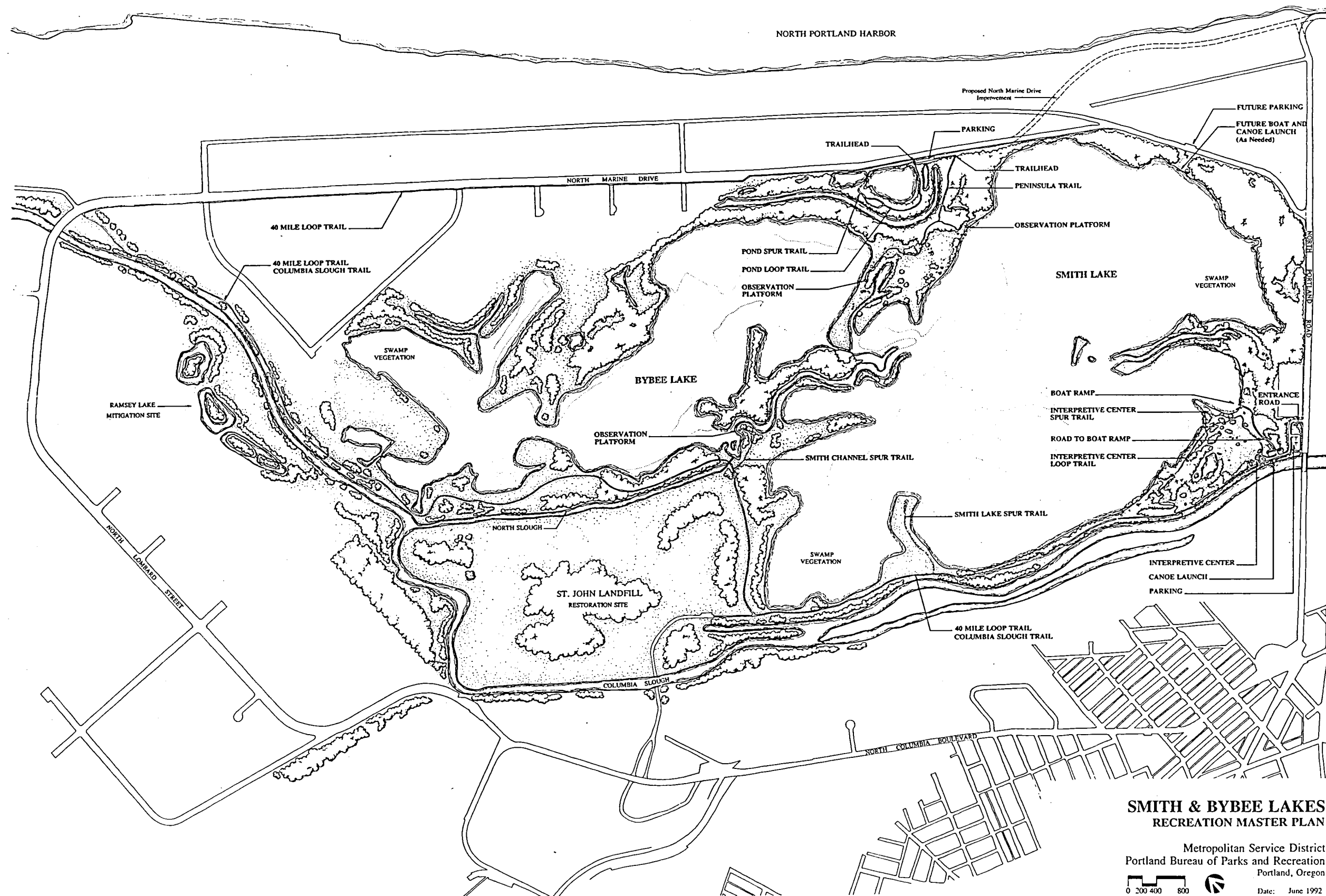
Provide and promote educational and research opportunities to public and professional groups

- Develop an on-site interpretive center that provides educational opportunities on the lakes' environmental conditions, cultural history, and its relationship to its surrounding neighborhoods.
- Develop areas around the lakes that can be used as environmental learning laboratory for schools.
- Promote research opportunities for colleges and universities.
- Provide interpretive signage throughout the site.
- Establish educational programs that involve local schools, neighborhood groups, environmental organizations, and other public agencies.



**SMITH & BYBEE LAKES
CONCEPTUAL RECREATION MASTER PLAN**

Metropolitan Service District
Portland Bureau of Parks and Recreation
Portland, Oregon
Date: June 1992



**SMITH & BYBEE LAKES
RECREATION MASTER PLAN**

Metropolitan Service District
Portland Bureau of Parks and Recreation
Portland, Oregon

0 200 400 800  Date: June 1992

3.3.2 DEVELOPMENT PLAN

The Development Plan describes the recommended facilities, improvements, and programs that are proposed over the next ten years for the lakes. Projects are described and organized according to the three facility types and by three "development zones".

- A. Trail System
- B. Roads and Parking
- C. Education Facilities and Programs
- D. Interpretive Center Area
- E. Pond and Peninsula Area
- F. Boat Launch Area

A. Trail System

The trail system is a critical element for the lakes because it provides the backbone or framework for recreational uses and will limit and define areas of human impact.

At Smith and Bybee Lakes, the trail system is designed to control and define human access in the lakes, minimize intrusions in environmentally sensitive areas, and provide access to areas that can accommodate human activity, provide some educational value, and offer views of the lakes. Some areas, such as the St. John's Landfill, will not be open for public use for 15-20 years, although a perimeter trail is a possibility by 1996.

Trail Guidelines and Types

A hierarchy of trails is proposed for the lakes and shall include primary routes, secondary routes, the 40-Mile Loop, and boardwalks (see table on page 27). All trails will be accessible for disabled visitors and shall conform to the intent of the Americans with Disabilities Act.

Primary trails will be surfaced with compacted, crushed rock or other non-asphalt hard surface material and will be 6' wide. These trails will be located in areas that are typically dry throughout the year. It is possible, however, that portions of these trails may be in areas that will be wet during unusually high rainfall or other unexpected events. In these cases, certain segments of these trails may have to be closed.

Secondary trails will direct visitors to environmentally sensitive areas and consequently, should be located and built to minimize any impacts on vegetation and wildlife. These trails may be located in areas that are inundated or have saturated soils for a part of the year. Secondary trails will be 5' wide and will be surfaced with crushed-rock.

These trails will be designed as "spurs" or dead-ends. In some areas, they will provide access to specific points such as interpretive exhibits, observation blinds, or viewpoints. Interpretive exhibits and signs should be distributed along the trails and at observation platforms.

The **40-Mile Loop trail** is a major hiking and bicycling route that will eventually connect Kelley Point Park with North Portland Road along the north side of the Columbia Slough. The Loop trail will be a 12' wide trail with a surface suitable for strollers and wheelchair users.

Surfacing of this trail has not been determined. A decision on surface material will be made after the results of a test trail on the Springwater Corridor are released. Although it will accommodate bicycles, the surfacing will be rougher than asphalt and consequently, will not encourage high levels of bicycle use.

Boardwalks will be provided in areas that are seasonally wet. The use of boardwalks is minimized. They will be used also at low points, in steep areas, and where on-grade trails will result in unacceptable environmental impacts. Boardwalks will be 6' wide and will be built with wood.

Special trails may be needed in unique conditions. An asphalt trail, for example, is proposed over the loose sand that links the parking lot on North Marine Drive with the Peninsula Trail or a mulched trail connecting to Pond Trail to the asphalt trail.

Major Trail Corridors

Three major trail linkages are proposed as primary trails and will likely be the most popular routes for visitors. These corridors will be wheelchair accessible, can accommodate small groups, and will be located to provide a variety of views and educational opportunities.

The **Columbia Slough Segment of the 40 Mile Loop**, that follows the route of the 40 Mile Loop, will connect Kelley Point Park with North

Portland Road via the north side of Columbia Slough and will be designed as a multi-purpose trail for bicyclists and hikers. The trail will be located on the existing dike road and will be connected to a trail that is linked to Columbia Boulevard through the St. John's Land-fill.

As mentioned on the previous page, surfacing of this trail will be determined upon completion of a test on the Springwater Corridor.

The *Interpretive Center Loop* will be about one mile long and will be built in the southeast corner by the interpretive center. The trail will allow visitors to see a range of habitats, vegetation types, and views of Smith Lake. As a short loop, this trail is projected to be a heavily used trail, especially for small groups or those with children. Surfacing of this trail will be crushed rock or other wheelchair-accessible, non-asphaltic surface.

The *Peninsula Trail* will be a 1.1 mile long trail extending from the Marine Drive parking lot into a part of the peninsula that separates Smith and Bybee Lakes. Visitors on this trail will walk through a dense canopy of ash and cottonwoods for 300'. The forest then transitions into an open grass area comprising sedge meadows and reed canary grass.

The trail will end at an observation platform that provides views of Bybee Lake and the western half of the peninsula. The trail will be surfaced with crushed rock.

hard surface

Trail Corridor Summary

<i>Trail Name or Location</i>	<i>Length</i>	<i>Type</i>	<i>Width</i>	<i>Surface</i>
40 Mile Loop				
Columbia Slough Segment	19,200'	Primary	12'	To be determined (p.26)
Smith Lake Spur Trail	1,100'	Secondary	5'	Crushed-Rock
Smith Channel Spur Trail	700'	Secondary	5'	Crushed-Rock
Interpretive Center Area				
Interpretive Center Loop	5,360 ¹	Primary	6'	Crushed Rock
Pond and Peninsula Area				
Peninsula Trail				
N. Marine Dr.- Peninsula	3,650'	Primary	6'	Crushed Rock
Parking Lot-Trailhead	300'	Special	6'	Asphalt
Pond Loop Trail	1,700 ²	Primary	6'	Crushed Rock
Pond Spur Trail	400'	Special	3'	Mulch

Notes

¹ Includes 800' on the existing gravel road

² Includes 100' of boardwalk

B. Roads & Parking

Facilities for cars and busses are limited to two areas in Smith and Bybee Lakes -- the interpretive center area and near the parking lot off of Marine Drive. At these two sites, the parking and auto-related areas are minimized. Wherever possible, they also are located at the edges or around the edges of the lakes' management area.

Interpretive Area

The interpretive center includes a parking lot for 20 cars in the initial phase of the development program. An expansion area for about 50 - 100 cars is proposed in an area south of the access route from North Portland Road. Development of parking areas is phased, to allow for growth only if needed and to accommodate increased use. A 20' wide access road is proposed to connect North Portland Road with the parking areas.

Peninsula Area

The existing parking lot accommodates 25 cars. This is considered to be sufficient for projected uses and also is consistent with the overall goal of protecting the lakes from overuse. No expansion is planned for this lot.

Boat/Canoe Launch Area

A small parking lot for 5 to 7 cars is proposed for the boat/canoe launch at the north end of Smith Lake. The lot will be developed after North Marine Drive is closed and relocated. Development of the boat launch however, is a long-term project that will be built only if demand warrants.

**C. Educational
Facilities
& Programs**

As one of the largest, if not the largest, wetland complex in the metropolitan area, Smith and Bybee Lakes offer an unparalleled opportunity for environmental education. The area is large enough to provide habitat for a variety of wildlife, encompasses wetland and upland vegetation types, and includes several areas that illustrate human impacts on wetlands.

Moreover, the lakes are easily accessible for much of the region, including cities in the Vancouver-Clark County area. The lakes are particularly accessible for schools in the immediate vicinity of the lakes which can be reached by a ten-minute drive.

The educational potential of the lakes was glimpsed in a demonstration project in 1991 with a class from George Middle School in north Portland. Approximately 60 students took part in a two-month program of science and art classes that focussed on the lakes' wildlife. With the assistance of a mural artist and teacher/naturalist, the students created and painted a three-panel mural that depicted the animals and plants of Smith and Bybee Lakes.

Because of this potential, environmental education is an important part of the recreation master plan and will be addressed through two ongoing programs.

- Interpretive facilities are those that are "in the field", will provide information that is specific to a particular site or subject, and is intended for use on self-guided walks. Examples of interpretive facilities include graphic exhibits, signs, and displays.

Loop trails are located in projected "high-use" areas and will likely be used extensively by the lakes' visitors. These trails will be located and designed to feature sites that have educational value or reinforce specific interpretive themes.

- The environmental education program is more varied and sustained in its scope. Programs will address a variety of issues and educational themes and can also be tailored to audiences such as primary schoolchildren, adults, birders, and others with specific interests.

Potential program opportunities and audiences are:

- General public: lectures, classes, and guided hikes;
- Schoolchildren: guided tours for school groups;
- Teachers: in-service training and summer workshops, assistance with classroom projects, continuing education with area colleges;
- Apprentice naturalist program: training for students and guides;
- Research: formal and informal activities aimed at students and scientists, in conjunction with local universities.

Potential themes or subject areas include wildlife and vegetation of the lakes, socio-cultural history of the lakes and adjacent neighborhoods;

geologic history and geomorphology of the lakes; migration patterns for the lakes' waterfowl; environmental history of the lakes' and human impacts on wetlands; hydrology of the lakes and Columbia/Willamette Rivers, and effects of water level on the lakes' wildlife and vegetation.

The potential for a partnerships between the lakes' educational programs and local colleges and universities might be explored because additional research is needed to expand the environmental database for the lakes. Local schools such as Portland State University, Portland Community College, Oregon Graduate Institute, and other universities could be instrumental in establishing research programs on water quality, wildlife, hydrology, and other scientific subjects at Smith and Bybee Lakes.

D. Interpretive Center

Area Description

The Interpretive Center area is located in the southeastern corner of the lakes and represents the major "buildable" portion of the site. The area is generally flat although there is a slight slope from North Portland Road.

The site includes a large flat area with several structures, one of which is a residence. Vegetation around the structures consists mainly of reed canary grass. Large poplar, willow and ash trees are located along the Columbia Slough, North Portland Road, and along Smith Lake.

Development Actions

This area is one of two "development zones" proposed for the lakes and will likely attract and accommodate more visitors than other parts of the lakes. Several actions, noted below, are proposed for this area. Some tasks are however, contingent upon land acquisition.

- Develop an interpretive center and related support facilities.
- Establish trails that connect to other trails and to viewpoints.
- Develop parking areas to serve the interpretive center.
- Develop one boat/canoe launch to provide access to Smith Lake and one canoe launch for access to the Columbia Slough.
- Construct caretaker residence and maintenance facility.

Each major facility in this zone is described below.

Interpretive Center - The interpretive center will provide educational opportunities for visitors to learn about the lakes' history, vegetation, wildlife, and its importance to the city and adjacent neighborhoods. The center may also include support facilities, such as canoe rental operation or other recreation-related use, that could serve as a revenue generator for the lakes.

Facilities will likely include exhibits, classrooms, meeting rooms, office space, workrooms, and other facilities for both drop-in visits and

scheduled programs. The size of the center, which will be located to minimize environmental and visual impacts, will depend on a more detailed architectural and feasibility study.

Use of the existing mobile home as an interim educational center should be investigated to determine its feasibility. Some remodeling will be required but the structure should be suitable for small group programs, exhibits and a caretaker.

Interpretive Center Loop Trail - A 1-mile loop trail that starts and ends at the interpretive center will provide visitors with views of the lakes and will provide an overview of its vegetation and wildlife. The trail will be 6' wide, will be accessible for the disabled, and will likely be the most widely used trail in this zone.

Boat and Canoe Launches - One boat/canoe launch and one canoe launch are proposed in this zone. One launch is on Smith Lake, north-east of the interpretive center, and is accessed by a 12' wide gravel road. The other launch is south of the interpretive center and will provide access to the Columbia Slough. Because the banks of the slough are steep, access to this launch requires the use of stairs.

Parking Areas - Two parking areas will be provided in this zone. One lot will be east of the interpretive center and will accommodate about 20 cars. A larger lot, proposed as an expansion area, will be located near the entrance at of North Portland Road and will include room for about 50-100 cars. Both lots will be surfaced with crushed gravel.

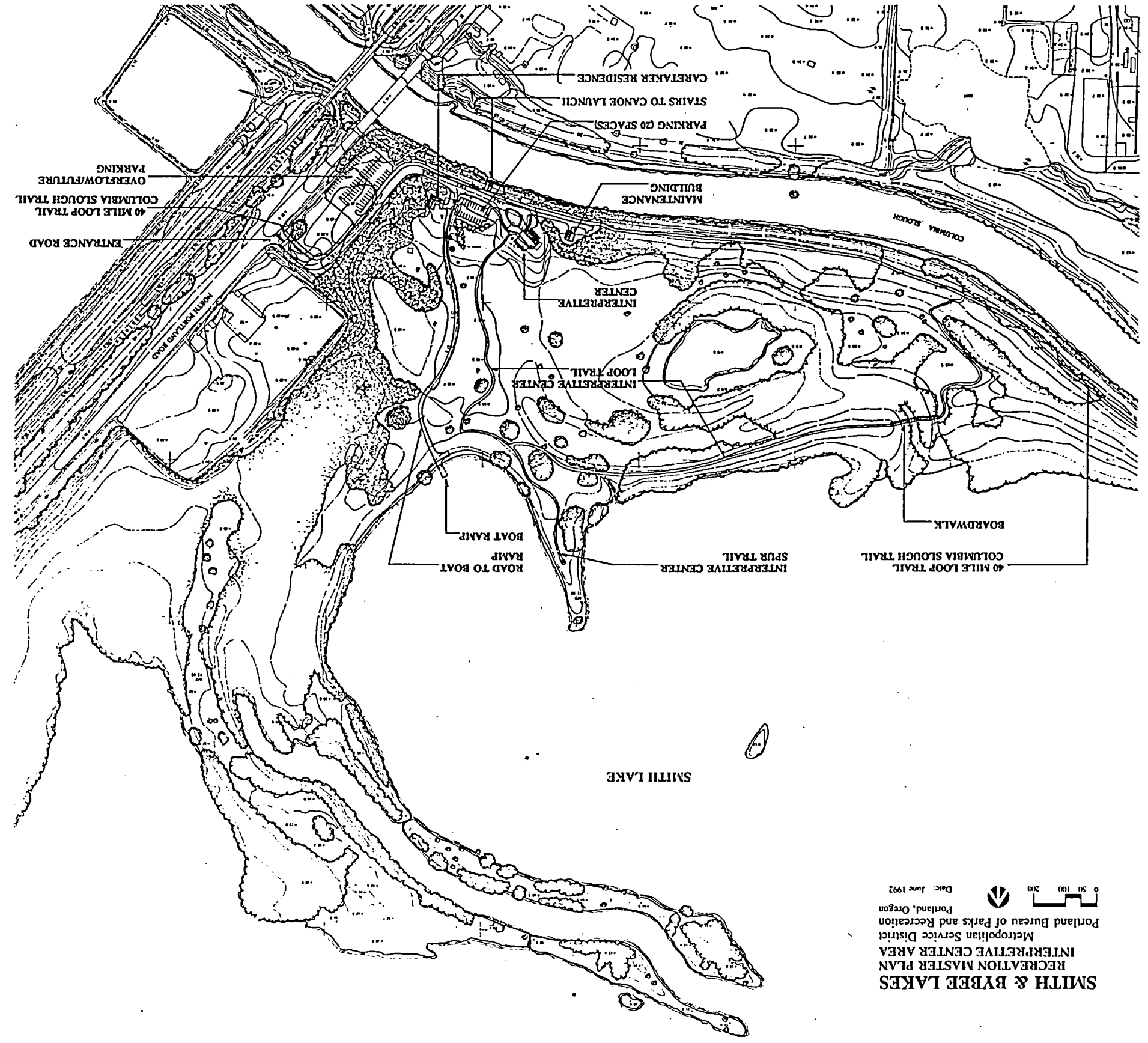
Caretaker's Residence - A live-in caretaker is proposed as a way of monitoring and controlling access into the lakes. The caretaker would provide a "presence" on the site and would be responsible primarily for maintaining the security of the interpretive center area and adjacent trails. The specific terms and responsibilities of the caretaker will have to be negotiated with Metro.

A caretaker's residence is proposed in the vicinity of the interpretive center. The site for the residence will allow the caretaker to watch the parking areas, observe the interpretive center, and monitor the entry road into this zone. The residence is located also to provide privacy for the caretaker.

An optional project is the establishment of a Wilderness Trail, a .5 mile spur trail that would lead from the interpretive center to the end

of the peninsula that extends out into Smith Lake. Because of potential environmental impacts, development of this trail would occur only if there is sufficient demand and if environmental impacts can be minimized.

If built, the trail will be 5' wide, will be wheelchair-accessible. It will generally follow the route of the existing informal road and will terminate in a small observation platform that provides visitors with expansive views of Smith Lake.



**SMITH & BYBEE LAKES
RECREATION MASTER PLAN
INTERPRETIVE CENTER AREA**
Metropolitan Service District
Portland Bureau of Parks and Recreation
Portland, Oregon

Date: June 1992

0 50 100 200

E. Pond & Peninsula Area

Area Description

The Pond and Peninsula Area is environmentally diverse and includes several major features. Among these are a small pond next to North Marine Drive and an adjacent blind slough. The area's major landform is a peninsula that separates Smith and Bybee Lakes and which now serves as an access into the lakes.

The peninsula is unique in the management zone because it provides a range of educational and recreational opportunities. It contains a pond, a slough, upland and wetland areas, and open and forested areas. In addition, the peninsula is one of the few areas that includes views of both lakes.

The pond is now used for fishing, mainly from the sandy areas along the north and northeast shoreline. An informal trail encircles the pond although a complete loop is difficult during periods of high water.

Vegetation on the peninsula consists mainly of ash, cottonwood, and willow stands, reed canary grass, and a few sedge meadows in low areas.

Development Actions

This area is one of two "development zones" proposed for the lakes. Planned improvements include a major trail, observation platforms, and interpretive signs and exhibits.

- Develop a trail from the parking lot into the peninsula.
- Develop a trail that encircles the pond and is linked to the parking lot.
- Develop three observation platforms to provide wildlife observation opportunities of both Smith Lake and Bybee Lake.
- Provide interpretive and directional signs.

F. Boat Launch

Area Description

The Boat Launch area is a small site that includes a gradually sloping sandy beach, a steep bank up to North Marine Drive, and a portion of North Marine Drive. The area is now used to launch canoes and boats and represents the primary access point for watercraft into Smith Lake.

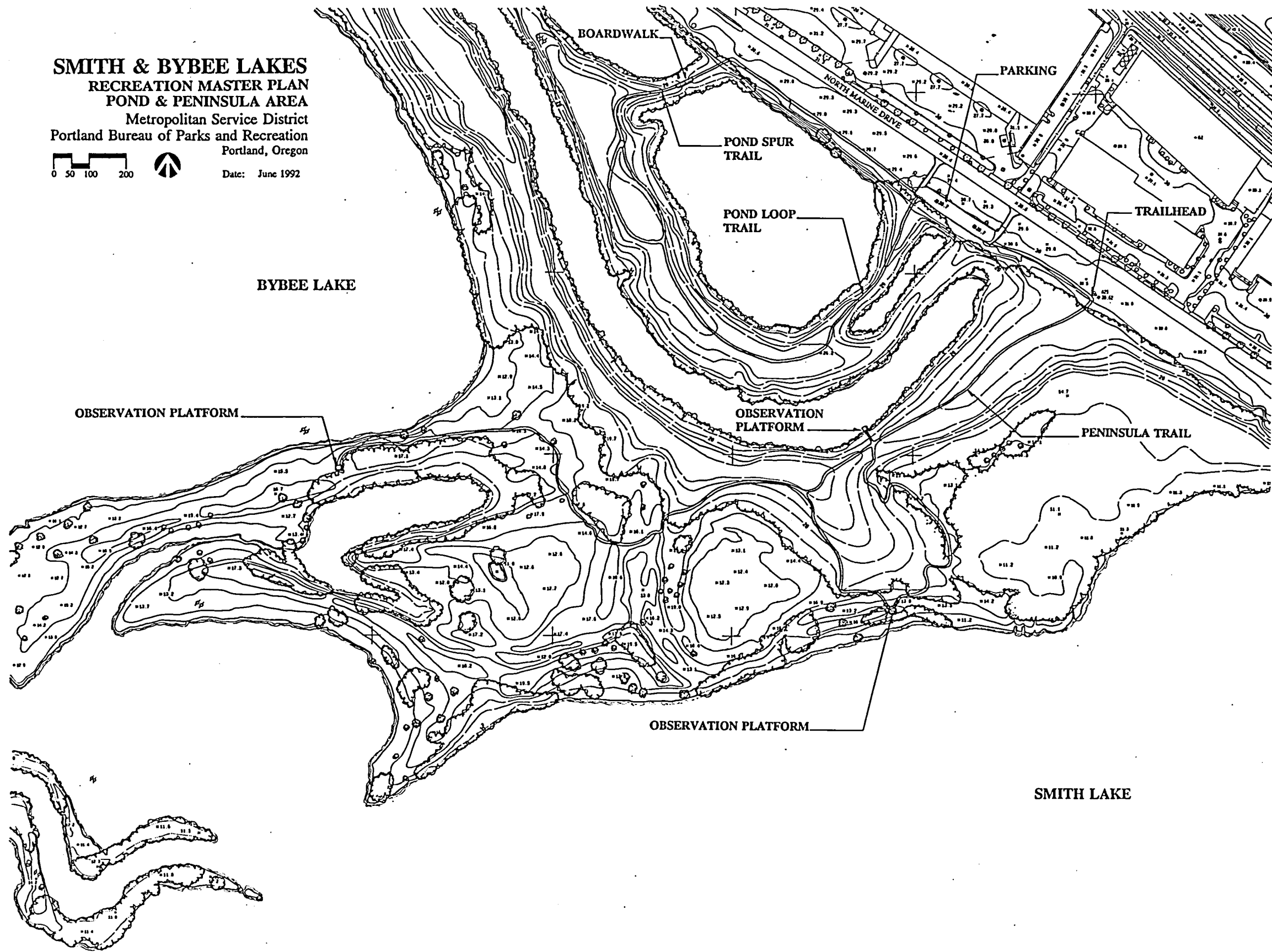
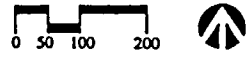
Development of this area as a long-term project will not occur until there is sufficient need and demand. When fully improved, the boat launch area will provide off-street parking, an accessible path down the bank, and a launch.

Development Actions

Development of this site as a canoe launch is contingent upon the relocation of North Marine Drive to the north, in the general vicinity of Suttle Road. Once this is accomplished, the boat launch can be built according to the site plan on the following page.

- Develop parking area on vacated portion of North Marine Drive.
- Develop boat launch and access paths from the parking area.

**SMITH & BYBEE LAKES
RECREATION MASTER PLAN
POND & PENINSULA AREA**
Metropolitan Service District
Portland Bureau of Parks and Recreation
Portland, Oregon
Date: June 1992



SMITH LAKE

3.4 Implementation & Phasing

Implementation of the Recreation Master Plan's recommendations is projected to occur over many years, as funding allows, and as use of the lakes changes. Three phases are recommended to guide the recreational development of the Smith and Bybee Lakes.

The gradual development of recreational improvements will allow impacts to be assessed as a way of ensuring that recreational improvements are consistent with the management goals for the lakes.

Several points should be noted about the costs and recommended phasing.

- Actual implementation of the projects may have to be adjusted to respond to funding levels and policies.
- The recommendations in this section are proposals only and should not be viewed as an appropriation for funds.
- Not all projects need to be funded from the Smith and Bybee Lakes Landfill Trust Fund--some projects in the Master Plan can be funded from other sources. The use of supplementary funding will in fact, be pursued for appropriate projects.

Development Costs

The total cost for all of the projected improvements in the plan have been estimated to range from \$ 1.3 - 2.5 million. The range in costs is based on two different sizes for the interpretive center, described below.

<i>Size</i>	<i>Cost/SF</i>	<i>Total Cost</i>
3,500 SF	\$ 100	\$ 350,000
10,000 SF	\$ 125	\$ 1,250,000

A summary of development costs for all improvements and projects recommended in the plan is shown below. These costs are detailed on pages 41-44.

Southeast Corner	\$ 1,230,306 - 2,464,056
North Marine Dr. Pond Area	\$ 111,781
Total Cost	\$ 1,342,000 - 2,575,800

Phase One - North Marine Drive Pond & Peninsula Area

This phase is limited to development of an area of the Smith and Bybee Lakes which is in complete public ownership, it is easily accessible and is now being used on an informal basis by the public. The North Marine Drive Pond area provides an excellent opportunity to assess the adequacy of planned facilities planned and their impact on the resources on a small area before other projects are implemented.

The phase one development includes the following facilities, all located in the North Marine Drive Pond area:

(a) 6' wide asphalt path	\$ 6,750
(b) 6' wide accessible hiking trail	20,175
(c) 3' wide non-accessible trail	600
(d) Boardwalk	5,200
(e) Two observation deck	20,000
(f) Observation platform	6,000
(g) Signage	12,000

Sub-Total	\$ 70,725
25% Fees & Contingency	17,680

Total Phase 1	\$ 88,400
----------------------	------------------

Phase 2 - Southeast Corner

Phase 2 implementation shall follow the completion of the Phase 1 projects. These projects should occur preferably, after there is sufficient information on peak use and environmental impacts so that Phase 2 projects can be modified, if needed.

Phase 2 development includes roads, parking, trails and boat and canoe launches only in the southeast corner of the site. Costs are estimated as shown on the next page:

(a) Roads and Parking (for 20 cars)	\$ 78,750
(b) Paths and Trails	307,795
(c) Boat and Canoe Launches	20,000
(d) Signage	23,700

Sub-Total	\$ 430,245
25% Fees and Contingency	\$ 10,7560

Total Phase 2 \$537,800

Phase 3 - Interpretive Center & Support Structures

Facilities included in the final development phase of the Smith and Bybee Lakes consist of the interpretive center, caretaker residence and the maintenance building. Development of these facilities, specially the interpretive center, shall proceed after careful examination of the site's capacity to accommodate use without negative impact on it's resources and determination of the appropriate size which respects that capacity.

The development cost for Phase 3 is as follows:

(a) Interpretive Center	\$350,000 - 1.25M
(b) Maintenance Building	84,000 - 135,000
(c) Caretaker Residence	90,000 - 126,000

Sub- Total	\$ 524,000 - 1.51M
25% Fees and Contingency	131,000 - 377,500

Total Phase 3 \$ 655,000 - 1.88M

SMITH & BYBEE LAKES RECREATION MASTER PLAN
Preliminary Cost Estimate - South East Corner

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
ROADS & PARKING				
Asphalt Entrance Rd. 36' wide	L.F.	100	\$57.25	\$5725
Asphalt Road 20'wide (includes 2' shoulder)	L.F.	1400	\$38.20	\$53,480
Concrete curbing	L.F.	50	\$12.40	\$620
Gravel Road 12'wide for Boat Launch (on existing footpath)	L.F.	950	\$6.50	\$5850
Gravel Driveway	S.F.	1000	\$1.50	\$1500
Gravel Parking Lot (20 spaces)	S.F.	7500	\$1.50	\$11,250
Sub-Total				\$78,750
PATHS & TRAILS				
Crushed Stone Path 12'wide - Bike/Hike (on existing gravel road)	L.F.	800	\$13.00	\$10,400
Crushed Stone Path 12'wide - Bike/Hike	L.F.	400	\$16.00	\$6,400
Crushed Stone Path 6'wide - Hike Only	L.F.	3700	\$3.75	\$13,875
Boardwalk w/ handrails (see detail)	L.F.	160	\$52.00	\$8320
Sub-Total				\$38,995
STRUCTURES				
Boat Launch	EA.	1	\$10,000	\$10,000
Canoe Launch	EA.	1	\$5000	\$5,000
Stairs to Canoe Launch (8'elevation change)	EA.	1	\$2000	\$2,000

SMITH & BYBEE LAKES RECREATION MASTER PLAN
Preliminary Cost Estimate - South East Corner

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
Benches	EA.	5	\$600	\$3000
Sub-Total				\$20,000
BUILDINGS				
Interpretive Center	S.F.	3500-10,000	\$100-\$125	\$350K- \$1,25M
Maintenance Building	S.F.	900-1500	\$90.00	\$84,000- \$135,000
Caretaker Residence	S.F.	1000-1400	\$90.00	\$90,000- \$126,000
Water and Sanitary Sewer	L.S.			\$30,000
Sub-Total				\$554K- \$1,541M
SIGNAGE				
Entrance Sign	L.S.	1	\$600	\$600
Directional Signs	L.S.			\$2500
Interpretive Signs	L.S.			\$20,000
40 Mile Loop Signs	L.S.			\$600
Sub-Total				\$23,700
EXTENSION OF 40 MILE LOOP TRAIL	L.F.	19,200	\$14.00	\$268,800
TOTAL				\$984,245- \$1,971,245
ENGINEERING FEE AND CONTINGENCY		@ 25%		\$246,061- \$492,811
GRAND TOTAL				\$1,230,306- \$2,464,056

SMITH & BYBEE LAKES RECREATION MASTER PLAN
Preliminary Cost Estimate - North Marine Drive Pond & Peninsula Area

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
ROADS & PARKING				
Gravel Parking Parallel to Road	S.F.	1000	\$1.50	\$1500
Sub-Total				\$1500
PATHS & TRAILS				
Asphalt Path 6'wide (existing base loose sand)	L.F.	900	\$7.50	\$6750
Crushed Stone Trail 6'wide	L.F.	5380	\$3.75	\$20,175
Compacted Mulch 3'wide non-accessible trail	L.F.	400	\$1.50	\$600
Boardwalk w/ handrails (see detail)	L.F.	100	\$52.00	\$5200
Sub-Total				\$32,725
STRUCTURES				
Boat Launch (in the future, only if needed)	L.S.	1	\$17,000	\$17,000
Stairs to Boat Launch (10-12' elevation change)	L.S.	1	\$2000	\$2000
Wood Observation Deck	L.S.	2	10,000	20,000
Small Observation Platform w/stairs	L.S.	1	6,000	6,000
Sub-Total				\$43,000
SIGNAGE				
Entrance Sign	EA.	2	\$600	\$1200
Directional Signs	L.S.			\$1000
Interpretive Signs	L.S.			\$10,000
Sub-Total				\$12,200
TOTAL				\$89,425

SMITH & BYBEE LAKES RECREATION MASTER PLAN
Preliminary Cost Estimate - North Marine Drive Pond Area

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
ENGINEERING FEES AND CONTINGENCY		@25%		\$22,356
GRAND TOTAL				\$111,781

**TOTAL LONG TERM DEVELOPMENT COSTS FOR THE ENTIRE SMITH- BYBEE
LAKES AREA**
\$1,342,000 - 2,575,800



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

METRO COUNCIL
November 12, 1992
Agenda Item No. 8

Date: November 12, 1992

To: Jim Gardner, Presiding Officer and Standing Committee
Chairpersons

From: Donald E. Carlson, Council Administrator *DEL*

Re: List of Immediate Council Actions to Implement the
Charter

Listed below are the subject areas of necessary immediate ordinances or resolutions that the Council should act on to implement the Charter. There may be others that come to mind later. The approach to dealing with these and any others should be discussed at the November 12, 1992 meeting.

- * Budget amendment for the Council Department to accommodate councilor salaries and fringe costs.
- * Recognize establishment of Apportionment Commission, set forth appointment process and list apportionment criteria.
- * Recognize establishment of MPAC and define relationship, if any, to RPAC.
- * Recognize establishment of Office of Citizen Involvement and integrate it with current Metro CCI and define staffing arrangement.
- * Create the Future Vision Commission and define relationship with the current 2040 process.
- * Revise Council procedures as necessary to make consistent with Charter, ie., ordinances and resolutions, custodian of records, succession of E.O., etc.
- * Possibly create Tax Study Committee(s) to address current financial needs.
- * Adopt Charter implementation legislative package.

Council Action Charter.memo



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

Council
11/12/92
#8

DATE: November 12, 1992
TO: Metro Councilors
FROM: Jim Gardner, Presiding Officer *JG*
RE: Consolidation Agreement Amendments

The Council will be receiving a briefing this evening during Councilor Communications/Committee Reports concerning proposed amendments to the Consolidation Agreement with the City of Portland on the MERC Facilities. Those amendments would return operational authority over Memorial Coliseum back to the City, effective July 1, 1993, and set out the sources of funds for effecting that transfer. A related document would implement a commitment made by the Metro Council last November to waive up to 6% of any admissions tax at the Coliseum and the new Oregon Arena.

The Executive Officer and I met twice with members of the Portland City Council to discuss the proposed amendments, and agreed to submit them to the Metro Council later this month. I would like to list here my reasons for agreeing to the proposed amendments.

- Admissions Tax Offset

In the course of deliberations last year by the Arena Task Force, the Trail Blazers made it clear that a Metro waiver of any regional admissions tax was a requirement of their participation in construction of the new arena. This provision was included in the Memorandum of Understanding, which the Council adopted in Resolution No. 91-1527. We committed at that time to waive up to 6% of any such tax in the future, in order to keep the deal alive and guarantee a critical part of the revenue stream for the City to pay its debt for the public improvements related to the new arena. I want to stress that this would not affect any current or projected Metro revenues, but would only affect the potential for a future tax - a tax that we may choose never to impose.

- Payment of Expenses Related to Transfer

The proposed amendments call for the first \$300,000 of transfer-related expenses to be paid from proceeds of the Coliseum Fund. Any additional costs will be paid out of the Spectator Facilities Fund.

We expect transfer costs to stay under the \$300,000, depending to a large extent on how many Coliseum employees the

Trail Blazers hire to operate the facility beginning next July. The City's commitment to absorb costs up to the specified limit was a concession on their part, in that their earlier negotiating position held to the terms of the Memorandum of Understanding which provided that any balance in the Coliseum fund would be available for the City and Oregon Arena Corporation to use for other Coliseum-related purposes. The City had proposed paying all transfer costs from the Spectator Facilities Fund.

- Status of Memorial Coliseum

If a new arena is to be built, it is unlikely the Memorial Coliseum will continue to be profitable. Ever since the Oregon Arena proposal surfaced, the expectation has been that the only way the Coliseum could continue to remain open to serve the public would be for it to be jointly managed with the new arena. Loss of the Coliseum as part of the Regional Facilities system has long been a cost of building a new arena.

- Public Benefits of a New Arena

In announcing their intention to build a new arena, the Trail Blazers made it clear they could not stay in Portland without a new arena. Metro's role in facilitating their intentions to build a new facility and keep the team in the region has been minimal. We will lose the principal revenue stream that has kept the other City-owned MERC facilities operating, but the Coliseum surplus would not have continued to sustain those operations indefinitely. A new revenue source would have to be developed in any case, which was a principal reason Metro created the Public Policy Advisory Committee on Regional Facilities - before the arena project began.

If a new arena is going to be built, the proposal agreed to by the City of Portland and the Trail Blazers/Oregon Arena Corporation is a very good deal for the public, as it places the lion's share of the costs in the private sector with less than 20% of the costs borne by the taxpayer. Our role as players in maintaining and improving the quality of life for residents of the region argues that we endorse the new arena proposal. This agency would stand to lose much more in terms of public acceptance and promotion of the quality of life by refusing to agree to the proposals that will come before you soon, than we might lose in dollars or potential authority by approving the proposals.



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

IMPORTANT

Date: November 9, 1992

To: Metro Council

From: Councilor George Van Bergen
Finance Committee Chair

G.V.B./sl

*For Councilor
Communications
11/12/92 Council*

Re: Performance Audit Contract with Specific Scope of Work

Please find attached a copy of the performance audit contract to be entered into with Talbot Korvola & Warwick. The contract is for a term of three years (9/25/92 to 6/30/95). It includes a specific scope of work to do a performance audit of the District's contract policies, procedures and practices relating to Chapter 2.04 of the Metro Code (excludes the contract policies, procedures and practices of the Metro ERC which are established separately). The initial amount of the contract will be \$31,930 to perform the work identified in the Scope of Work. Any additional work would be the subject of a contract amendment which would include a revised scope of work and new dollar amount. The Council Department budget includes \$60,000 for performance audit services during FY 92-93.

The Council approved this contract with Talbot Korvola & Warwick on September 24, 1992 (Res. No. 92-1676). The resolution contained a blank contract with a generic scope of work. This specific scope of work is the result of discussions with the Presiding Officer, the Executive Officer, myself and the Finance Committee. Please review the Scope of Work and give comments or suggestions to Don Carlson as soon as possible. I intend to discuss this matter at the November 12, 1992 Council meeting under Councilor Communications/Committee Reports. If there is no serious objection, the contract will be executed on November 13, 1992 and work will commence.

cc: Rena Cusma
Jack Talbot

GVB PerAud.memo

PERSONAL SERVICES AGREEMENT

THIS AGREEMENT is between the METROPOLITAN SERVICE DISTRICT, a municipal corporation organized under ORS Chapter 268, referred to herein as "Metro," located at 2000 S.W. First Avenue, Portland, OR 97201-5398, and Talbot, Korvola and Warwick referred to herein as "Contractor," located at 6420 S.W. Macadam, Suite 300 Portland, OR 97201-3519

In exchange for the promises and other consideration set forth below, the parties agree as follows:

1. Duration. This personal services agreement shall be effective September 25, 1992 and shall remain in effect until and including June 30, 1995, unless terminated or extended as provided in this Agreement.
2. Scope of Work. Contractor shall provide all services and materials specified in the attached "Exhibit A -- Scope of Work," which is incorporated into this Agreement by reference. All services and materials shall be provided by Contractor in accordance with the Scope of Work, in a competent and professional manner. To the extent that the Scope of Work contains additional contract provisions or waives any provision in the body of this Agreement, the Scope of Work shall control.
3. Payment. Metro shall pay Contractor for services performed and materials delivered in the maximum sum of Thirty one thousand nine hundred ^{thirty no} AND no /100THS DOLLARS (\$ 31,930.), in the manner and at the time specified in the Scope of Work.
4. Insurance.
 - a. Contractor shall purchase and maintain at the Contractor's expense, the following types of insurance, covering the Contractor, its employees, and agents:
 - (1) Broad form comprehensive general liability insurance covering personal injury and property damage, with automatic coverage for premises, operations, and product liability. The policy must be endorsed with contractual liability coverage; and
 - (2) Automobile bodily injury and property damage liability insurance.
 - b. Insurance coverage shall be a minimum of \$500,000 per occurrence, \$250,000 per person, and \$50,000 property damage. If coverage is written with an annual aggregate limit, the aggregate limit shall not be less than \$1,000,000.

c. Metro, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSUREDS. Notice of any material change or policy cancellation shall be provided to Metro 30 days prior to the change or cancellation.

d. Contractor, its subcontractors, if any, and all employers working under this Agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide Workers' Compensation coverage for all their subject workers. Contractor shall provide Metro with certification of Workers' Compensation insurance including employer's liability.

e. If required by the Scope of Work, Contractor shall maintain for the duration of this Agreement professional liability insurance covering personal injury and property damage arising from errors, omissions, or malpractice. Coverage shall be in the minimum amount of \$500,000. Contractor shall provide to Metro a certificate of this insurance, and 30 days' advance notice of material change or cancellation.

5. Indemnification. Contractor shall indemnify and hold Metro, its agents, employees and elected officials harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, with any patent infringement arising out of the use of Contractor's designs or other materials by Metro and for any claims or disputes involving subcontractors.

6. Maintenance of Records. Contractor shall maintain all of its records relating to the Scope of Work on a generally recognized accounting basis and allow Metro the opportunity to inspect and/or copy such records at a convenient place during normal business hours. All required records shall be maintained by Contractor for three years after Metro makes final payment and all other pending matters are closed.

7. Ownership of Documents. All documents of any nature including, but not limited to, reports, drawings, works of art and photographs, produced by Contractor pursuant to this Agreement are the property of Metro, and it is agreed by the parties that such documents are works made for hire. Contractor hereby conveys, transfers, and grants to Metro all rights of reproduction and the copyright to all such documents.

8. Project Information. Contractor shall share all project information and fully cooperate with Metro, informing Metro of all aspects of the project including actual or potential problems or defects. Contractor shall abstain from releasing any information or project news without the prior and specific written approval of Metro.

9. Independent Contractor Status. Contractor shall be an independent contractor for all purposes and shall be entitled only to the compensation provided for in this Agreement. Under no circumstances shall Contractor be considered an employee of Metro. Contractor shall provide all tools or equipment necessary to carry out this Agreement, and shall exercise complete control in achieving the results specified in the Scope of Work. Contractor is solely responsible for its performance under this Agreement and the quality of its work; for obtaining and maintaining all licenses and certifications necessary to carry out this Agreement; for

payment of any fees, taxes, royalties, or other expenses necessary to complete the work except as otherwise specified in the Scope of Work; and for meeting all other requirements of law in carrying out this Agreement. Contractor shall identify and certify tax status and identification number through execution of IRS form W-9 prior to submitting any request for payment to Metro.

10. Right to Withhold Payments. Metro shall have the right to withhold from payments due to Contractor such sums as necessary, in Metro's sole opinion, to protect Metro against any loss, damage, or claim which may result from Contractor's performance or failure to perform under this Agreement or the failure of Contractor to make proper payment to any suppliers or subcontractors.

11. State and Federal Law Constraints. Both parties shall comply with the public contracting provisions of ORS chapter 279, and the recycling provisions of ORS 279.545 - 279.650, to the extent those provisions apply to this Agreement. All such provisions required to be included in this Agreement are incorporated herein by reference. Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations including those of the Americans with Disabilities Act.

12. Assignment. This Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstance, be assigned or transferred by either party.

13. Termination. This Agreement may be terminated by mutual consent of the parties. In addition, Metro may terminate this Agreement by giving Contractor five days prior written notice of intent to terminate, without waiving any claims or remedies it may have against Contractor. Termination shall not excuse payment for expenses properly incurred prior to notice of termination, but neither party shall be liable for indirect or consequential damages arising from termination under this section.

14. No Waiver of Claims. The failure to enforce any provision of this Agreement shall not constitute a waiver by Metro of that or any other provision.

15. Modification. This Agreement is the entire agreement between the parties, and may only be modified in writing, signed by both parties.

CONTRACTOR

METROPOLITAN SERVICE DISTRICT

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

EXHIBIT A

FISCAL YEAR 1992-93
SCOPE OF WORK

This exhibit describes the contractor's work plan, deliverables and budget for conducting a performance audit of the District's contract policies, procedures and practices relating to the implementation of Chapter 2.04 of the Metro Code.

The performance audit will be conducted in two separate phases: a survey phase (Phase I), and an in-depth review phase (Phase II). Phase I will analyze the District's contract management system, identify areas with potential for improvement, and lead to development of a work plan for the in-depth audit of selected areas under Phase II. The contractor will provide recommendations for immediate improvements in areas developed under Phase I of the project.

Under Phase II, the contractor will develop the attributes of a performance audit finding -- condition, cause, criteria and effect for the areas identified under Phase I. The contractor will also develop meaningful recommendations to improve the economy and efficiency of the District's contracting system.

WORK PLAN

The work plan for the completion of the performance audit of the District's contracting system is set forth below. It is based on the assumption that the Council's Finance Committee will perform oversight of this performance audit. If a different oversight arrangement is adopted by the Council, the contractor will modify the work program accordingly.

The level of effort, distributed by professional staff level, for the tasks set forth in the contractor's work plan are shown in the budget section of this scope of work. The contractor agrees to complete the work plan within 90 days of the execution of this contract.

PHASE I -- SURVEY

TASK 1 - CONDUCT START UP ACTIVITIES

This task includes:

- a) entrance conference with key elected officials and management staff to introduce audit team, refine scope and study objective and discuss project coordination procedures; and,
- b) collection and review of key documents regarding the District's contract policies, procedures and practices.

TASK 2 - INTERVIEWS WITH KEY MANAGEMENT, PROGRAM AND COUNCIL STAFF

This task includes interviews with those persons responsible for the administration of contract policies and procedures and for management of contract. The objectives of the interviews are to:

- a) provide opportunity for persons to describe areas of concern which should be addressed in the audit;
- b) identify contracting roles and responsibilities; regulatory requirements, work load and work flow, etc.; and,
- c) provide audit team an understanding of how contracting system works and necessary feedback on most appropriate areas to be reviewed and evaluated in the audit.

TASK 3 - ASSESS POTENTIAL FOR ECONOMY AND EFFICIENCY IMPROVEMENTS

This task includes an evaluation of the results of interviews and the analysis of contracting policies, programs and procedures. The key task of Phase I is the determination of focus for issues to be addressed in Phase II. During this task, initial observations will be shared with key management persons responsible for the functions/areas reviewed to assure accuracy of observations and to further develop insights on potential for improvements.

TASK 4 - REVIEW PHASE I OBSERVATION WITH COUNCIL FINANCE COMMITTEE AND DISTRICT MANAGEMENT STAFF

This task includes meeting with the Finance Committee and appropriate District staff to:

- a) discuss observations and areas of concern developed in Phase I; and,
- b) review recommendations for immediate improvement to policies, procedures and practices developed as a result of Phase I.

TASK 5 - PREPARE PHASE I FINAL REPORT AND WORK PLAN FOR PHASE II

This task includes:

- a) writing the results of the audit conducted under Phase I;
- b) preparing a work plan in writing on the issues recommended for study in greater depth; and,
- c) review of the work plan with the Finance Committee.

PHASE II -- DETAILED REVIEW

TASK 6 - PERFORM IN-DEPTH STUDY

This task includes:

- a) development of the findings on District contracting policies, procedures and practices identified in Phase I; and,
- b) development of practical and cost effective recommendations for improvements in the economy, efficiency and effectiveness of the contracting system. The recommendations may address:

- 1) needed changes to existing policies and procedures
- 2) needed policies and procedures where none exist
- 3) realignment of organizational and program responsibilities to improve economy and efficiency or to improve delivery of service; and,
- 4) adjustment to current funding levels.

TASK 7 - PREPARATION OF THE AUDIT REPORT

This task will include:

- a) preparation of the draft report which summarizes the following:
 - 1) scope of work performed
 - 2) methodology for conducting study
 - 3) major findings in each area reviewed
 - 4) conclusions of study identifying strengths and weaknesses of the contracting system; and,
 - 5) recommendations to improve the contracting system;
- b) review the draft report with Council Staff and key management staff to:
 - 1) provide an opportunity for additional explanation or clarification regarding the results of the study; and,
 - 2) discuss the appropriateness and feasibility of contractor's recommendations;
- c) review the draft report with Council Finance Committee to:
 - 1) present the results of the study; and
 - 2) clarify any questions raised by the Committee;
- d) finalize the report:
 - 1) make any necessary changes in the draft report based upon the review and comments; and,
 - 2) present the final written report to the Metro Council.

DELIVERABLES

Based on the Scope of Work contractor will provide at least 30 copies of the following deliverables:

- a) Task 5 -- Phase I report and recommended work Plan for issues to be developed under Phase II; and,
- b) Task 7 -- Draft and final reports on findings, conclusions and recommendations developed in Phase II, the detailed audit.

METRO CONTRACT MANAGER

The Council Administrator shall serve as contract manager for this contract. The contractor agrees to provide periodic status reports to the contract manager and Finance Committee as mutually agreed to by the contractor and contract manager.

BUDGET

The proposed costs to accomplish this scope of work are as follows:

<u>Professional</u>	<u>Phase I</u>			<u>Phase II</u>		<u>Totl</u>
	<u>Hrs.</u>	<u>Rate</u>	<u>Fee</u>	<u>Hrs.</u>	<u>Fee</u>	
Principal/Partner Jack Talbot	30	\$98	\$2940	30	\$2940	\$5880
Manager Brad Rafish	60	\$65	3900	140	9100	13000
Consultants	0	\$50	0	120	6000	6000
Staff Auditors	60	\$40	2400	100	4000	6400
Total	150		9240	390	22040	31280
 <u>Expenses:</u>						
Report Production				Draft		250
				Final Report		400
Total						31930

Total Audit Costs*

* A not-to-exceed amount. The estimated total project cost will be determined prior to Phase II of the performance audit.

The rates shown are for fiscal year 1992-93 work. Contractor agrees that Mr. Jack Talbot and Mr. Brad Rafish will serve as the principal and manager respectively for the term of this contract unless Metro agrees to change the person(s) so designated.



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

Council
11/12/92
#8

DATE: November 12, 1992
TO: Metro Councilors
FROM: Jim Gardner, Presiding Officer *JG*
RE: Consolidation Agreement Amendments

The Council will be receiving a briefing this evening during Councilor Communications/Committee Reports concerning proposed amendments to the Consolidation Agreement with the City of Portland on the MERC Facilities. Those amendments would return operational authority over Memorial Coliseum back to the City, effective July 1, 1993, and set out the sources of funds for effecting that transfer. A related document would implement a commitment made by the Metro Council last November to waive up to 6% of any admissions tax at the Coliseum and the new Oregon Arena.

The Executive Officer and I met twice with members of the Portland City Council to discuss the proposed amendments, and agreed to submit them to the Metro Council later this month. I would like to list here my reasons for agreeing to the proposed amendments.

- Admissions Tax Offset

In the course of deliberations last year by the Arena Task Force, the Trail Blazers made it clear that a Metro waiver of any regional admissions tax was a requirement of their participation in construction of the new arena. This provision was included in the Memorandum of Understanding, which the Council adopted in Resolution No. 91-1527. We committed at that time to waive up to 6% of any such tax in the future, in order to keep the deal alive and guarantee a critical part of the revenue stream for the City to pay its debt for the public improvements related to the new arena. I want to stress that this would not affect any current or projected Metro revenues, but would only affect the potential for a future tax - a tax that we may choose never to impose.

- Payment of Expenses Related to Transfer

The proposed amendments call for the first \$300,000 of transfer-related expenses to be paid from proceeds of the Coliseum Fund. Any additional costs will be paid out of the Spectator Facilities Fund.

We expect transfer costs to stay under the \$300,000, depending to a large extent on how many Coliseum employees the

Trail Blazers hire to operate the facility beginning next July. The City's commitment to absorb costs up to the specified limit was a concession on their part, in that their earlier negotiating position held to the terms of the Memorandum of Understanding which provided that any balance in the Coliseum fund would be available for the City and Oregon Arena Corporation to use for other Coliseum-related purposes. The City had proposed paying all transfer costs from the Spectator Facilities Fund.

- Status of Memorial Coliseum

If a new arena is to be built, it is unlikely the Memorial Coliseum will continue to be profitable. Ever since the Oregon Arena proposal surfaced, the expectation has been that the only way the Coliseum could continue to remain open to serve the public would be for it to be jointly managed with the new arena. Loss of the Coliseum as part of the Regional Facilities system has long been a cost of building a new arena.

- Public Benefits of a New Arena

In announcing their intention to build a new arena, the Trail Blazers made it clear they could not stay in Portland without a new arena. Metro's role in facilitating their intentions to build a new facility and keep the team in the region has been minimal. We will lose the principal revenue stream that has kept the other City-owned MERC facilities operating, but the Coliseum surplus would not have continued to sustain those operations indefinitely. A new revenue source would have to be developed in any case, which was a principal reason Metro created the Public Policy Advisory Committee on Regional Facilities - before the arena project began.

If a new arena is going to be built, the proposal agreed to by the City of Portland and the Trail Blazers/Oregon Arena Corporation is a very good deal for the public, as it places the lion's share of the costs in the private sector with less than 20% of the costs borne by the taxpayer. Our role as players in maintaining and improving the quality of life for residents of the region argues that we endorse the new arena proposal. This agency would stand to lose much more in terms of public acceptance and promotion of the quality of life by refusing to agree to the proposals that will come before you soon, than we might lose in dollars or potential authority by approving the proposals.

Council
11/12/92
#8

CITY/METRO/OAC AGREEMENT TO OFFSET ADMISSION TAX #8

This Agreement, dated _____, 1992, is between the City of Portland, Oregon (City), the Metropolitan Service District (Metro), the Oregon Arena Corporation (OAC), and the Trail Blazers Inc. (TBI).

RECITALS

A. The City, OAC, and TBI are entering into a project agreement for the development of a sports arena and plaza generally located on the site of the City's Memorial Coliseum and Exhibit Hall, and for operation of the Project Facilities by OAC.

B. Pursuant to those agreements, OAC will be collecting user fees on tickets for events at the Project Facilities and will make payments to the City from user fees collected.

C. The City and Metro have authority to impose and collect admission taxes on tickets for spectator events, including events at the Project Facilities.

D. The parties to this Agreement believe it is in their best interest to ensure that the user fee on events at the Project Facilities (Coliseum, Arena, Plaza, and Exhibit Hall) is offset against any Admission Tax imposed by the City or Metro so as to avoid unreasonably high cumulative excise charges on tickets.

SECTION 1

DEFINITIONS

1. "Admission Tax" means any tax or imposition imposed by the City or Metro directly on the issuance, purchase, sale or use of tickets for events at the "Project Facilities" as defined below. Admission taxes include any tax measured by the gross receipts from

ticket sales or admissions, and also include impositions which (a) are specific to the Project Facilities, or (b) taxes on or measured by the gross receipts of sales of tickets and admissions to assembly type facilities such as theaters, stadiums, auditoriums, amphitheaters, plazas, exhibit halls and performance halls. Admission taxes do not include taxes which are of a general nature, and applicability, including business income, gross receipts or sales taxes.

2. "User Fee" means the additional charge not to exceed 6 percent imposed by OAC on tickets for events at the Project Facilities, which User Fee is subsequently paid by OAC to the City, pursuant to the agreements between OAC and the City.

3. "Project Facilities" means the sports Arena, Plaza, Memorial Coliseum, and associated Exhibit Hall, all located generally on the site of the Memorial Coliseum at 1401 North Wheeler, Portland, Oregon.

SECTION 2

ADMISSION TAX OFFSET

4. In the event that the City or Metro imposes any Admission Tax, OAC may offset, dollar-for-dollar, the amount paid in User Fees to the City against the amount of Admission Tax payable to the City or Metro in the manner set forth in this Agreement.

5. OAC may reduce the Admission Tax it collects on each ticket, and thus reduce the amount of Admission Tax OAC pays to Metro or the City by an amount equal to the amount of User Fees OAC must collect on each ticket and pay to the City pursuant to its agreements with the City. The intended result of this Agreement is as follows:

- a. If the User Fee is greater than the sum of all admission taxes imposed by the City and Metro, then OAC need not collect or pay any Admission Tax.
- b. If the sum of the admission taxes is greater than the User Fee, then OAC may collect and pay as Admission Tax only the amount by which the sum of admission taxes exceeds the User Fee.
- c. If OAC must collect and pay a partial Admission Tax, as in (b) above, and both the City and Metro have imposed admission taxes, then the amount paid by OAC shall be apportioned between the City and Metro in the same ratio as the ratio between the full admission taxes imposed by the City and Metro.

6. Nothing in this Agreement shall reduce or impair the obligations of OAC to pay User Fee revenue to the City pursuant to the agreements between OAC and the City.

7. In the event that the City or Metro, in spite of this Agreement, collect Admission Tax from OAC without it being reduced by the amount of User Fee as provided in this Agreement, then the City or Metro shall reimburse OAC so that the net effect is the same as if the Admission Tax had been fully offset by the User Fee as contemplated by paragraph 4 of this Agreement.

8. The User Fee contemplated by this Agreement is the 6 percent fee on tickets sold in the new Arena and Coliseum. Any increase in this fee subsequently agreed to by City and OAC or any other payments made by OAC to City pursuant to the agreements between OAC and City are excluded from the Admission Tax offset and OAC shall not be

entitled to offset any such additional User Fee or payments against any Admission Tax subsequently imposed by Metro or City.

9. This Agreement shall be in effect as long as OAC is contractually obligated to pay User Fees to the City pursuant to the agreements entered into between City and OAC on November 5, 1992.

DATED this _____ day of _____, 1992.

Oregon Arena Corporation

Trail Blazers Inc.

City of Portland

Metropolitan Service District

gl
1128

AMENDED

AGREEMENT REGARDING CONSOLIDATION

OF

REGIONAL CONVENTION, TRADE, SPECTATOR AND

PERFORMING ARTS FACILITIES OWNED AND OPERATED BY

THE CITY OF PORTLAND AND THE METROPOLITAN SERVICE DISTRICT

This Agreement dated as of December 19, 1989, ~~amended as of~~ ~~1992~~, is between the City of Portland, Oregon (City); and the Metropolitan Service District (Metro); and the City of Portland Exposition-Recreation Commission (ERC).

~~City, Metro, and ERC agree that the December 19, 1989, Agreement is amended as follows:~~

RECITALS:

~~1. In January 1985 the City, Metro, and Clackamas, Multnomah, and Washington counties established the Committee on Regional Convention, Trade, and Spectator Facilities (CTS Committee) consisting of public and private representatives.~~

~~2. In May 1986 the CTS Committee adopted recommendations regarding regional convention, trade, and spectator facilities.~~

~~3. The CTS recommendations called for Metro to establish a regional commission under ORS Chapter 268 for the planning, development, promotion, operation, and management of the region's convention, trade, and spectator facilities, and for the City and Multnomah County to transfer responsibility for operating their regional convention, trade, and spectator facilities to the regional commission.~~

~~4. In May 1986 the City, by Resolution No. 34110, found that Metro should be responsible for the planning, development, promotion, operation, and management of the region's public convention, trade show, and spectator facilities and resolved that the City work with Metro to develop a plan for the transfer of the ERC's functions and responsibilities to a regional commission to be established by Metro, with the transfer to be completed by the date of opening of the Oregon Convention Center.~~

5. — In November 1986 the voters of the Metropolitan Service District approved the sale of \$65,000,000 in General Obligation bonds to assist in financing construction of the Oregon Convention Center; the 1987 and 1989 sessions of the Oregon Legislature authorized \$15,000,000 from State Economic Development Funds to assist in financing construction; and the City of Portland through a Local Improvement District has secured an additional \$5,000,000 to assist in financing construction.

6. — The Metro Council on October 22, 1987, adopted Metro Ordinance No. 87-225 which created the Metropolitan Exposition Recreation Commission with powers and duties substantially similar to the City Exposition Recreation Commission for the purpose of maintaining and operating metropolitan convention, trade, and spectator facilities.

7. — The Oregon Convention Center is scheduled to open in the fall of 1990.

8. — The City and Metro have been involved in extensive negotiations regarding consolidation of City and Metro convention, trade, spectator, and performing arts facilities.

9. — The negotiating process produced a Memorandum of Understanding which stated proposed principles to govern an initial phase of consolidation; which expressed the intention of the City and Metro to approve a formal consolidation agreement consistent with those principles; and which anticipated that the formal consolidation agreement would be prepared and approved as soon as possible.

10. — The Metro Council and the City Council approved the Memorandum of Understanding.

11. — This Agreement has been prepared to implement the Memorandum of Understanding.

RECITALS:

1. As of December 19, 1989, the City, Metro, and the ERC entered into an Agreement Regarding Consolidation of Regional Convention, Trade, Spectator and Performing Arts Facilities Owned and Operated by the City of Portland and the Metropolitan Service District. The December 19, 1989, Agreement provided generally for the consolidated operation, under Metro's Metropolitan Exposition Recreation Commission (Metro ERC), of the City's Memorial Coliseum (Coliseum), Civic Stadium, and Portland Center for the Performing Arts, together with Metro's Oregon Convention Center. The December 19, 1989, Agreement provided in detail for the transfer of operational control of the City's facilities from the ERC to the Metro ERC.

2. In 1991 and 1992 the City, Trail Blazers Inc. (TBI), and Oregon Arena Corporation (OAC) entered into a cooperative process for the development of a 19,000 seat

Arena and related parking garage and other improvements generally located on the site of the Coliseum and for the consolidated operation of the Arena and Coliseum by OAC.

3. To facilitate implementation of agreements related to construction and operation of the Arena and related facilities, the City must remove the Coliseum from the mix of facilities operated by Metro and the Metro ERC.

4. Metro, the City, and the ERC recognize that they need to amend the Agreement to reflect the changed status of Coliseum operation.

SECTION 1

DEFINITIONS

In this Agreement, the following terms shall have the following meanings unless the context indicates otherwise:

"Agreement" means the Agreement regarding consolidation of regional convention, trade, spectator and performing arts facilities owned and operated by the City of Portland and the Metropolitan Service District entered into by the City of Portland and the Metropolitan Service District on December 19, 1989, as amended.

"Arena" means an approximately 19,000 seat, multi-purpose facility to be constructed by OAC on the Coliseum property.

"City" means the City of Portland, Oregon.

"City Council" means the Council of the City of Portland or the lawful successor thereto.

"Coliseum" means the Portland Memorial Coliseum complex.

"Coliseum Fund" means the fund described in Section 7(J) hereof.

"Commissioner in Charge" means the City Commissioner to whom the Mayor of the City assigns responsibility for the City's relationship with Metro-ERC.

"Convention Center" means the Oregon Convention Center.

"ERC" means the City Exposition-Recreation Commission.

"ERC Facilities" means the Coliseum, PCPA, and the Stadium ~~except that as of July 1, 1993, ERC Facilities means only the PCPA and the Stadium.~~

"Facilities" means the ERC Facilities, ~~Convention Center and other regional convention, trade, or spectator facilities~~ Metro ERC Facilities, and Other Facilities.

"Metro" means the Metropolitan Service District.

"Metro Council" means the Council of the Metropolitan Service District provided for in ORS 268.150 or the lawful successor thereto.

"Metro ERC" means the Metropolitan Exposition-Recreation Commission.

"Metro ERC Facilities" means the Oregon Convention Center and other convention, trade, or spectator Facilities owned by Metro and operated by Metro ERC.

"Metro Executive Officer" means the duly elected Executive Officer provided for in ORS 268.180 or the lawful successor thereto.

~~"OAC" means the Oregon Arena Corp. or any successor in interest.~~

"Other Facilities" means present and future convention, trade, or spectator facilities within the Metro district other than the ERC Facilities and Metro ERC ~~Facilities.~~

"PCPA" means the Portland Center for the Performing Arts complex.

~~"Project Facilities" means the sports Arena, Plaza, Memorial Coliseum, and associated Exhibit Hall, all located generally on the site of the Memorial Coliseum at 1401 North Wheeler, Portland, Oregon.~~

"Stadium" means the Portland Civic Stadium.

SECTION 2

TRANSFER OF OPERATIONS AND MANAGEMENT OF ERC FACILITIES TO THE METRO ERC

- A. Subject to the terms and conditions contained in this Agreement City hereby transfers to Metro and Metro hereby accepts responsibility for operation and management of the ERC Facilities effective as of January 4, 1990. Metro agrees that authority and responsibility for operation and management of the ERC Facilities is hereby delegated to Metro ERC. All duly adopted resolutions of the ERC in force and effect on

January 3, 1990, shall remain in force and effect with regard to the ERC Facilities until superseded or repealed by resolutions duly adopted by the Metro ERC.

City has entered into agreements with OAC under which, effective on July 1, 1993, OAC becomes responsible for operations and management of the Coliseum in conjunction with OAC constructing an Arena and other public improvements on the Coliseum property. As of July 1, 1993, a termination under the provisions of this Agreement shall be deemed to have occurred as to the Coliseum, which as of July 1, 1993, shall no longer be considered an ERC Facility for the purpose of this Agreement, but the terms of this Agreement shall remain in full force and effect for the remaining ERC Facilities. As to the Coliseum, as of July 1, 1993, the provisions of Section 18(D) apply.

- B. The power and authority of Metro ERC has been created by Metro pursuant to the provisions of ORS 268.395 and 268.400. Chapter 6.01 of the Metro Code sets forth the power, authority and duties of Metro ERC. Metro agrees to adopt the amendments to Metro Code Sections 6.01.030, 2.04.035, and 1.01.010 attached hereto as Exhibit "A." The parties agree that the continued existence of Metro ERC with the power, authority, and duties it will possess under Metro Code Chapter 6.01 as amended are an essential element to the City's willingness to transfer operation and management control of the ERC Facilities to Metro. The parties also agree that during the term of this Agreement it may be necessary or desirable for Metro to amend the provisions of Metro Code Chapter 6.01 in order to reflect changes in law or to provide for a response to changed circumstances. Therefore City agrees Metro may amend Chapter 6.01 during the term of this Agreement upon obtaining City's prior approval pursuant to Section 19 of this Agreement.
- C. Except as expressly provided otherwise, the provisions of this Agreement shall be effective as of January 4, 1990, and shall be effective only during the term of this Agreement.

SECTION 3

REAL AND PERSONAL PROPERTY

- A. City and ERC hereby transfer, effective January 4, 1990, to Metro the right to beneficial use of all real property comprising the ERC Facilities. City and ERC shall retain title to and beneficial ownership of all real property comprising ERC Facilities. City and ERC shall not take any action with regard to the real property comprising the ERC Facilities that would interfere with management and operation of the ERC Facilities. Metro shall not take any action with regard to the real property comprising

the ERC Facilities that would affect or encumber the title to the property without the prior written consent of City.

Effective on July 1, 1993, Metro's right to beneficial use of all Coliseum real property is terminated.

- B. City, either directly or through ERC, owns certain rights to use real property subject to restrictions and therefore City and ERC have certain obligations related thereto. In addition to the provisions of Subsection (A) of this Section, the following provisions shall apply to specific real property.

Effective on July 1, 1993, all Coliseum personal property shall be returned to City pursuant to Section 18(D).

1. First Congregational Church

- (a) City and the First Congregational Church are parties to a Ground Lease, Parking Rights Agreement and Agreement to Lease Space dated November 1, 1984, (Church Agreement) providing land for use of PCPA and creating related obligations. City hereby authorizes Metro, effective January 4, 1990, to exercise all of City's rights under the Church Agreement. Metro shall perform all obligations of City under the Church Agreement.
- (b) City shall notify the First Congregational Church that all notices to be given to City under the Church Agreement also shall be given to Metro at the address set out in Section 22 hereof.

2. Al Kader Temple

- (a) City and Al Kader Temple are parties to a Parking Rights Agreement dated August 1, 1984, (Al Kader Agreement) providing parking rights to City and creating related obligations. City hereby authorizes Metro, effective January 4, 1990, to exercise all of City's rights under the Al Kader Agreement. Metro shall perform all obligations of City under the Al Kader Agreement.
- (b) City shall notify Al Kader Temple that all notices to be given to City under the Al Kader Agreement also shall be given to Metro at the address set out in Section 22 hereof.

3. Multnomah Athletic Club

City is the grantee under a deed from the Multnomah Athletic Club as grantor dated December 28, 1966, (MAC Deed) conveying to City Portland Civic Stadium, the underlying land, and certain easements. City hereby authorizes Metro, effective January 4, 1990, to exercise all of City's rights under the MAC Deed except that Metro shall not cease the use of the granted premises or a substantial portion thereof without the prior written consent of City. Metro shall perform all obligations of City under the MAC Deed.

- C. Personal Property. City or ERC if then in existence, otherwise City, shall be the owner of all ERC Facilities-related personal property owned by City or ERC as of January 3, 1990, and also of all capitalized personal property acquired thereafter by Metro ERC using ERC Facilities-related funds. Metro and Metro ERC shall have the right to beneficial use thereof. Metro ERC shall maintain records of all capitalized personal property identifying the Facility at which the property will be used and the source of funding, as appropriate. Nothing in this Section, however, shall prevent Metro ERC from disposing of ERC Facilities-related personal property in the ordinary course of business or from acquiring title to personal property using both ERC and Metro ERC Facilities-related funds that is of common benefit to ERC and Metro ERC Facilities. On disposition of ERC Facilities-related personal property, any compensation received for the property shall be treated as ERC Facilities-related revenues. Metro and Metro ERC shall not dispose of ERC Facilities-related personal property, except in the ordinary course of business, without the prior written consent of City.
- D. Acquisition of Real Property. Prior to acquiring any real property with ERC Facilities-related funds, Metro and Metro ERC shall identify resources and appropriations for the acquisition in the annual or supplemental or amended budget for Metro ERC subject to City approval as provided for in Section 6 of this Agreement. As of January 4, 1990, Metro and Metro ERC hereby are designated, to the extent City and ERC have authority to so designate, to represent City and ERC in any contract or legal proceeding for the acquisition using ERC Facilities-related funds of real property initiated by City or ERC for the benefit of the ERC Facilities. Title to any and all real property and improvements thereto acquired by Metro or Metro ERC with ERC Facilities-related funds shall be taken in the name of City or ERC as appropriate. Any disposition of City- or ERC-owned real property shall be subject to the same requirements as apply to dispositions of other City property.
- E. Audit of Property Records. On or before January 4, 1990, or as soon as practicable thereafter, Metro and Metro ERC shall prepare an initial inventory of all personal and real property possessed by ERC and all records related thereto. The initial inventory shall be the basis for identifying all property for which Metro shall assume

responsibility hereunder. Thereafter, Metro and Metro ERC, as of July 1 each year beginning with July 1, 1990, shall prepare an annual inventory of real property and capitalized personal property owned by City and ERC as to which Metro has the right of beneficial use under this Agreement. The initial inventory prepared by Metro and Metro ERC under this Subsection shall be prepared in a manner acceptable to City and its outside auditors and shall be subject to City's approval, which approval shall not be unreasonably withheld. The subsequent annual inventory shall be conducted in a fashion substantially similar to the manner in which City conducts its own annual inventory of personal property. Copies of all inventories shall be furnished to City.

On or before July 1, 1993, Metro shall provide to the City an inventory of all Coliseum real property and capitalized personal property substantially similar in form to that required to be provided annually to the City. Thereafter, Metro's annual inventory shall not include Coliseum real and personal property.

SECTION 4

PERSONNEL

- A. The City and Metro agree that all employees presently employed by ERC will be transferred to Metro ERC and will become employees of Metro ERC as provided for herein. On transfer, employees shall continue to have all accrued but unused vacation, sick leave, and personal leave time that they have immediately prior to transfer.
- B. Transfer of Represented Employees. On January 4, 1990, ERC shall transfer all of its employees represented by labor unions to Metro ERC. Thereafter, Metro ERC shall recognize the same unions as representative of the transferred employees and shall comply with the collective bargaining agreements in effect prior to transfer.
- C. Transfer of Non-Represented Employees. On January 4, 1990, ERC shall transfer all of its unrepresented employees to Metro ERC.
- D. Employees' Statutory Rights. On and after January 4, 1990, Metro ERC shall assure that all ERC employees as of January 3, 1990, are accorded all the rights to which they are entitled under Oregon laws affecting the transfer of duties from one unit of government to another.
- E. Assignment of Collective Bargaining Agreements. ERC hereby assigns to Metro ERC, and Metro on behalf of Metro ERC, hereby accepts assignment of all collective bargaining agreements to which ERC is a party, effective as of January 4,

1990. Metro ERC shall conduct such impact bargaining with affected unions as is appropriate and necessary under applicable law.

SECTION 5

CONTRACTS AND LICENSES

- A. Assignable ERC Contracts and Licenses. ERC hereby assigns to Metro ERC all contracts, permits, rental agreements, and licenses to which ERC is a party and which are assignable without the consent of other parties, effective as of July 1, 1990. From January 4, 1990, through June 30, 1990, these contracts, permits, rental agreements, and licenses shall be subject to the management and control of Metro ERC to the same extent and subject to the same City procedural requirements as applied to ERC immediately prior to January 4, 1990.
- B. Other ERC Contracts and Licenses. ERC hereby assigns to Metro ERC each contract, permit, rental agreement, and license to which ERC is a party, the assignment to be effective on July 1, 1990, or on obtaining the consent of the other parties thereto, whichever occurs later. From January 4, 1990, through the effective date of the assignment, these contracts, permits, rental agreements, and licenses shall be subject to the management and control of Metro ERC to the same extent and subject to the same City procedural requirements as applied to ERC immediately prior to January 4, 1990.

SECTION 6

BUDGET APPROVAL FOR METRO ERC

- A. For fiscal years commencing on or after July 1, 1990, Metro ERC's annual budget shall be subject to City and Metro approval and shall be included in the overall Metro budget for submission to the Tax Supervision and Conservation Commission. Metro ERC's annual budget shall include a separate budget for each of the ERC Facilities, in the standard format used by Metro for its budget units. City's right to approve or disapprove the Metro ERC budget shall be applicable only to the budgets for the ERC Facilities.
- B. Metro ERC Budget Process. All Metro ERC budgets and supplemental and amended budgets will be part of the Metro budget and will be subject by law to the budget procedures governing Metro. In addition, the Metro ERC budget and supplemental and amended budgets shall be subject to the approval of City to the extent described in Subsection (A) of this Section. In order to carry out successful budget procedures,

with Metro and City both approving the same budget, it will be necessary that there be a high degree of cooperation among Metro, City, and Metro ERC in the budget process. Therefore Metro ERC and Metro shall make every reasonable effort to inform City of and provide the opportunity for City review of and participation in the Metro ERC budget development and review process. Concomitantly, City shall make every reasonable effort to participate in that process. These efforts shall be made with a view to identifying and resolving conflicts early in the budget process in order to avoid surprises or unresolved disputes at the end of the process. In order to achieve this objective, the process for City review of the Metro ERC budget shall be as follows:

1. On or before February 1 of each year, Metro ERC shall provide to the Metro Executive Officer the proposed Metro ERC budget for the next fiscal year. The Metro Executive Officer shall transmit the proposed Metro ERC budget to the Commissioner in Charge and to the City Auditor at the same time the proposed Metro budget is transmitted to the Metro Council.
2. Within forty-five (45) days of receipt of the proposed Metro ERC budget, City shall review and approve or disapprove by resolution adopted by the City Council the proposed Metro ERC budget for the next fiscal year. In the event of disapproval, the City Council shall state the reasons for disapproval, the portions of the proposed budget objected to, and proposed revisions that would meet City's approval. A failure by the City Council to act within forty-five (45) days of receipt shall be deemed an approval of the proposed Metro ERC budget.
3. In the event Metro revises a proposed Metro ERC budget following City approval, then the revised proposed budget shall be provided to the Commissioner in Charge and to the City Auditor for City review according to the same procedure as governed City review of the initial proposed budget. City review period shall be twenty (20) days from receipt of the revised proposed budget.
4. In the event Metro revises a proposed Metro ERC budget following City disapproval, but proposes revisions different than those proposed by City, then the revised proposed budget shall be provided to the Commissioner in Charge and to the City Auditor for City review according to the same procedure as governed City review of the initial proposed budget. City review period shall be twenty (20) days from receipt of the revised proposed budget.
5. Any supplemental budget adopted by Metro for Metro ERC shall be subject to the same procedure as governs City review of a proposed annual Metro ERC budget.

6. Any budget amendment adopted by Metro for Metro ERC, except as part of a supplemental budget, shall be subject to the same procedure as governs City review of a proposed annual Metro ERC budget except that (a) the amendment shall be deemed approved unless the Commissioner in Charge notifies Metro within fifteen (15) days of receipt of the proposed amendment that City intends to review the amendment, and (b) if the Commissioner in Charge does so notify Metro then the amendment shall be deemed approved unless the City Council acts on it within thirty (30) days of receipt.
- C. Financial Reporting Requirements. Metro ERC shall provide to City monthly financial reports showing the current status of revenues and expenditures of Metro ERC for the then current fiscal year. These reports shall be in no less detail than reports Metro ERC regularly prepares for its own and Metro's review and shall provide details separately identifying the financial status of each ERC Facility.
 - D. Metro ERC Management Services. It is Metro ERC's present intention to maintain a central management staff for all the Facilities under its jurisdiction and to allocate the central management costs among the Facilities based on a formula. The initial allocation formula shall be based on an annual determination of the time spent on each Facility by each central management staff employee weighted by the salary of each employee. Any other method for allocating management costs if Metro ERC adopts a different management structure or allocation formula, shall be established as part of the Metro ERC annual budget and shall be subject to City's review and approval, which approval shall not be unreasonably withheld. City review and approval or disapproval shall be part of the budget review process and shall follow the procedures for budget review and approval set forth in Subsection (B) of this Section.

SECTION 7

MONEY TRANSFERS, ACCOUNTING, AND AUDITING

- A. Financial Transactions from January 4, 1990, to June 30, 1990. During the period from January 4, 1990, to June 30, 1990, ERC shall receive all ERC Facilities-related revenues, which shall be treated as ERC revenues for budget purposes; and ERC shall pay all ERC Facilities-related expenses, which shall be treated as ERC expenditures for budget purposes. During this period, all ERC Facilities-related financial transactions shall follow the procedures established therefor by this Subsection:
 1. City shall process all duly authorized requests for payment received from Metro ERC related to ERC Facilities on forms to be provided by City including payroll and accounts payable, for payment from ERC funds in accord with current practice. Metro ERC shall transmit all funds received

from operations of ERC Facilities to City for deposit into ERC funds in accord with current practice.

2. City shall maintain records of all fiscal transactions related to the ERC Facilities and shall transmit periodic reports thereof to Metro and Metro ERC at the same time it transmits its regular periodic reports to responsible City officials.
3. City shall make all required reports to and filings with federal and state agencies including the Internal Revenue Service related to the financial transactions carried out under this Subsection, on behalf of Metro, Metro ERC, City, and ERC. If City legally is unable to do this, it shall prepare sufficient information for Metro and Metro ERC to allow Metro to make the reports and filings in a timely manner.

B. General. On July 1, 1990, except as otherwise provided in this Subsection, all moneys in the following ERC Funds shall be transferred to Metro for use by Metro ERC as provided herein:

Exposition-Recreation -- Civic Stadium Fund
Exposition-Recreation -- Memorial Coliseum Fund
Expo-Recreation -- Performing Arts Fund
Performing Arts Center Construction Fund

Between the dates of July 1, 1990, and completion of the audit described in Subsection (D) of this Section, City shall retain sufficient amounts in the ERC Funds, as agreed to by City and Metro, in order to provide for positive balances in all ERC Funds immediately prior to the adjustments under Subsection (D) of this Section. The amounts retained shall be set so as to avoid any adverse impact on Metro ERC operations. Any dispute between the parties regarding amounts to be retained shall be resolved pursuant to Section 15 of this Agreement.

C. Payables and Receivables. ERC hereby assigns to Metro ERC as of July 1, 1990, all ERC accounts receivable and other receivables existing as of that date or thereafter accruing. Metro ERC shall be responsible for payment of all ERC accounts payable and other obligations existing as of that date or thereafter accruing, except that liabilities covered by insurance or self-insurance shall be treated as provided in Section 11 of this Agreement and City shall be responsible for the payments identified in Section 13 of this Agreement. Metro ERC shall pay, out of ERC Facilities-related funds, all tax and other governmental assessments against real property comprising the ERC Facilities and against any ERC Facilities-related personal property.

- D. Adjustments Following Audit. A portion of City's official independent audit for FY 1989-90 shall cover all ERC operations for the entire period from July 1, 1989, through June 30, 1990. On completion and acceptance by City of the portion of the official City independent audit covering ERC for FY 1989-90, adjustment shall be made in the amounts transferred under Subsection (A) of this Section as indicated by the audit so as to bring the amounts retained in ERC funds under Subsection (B) of this Section to zero. In the event of excess transfers to Metro on July 1, 1990, Metro shall refund the amount of the excess to City or ERC as appropriate. In the event of deficient transfers to Metro, City or ERC as appropriate shall transfer the amount of the deficiency to Metro for use by Metro ERC as provided herein. City shall encourage its auditors to complete the portion of the audit covering ERC as quickly as possible. Any dispute between the parties regarding funds to be transferred shall be resolved pursuant to Section 15 of this Agreement. Metro ERC shall prepare appropriate responses to management findings related to ERC Facilities contained in the audit.
- E. Treatment of Monies from January 4, 1990, through June 30, 1990. Pursuant to Subsection 7(A) of this Section, from January 4, 1990 through June 30, 1990, the collection of ERC Facilities revenues to be deposited into ERC funds and the payment of ERC Facilities expenditures from ERC funds shall be subject to the direction and control of Metro ERC to the same extent and subject to the same City procedural requirements as applied to ERC immediately prior to January 4, 1990. During this period, revenues from and expenditures for the ERC Facilities shall be accounted for in the same way as is in effect immediately prior to January 4, 1990.
- F. Audits and Accounting Beginning July 1, 1990. Beginning with FY 1990-91, Metro ERC, in its accounting, shall account separately for each of the ERC Facilities and shall comply with generally accepted governmental accounting principles and with the requirements of the Government Accounting Standards Board in accounting for ERC Facilities operations and maintenance. Metro ERC annually shall obtain an audit of its operations, with ERC Facilities separately accounted for. The audit may be conducted as a portion of Metro's audit. The audit of Metro ERC's operations, as to the portion covering ERC Facilities, shall be prepared in a manner acceptable to City and its auditors. In the event it is necessary under National Council on Government Accounting Statement 3 for City to include the ERC Facilities operations in City's Consolidated Annual Financial Report, then Metro ERC shall provide its audit to City not later than September 30 of each year.
- G. Restrictions on Use. The beginning balance in the Funds transferred to Metro ERC on July 1, 1990, under Subsection (B) of this Section, as determined by the audit referred to in Subsection (C) of this Section, shall be used only for the benefit of the ERC Facilities. Nothing in this Agreement shall prevent the transfer of resources among the ERC Facilities as provided in any Metro ERC budget. In addition, any net

surplus from operation of the ERC Facilities shall be used only for the benefit of the ERC Facilities. The beginning balance in the Performing Arts Center Construction Fund shall be deposited into a separate account maintained by Metro ERC and shall be used for capital appropriations to complete PCPA construction in a manner consistent with the original architecture and aesthetics of the PCPA and with the pledges giving rise to the Fund. Any revenues received by Metro from Multnomah County in support of the Oregon Convention Center shall be used only for the purposes authorized by the agreement between Metro and Multnomah County. Any net surplus from operation of Metro ERC facilities shall be used only as determined by Metro.

- H. Event and Concession Bank Accounts. ERC maintains in its name bank accounts into which it deposits event- and concession-related revenues, from which it pays event- and concession-related expenses including amounts owing to ERC from the event sponsors and concessionaires, and from which it pays the balance after expenses to the event sponsors and concessionaires. On January 4, 1990, ownership of the accounts shall be transferred to Metro ERC or the accounts may be closed and the account balances transferred to new accounts opened by Metro ERC or some comparable change may be made, as determined by Metro ERC. ERC shall execute whatever documents are necessary to accomplish the change. Following the change, Metro ERC shall make all payments for which the accounts are obligated. On or before January 4, 1990, or as soon as practicable thereafter, Metro and Metro ERC shall conduct an audit of such accounts to determine the condition thereof as of the effective date of transfer.
- I. Unemployment Compensation Payments as to ERC. Notwithstanding any other provision of this Section, City shall pay any unemployment billings due to the State of Oregon that are applicable to ERC employees terminated prior to January 4, 1990. City shall bill ERC for the amount of any payments made by City applicable to the period prior to July 1, 1990, and shall bill Metro ERC for the amount of any payments made by City applicable to the period following June 30, 1990. ERC and Metro ERC shall pay the City billings following their receipt.

J. Coliseum Fund. Effective as of July 1, 1992, Metro has established a new Coliseum Fund separate and distinct from other Metro ERC funds, to be used exclusively to receive all Coliseum revenues and pay all Coliseum disbursements on or after July 1, 1992. Metro shall pay the positive cash balance, if any, determined to have been accumulated in the Coliseum Fund as of July 1, 1993, as directed by City. City has entered into an agreement with OAC providing for a deposit by OAC into the Coliseum Fund of up to \$875,000 if needed to meet Coliseum cash flow requirements from July 1, 1992 until July 1, 1993. In determining whether there is a positive balance in the Coliseum Fund as of July 1, 1993, any payments made by OAC from the \$875,000 obligation shall be treated as liabilities of the fund prior to determining

the cash balance of the fund. If there is an operating loss to the Coliseum Fund between July 1, 1992, and July 1, 1993, beyond the \$875,000 to be provided by OAC, then the additional operating loss shall be covered by transfers to the Coliseum Fund from the Metro ERC funds for ERC facilities. Prior to transferring the Coliseum Fund to the City, Metro may deduct all proper charges against the fund for services rendered and loans advanced to the Coliseum Fund except to the extent any operating deficit exceeds the \$875,000 to be provided by OAC. Except as authorized by this Agreement, monies shall not be transferred from the new Coliseum Fund to other ERC facilities. Actual determination of the balance of the Coliseum Fund as of July 1, 1993, and payment of the amount provided for herein to the City by Metro shall be accomplished in a like manner and subject to the equivalent procedures provided for in Section 7(B), (C), and (D) which governed payment of the ERC funds to Metro in 1990.

The transfer of the balance existing in the Coliseum Fund as of July 1993 to City by Metro is subject to the following additional provisions:

Metro may charge to the Coliseum Fund the costs of insuring or creating self-insurance reserves against unforeseen or known liabilities including, but not limited to, tort claims, Workers' Compensation claims, and reserve accounts for payment of accrued vacation leave for Coliseum employees, and unemployment benefits provided that Metro may only charge the Coliseum Fund for such costs in an amount not to exceed \$300,000 or the positive balance in the Coliseum Fund, whichever is less.

Any charges for such costs in excess of \$300,000 or the positive balance in the Coliseum Fund, whichever is less, shall be charged to the Spectator Facilities Fund provided in no event shall Metro's liability exceed the amounts available in the Spectator Facilities Fund.

SECTION 8

CENTRAL SERVICES AND OTHER CHARGES

- A. Metro Charges To Metro ERC for Council and Executive Officer. Metro may charge Metro ERC for Council and Executive Officer services as provided for herein during the first two (2) fiscal years that this Agreement is in effect (Fiscal Year 1989-90 and 1990-91.) Thereafter, Metro shall no longer charge for Council and Executive Officer services to any Facilities operated by Metro ERC including the Oregon Convention Center. The amount charged by Metro to Metro ERC in FY 1990-1991 for Council and Executive Officer services shall not exceed the current level of charges for Council and Executive Officer services set in the Metro FY 1989-90.

budget for payment of such charges by Metro ERC to Metro for operations of the Oregon Convention Center, which amount is \$23,577. Metro shall not charge Metro ERC for Council and Executive Officer services for ERC Facilities for FY 1989-90 and shall not charge for FY 1990-91 in an amount in excess of the actual general fund charge for City Council services imposed on ERC by City as set out in City's budget for FY 1989-90, which amount is \$14,641. Metro ERC shall not pass on to the ERC Facilities any Metro charge for Metro Council and Executive Officer services in excess of the amounts charged to Metro ERC by Metro for ERC Facilities.

- B. Central Services and Central Services Charges. Nothing contained herein shall preclude Metro from charging Metro ERC for central services provided to Metro ERC by Metro, subject to City review and approval during the annual budget process pursuant to the procedure set out in Section 6(B) of this Agreement. Such charges shall not be increased in any fiscal year over the amount originally budgeted without prior review and approval of City pursuant to the same procedure as the procedure for supplemental budgets pursuant to Section 6(B) of this Agreement. The budget reviews under Section 6(B) of this Agreement shall include review of both the allocation of central services functions between Metro and Metro ERC and the charges therefor.

SECTION 9

METRO EXCISE TAX

- A. General. Under Chapter 332, 1989 Oregon Laws, Metro has the authority to impose excise taxes on persons using facilities, equipment, systems, functions, services, or improvements owned, operated, franchised, or provided by Metro. As a result of this Agreement, Metro will have the authority to impose excise taxes on persons using the ERC Facilities.
- B. Limitation. Metro shall not directly or indirectly use revenues from excise taxes on persons using the ERC Facilities for the purpose of funding Council or Executive Officer services or for any other purpose except as authorized in Subsection (C) below, without the prior written consent of City, which consent shall not be unreasonably withheld.
- C. Use. Metro shall provide all revenues from excise taxes on persons using the ERC Facilities to Metro ERC except that Metro may pledge the revenues for the benefit of Facilities operated by Metro ERC. Metro ERC shall use all revenues so provided to it for the benefit and operation of the Facilities operated by Metro ERC.

SECTION 10

INDEMNIFICATION

A. Tort and Workers' Compensation Claims.

1. City, to the maximum extent permitted by law, shall indemnify Metro, Metro ERC, and their officers, employees, and agents against and defend and hold them harmless from any and all liabilities, actions, damages, claims, demands, judgments, losses, costs, expenses, suits, and actions, including but not limited to attorneys' fees and expenses at trial and on appeal, relating to or resulting from any claim that has been made or is capable of being made as a tort claim as that term is defined by ORS 30.260(8), or a Workers' Compensation claim pursuant to ORS Chapter 656 or similar federal legislation, including any claims brought in any federal court or other federal forum, based on any act or occurrence that takes place prior to July 1, 1990, in connection with or as a result of operation of the ERC Facilities, or that

takes place after June 30, 1993, in connection with or as a result of operation of the Coliseum, the Arena, or any public improvement constructed on the Coliseum property.

2. Metro, to the maximum extent permitted by law, shall indemnify City, ERC, and their officers, employees, and agents against and defend and hold them harmless from any and all liabilities, actions, damages, claims, demands, judgments, losses, costs, expenses, suits, and actions, including but not limited to attorneys' fees and expenses at trial and on appeal, relating to or resulting from any claim that has been made or is capable of being made as a tort claim as that term is defined by ORS 30.260(8), or a Workers' Compensation claim pursuant to ORS Chapter 656 or similar federal legislation, including any claims brought in any federal court or other federal forum, based on any act or occurrence that takes place on or after July 1, 1990, in connection with or as a result of operation of the ERC or Metro-ERC Facilities.
3. The foregoing indemnification, defense, and hold harmless provisions are for the sole and exclusive benefit and protection of Metro, Metro ERC, City, ERC, and their respective officers, employees, and agents, and are not intended, nor shall they be construed, to confer any rights on or liabilities to any person or persons other than Metro, Metro ERC, City, ERC, and their respective officers, employees, and agents.

B. Contract and Quasi-Contract Claims. Metro and Metro ERC, to the maximum extent permitted by law, shall indemnify City and ERC against and defend and hold them harmless from any and all liabilities, actions, damages, claims, demands, judgments, losses, costs, expenses, suits, and actions, including but not limited to attorneys' fees and expenses at trial and on appeal, relating to or resulting from any claim for damages due under any contract, permit, rental agreement, or license or any claim based on any contract or quasi-contractual relationship not defined as a tort claim under ORS 30.260(8), any statutory rights claim, and any claim of rights under a collective bargaining agreement, no matter when the claim may have arisen based on an act, occurrence, event, or transaction in connection with or as a result of operation of the PCPA or Stadium, and such claims based on any act, occurrence, event, or transaction in connection with or as a result of operation of the Coliseum so long as the claim has arisen prior to July 1, 1992. However, this agreement to indemnify and hold harmless is limited to payment of funds generated by the ERC Facilities or transferred to Metro by City and dedicated to the ERC Facilities. Metro shall have no obligation to expend funds on claims related to City Facilities from sources dedicated to Metro Facilities or other Metro functions.

City and ERC, to the maximum extent permitted by law, shall indemnify Metro and Metro ERC against and defend and hold them harmless from any and all liabilities

actions, damages, claims, demands, judgments, losses, costs, expenses, suits, and actions, including but not limited to attorney's fees and expenses of trial and an appeal, related to or resulting from any claim for damages due under any contract, permit rental agreement or license or any claim based on any contract or quasi-contractual relationship not defined as a tort claim under ORS 30.260(8), any statutory rights claim, and any claim of rights under a collective bargaining agreement, in connection with or as a result of operation of the Coliseum, Arena, and any public improvement constructed on the Coliseum property arising on or after July 1, 1992.

This provision is subject to the following:

The Portland Winter Hawks have filed a civil action in Multnomah County Circuit Court alleging claims arising out of ERC's imposition of a user fee on tickets as well as claims that the construction of the Arena will constitute a breach of the agreement for the Winter Hawks' use of the Coliseum. City and Metro agree to cooperate in the defense of this lawsuit notwithstanding the judgment of any court. Metro shall be only obligated to pay, and in that event only out of the Spectator Facilities Fund, any amounts paid to the Winter Hawks, if any, for user fee payments received on or before June 30, 1992. City or the Coliseum Fund shall be the source of payment of any additional amounts found to be owed to the Winter Hawks. Attorney's fees, costs, and interest payments, if any, will be shared proportionately based on the amounts, if any, paid to the Winter Hawks.

SECTION 11

INSURANCE

During the term of this Agreement, Metro shall obtain and maintain insurance providing coverage for risks associated with operation of the ERC Facilities as provided for herein. After July 1, 1993, this Section shall only apply to risks associated with the operation of the PCPA and the Stadium.

- A. Tort and Workers' Compensation Coverages. Metro shall maintain insurance policies or a self-insurance program consistent with Oregon Law to provide full coverage for any and all tort claims as that term is defined in ORS 30.260(8) and any Workers' Compensation claim pursuant to ORS Chapter 656 that may be brought by any person including any claims brought on any federal court or other federal forum based on any act or occurrence that takes place on or after July 1, 1990.

If commercial insurance policies are obtained such policies shall name City, ERC, and their officers, employees, and agents as additional named insureds.

In addition, in order to fully fund the existing coverage maintained by City through its Risk Management program for all tort claims and Workers' Compensation claims arising prior to July 1, 1990, City may charge ERC an additional sum of \$123,000. Such sum shall be deducted from the balance of the ERC funds to be transferred to Metro pursuant to Section 7.

- B. Property Insurance. Effective July 1, 1990, Metro shall purchase and maintain in a company or companies licensed to do business in the State of Oregon, policies in an all risk policy form providing for full replacement value coverage for the ERC Facilities. Such policies shall include boiler and machinery coverage. City and ERC shall be named as additional named insureds for all policies providing coverage for ERC Facilities to the full extent of City's insurable interest.

SECTION 12

PCPA ADVISORY COMMITTEE

The City Commissioner in Charge shall appoint a PCPA Advisory Committee consisting of that number of persons the Commissioner deems appropriate to serve as the official advisory committee to Metro ERC for all PCPA matters. Metro ERC and Metro shall inform the Advisory Committee of and provide the opportunity for Advisory Committee review of and comment on all Metro ERC actions affecting the PCPA. Actions affecting the PCPA shall be deemed to include, without limitation, all Metro ERC budget matters affecting the PCPA, all decisions regarding rates and charges for use of PCPA facilities, all decisions regarding hiring of key PCPA personnel, and all decisions regarding use of monies from the Performing Arts Center Construction Fund and its successor fund under Metro. Metro ERC shall provide reasonable staff assistance from staff assigned to PCPA to assist the Advisory Committee.

SECTION 13

ERC FACILITIES-RELATED BOND AND OTHER CAPITAL PAYMENTS

City presently is obligated to make certain bonded debt and other similar payments related to renovation of Civic Stadium and construction of PCPA. These payments are as follows:

1. Debt service on \$30,130,000 Performing Arts and Civic Stadium Refunding Series 1986 C General Obligation Bonds dated December 1, 1986; and
2. Certain credits allowed by City to Portland General Electric Company under the "Agreement Regarding Portland Hydroelectric Project (Bull Run River) Power Sales Agreement" dated December 26, 1985, related to the use of Hydroelectric Project surplus capital construction funds for payment of PCPA capital construction costs.

City shall continue to make the required bond payments and to allow the required credits until the underlying obligations are satisfied.

SECTION 14

RECORDS

- A. City and ERC Records. If requested by Metro ERC or Metro, and to the extent permitted by law, City or ERC shall provide either the originals or copies of any records in its possession regarding the ERC Facilities. The requesting party shall reimburse the provider for the reasonable costs of providing the records or copies thereof, if billed by the provider. All original records provided under this Subsection shall remain the property of the provider, even though in the possession of Metro ERC or Metro. Metro ERC and Metro shall not destroy or otherwise dispose of the original records without the prior written consent of the provider.
- B. Metro and Metro ERC Records. If requested by ERC or City, and to the extent permitted by law, Metro or Metro ERC shall provide copies of any records in its possession regarding Metro ERC Facilities. The requesting party shall reimburse the provider for the reasonable costs of providing copies of the records, if billed by the provider. City and ERC shall not destroy or otherwise dispose of original records without the prior written consent of Metro.

SECTION 15

DISPUTE RESOLUTION

In the event of a dispute arising under this Agreement among any of the parties, any party may initiate the following dispute resolution process:

1. The initiating party shall give written notice of initiation to each other party then in existence, to the Metro Executive Officer, to the Commissioner in Charge, and to a person mutually agreed to by the Metro Executive Officer and the Commissioner in Charge. The three together shall constitute the Dispute Resolution Committee. The notice shall identify the dispute as to which the dispute resolution process is being initiated.
2. Not later than fifteen (15) days after receipt of the notice of initiation, each party to this Agreement may submit a written statement to the Dispute Resolution Committee stating the party's position on the dispute.
3. Not later than thirty (30) days after notice of initiation, the Dispute Resolution Committee shall decide on a resolution of the dispute and shall notify the parties to this Agreement of the resolution. Decisions of the Dispute Resolution Committee shall be by majority vote.
4. Decisions of the Dispute Resolution Committee shall be final and binding on the parties except for those disputes which are specified as grounds for termination of this Agreement pursuant to Section 18(C) of this Agreement.

SECTION 16

REMEDIES

In the event a party fails to comply with any provision of this Agreement, then any other party shall be entitled to any remedy available at law or in equity, including without limitation the right to specific performance. The termination of this Agreement shall not prevent a party from receiving any additional remedy not inconsistent with the events specified to occur on termination.

SECTION 17

FURTHER CONSOLIDATION

- A. Term of Agreement. The term of this Agreement shall continue unless termination occurs as provided for in Section 18 of this Agreement, or until the parties hereto then in existence enter into an agreement for further consolidation of the ERC Facilities and functions under Metro ERC. The various provisions of this Agreement

shall continue in effect only during the term of this Agreement, except that the provisions governing termination and remedies shall survive termination.

- B. Consolidation. It is the intention of City and Metro to pursue further consolidation of the region's convention, trade, and spectator Facilities following execution of this Agreement. The parties intend that this further consolidation will take two forms.

First, the parties to this Agreement intend to provide for a more complete consolidation of the ERC Facilities under Metro ERC. This further consolidation of the ERC Facilities under Metro ERC will require further agreement by the parties. The parties agree to make a good faith effort to resolve all outstanding issues with the express intent to provide for further consolidation as soon after January 4, 1992, as possible. To meet this goal, the parties agree to commence negotiations within two weeks of the effective date of the amendments to the December 19, 1989 Agreement to establish the terms for transfer to Metro of full control of the PCPA and Stadium as soon as possible, and to successfully conclude these negotiations by July 1, 1993.

if negotiations not successful, will exercise such a such a
Second, the parties to this Agreement agree that further consolidation may involve the consolidation under Metro ERC of Facilities operated by other local governments within the region including, but not limited to, the Multnomah County Exposition Center. This further consolidation also may include the construction of additional convention, trade, spectator, and performing arts facilities by Metro through Metro ERC or through other means and their consolidation under Metro ERC's operation, or the construction of new facilities by other local governments in the region and their consolidation under Metro ERC's operation. Metro and Metro ERC shall have the lead role in such further consolidation efforts. City agrees to review and consider in good faith the approval of any Metro ERC budget item, Metro Code amendment, or amendment to this Agreement that is requested by Metro to assist Metro and Metro ERC in achieving such further consolidation, which approval shall not be unreasonably withheld.

agreed to sign the agreement

SECTION 18

TERMINATION

- A. Termination by Mutual Agreement. The parties hereto who remain in existence may terminate this Agreement at any time by mutual written agreement. The procedure on termination by mutual agreement shall be determined by the termination agreement.
- B. Unilateral Termination. In the absence of a signed written agreement among the parties hereto then in existence for further consolidation of the ERC Facilities and functions under Metro ERC, then City or Metro on or after July 1, 1991, may by

duly adopted resolution of its governing body initiate termination of this Agreement and thereafter give notice of termination. The termination shall be effective on the first July 1 that is at least six (6) months after the date of the notice. On the effective date of the termination, the events described in Subsection (1) through (11) of Subsection (D) of this Section shall occur.

C. Termination for Cause.

1. This Agreement shall terminate if Metro shall amend Chapter 6.01 of the Metro Code without City's prior approval; or if Metro shall adopt a Metro ERC annual or supplemental or amended budget or increase a central service charge to Metro ERC chargeable to ERC Facilities during a fiscal year above the amount budgeted without City's prior approval; or if Metro shall violate the provisions of Sections 4(B), 7(F) or (G), or 8 of this Agreement without City's prior approval, all subject to the following procedures:
 - a. City in its discretion shall elect to give Metro written notice, in a form approved by the City Council, specifying the action Metro has taken that triggers proceedings under this Subsection. The notice may specify a date on which termination shall occur, provided that the date specified must be no sooner than thirty (30) days from the date of receipt of the notice by Metro.
 - b. Following receipt of the notice from City, Metro shall have thirty (30) days within which to rescind the action that City specified. In the absence of rescission, this Agreement shall terminate either thirty (30) days after receipt of the notice by Metro or on the later date specified in the notice, whichever is later.

2. This Agreement shall terminate if City shall unreasonably withhold its approval of any action requested by Metro under Section 17(B) of this Agreement to assist Metro and Metro ERC in achieving consolidation of facilities operated by other governments within the region under Metro ERC's management and control, subject to the following procedures:
 - a. Metro in its discretion shall elect to give City written notice, in a form approved by the Metro Executive Officer and the Metro Council, specifying the action requested as to which City unreasonably has withheld its approval, triggering proceedings under this Subsection.
 - b. Following receipt of the notice from Metro, City shall have thirty (30) days within which to approve the action as to which Metro has requested approval. In the absence of approval, this Agreement shall

terminate either ninety (90) days after receipt of the notice by City or on the July 1 next following, whichever is later.

D. In the event of termination, subject to compliance with any statutory requirements, the following shall occur:

1. All revenues from and expenditures for ERC Facilities shall be treated as ERC revenues and expenditures;
2. All Metro ERC accounts receivable and other receivables related to ERC Facilities existing as of that date or thereafter accruing shall be assigned to ERC, and ERC shall be responsible for payment of all Metro ERC accounts payable and other obligations existing as of that date or thereafter related to the ERC Facilities, except for liabilities covered by insurance or self-insurance based on actions or failures to act prior to termination;
3. All monies in Metro ERC funds related to ERC Facilities shall become the property of ERC and shall be transferred to ERC;
4. All event and concession bank accounts related to the ERC Facilities shall be transferred to ERC following which ERC shall make all payments for which the accounts are obligated;
5. All records related to ERC Facilities shall become the property of ERC and shall be transferred to ERC;
6. All property authorizations under Section 3 of this Agreement shall be rescinded and all Metro ERC obligations thereunder shall terminate;
7. All personnel whose positions are included in the budgets for ERC Facilities shall become employees of ERC;
8. All personnel holding central management staff positions transferred by ERC to Metro ERC hereunder shall become employees of ERC;
9. All contracts, permits, rental agreements, and licenses or portions thereof related to the ERC Facilities shall be assigned to ERC;
10. All other charges, allocations, and transfers as are necessary or desirable to the proper operation of ERC Facilities and other Facilities operated by Metro ERC shall be carried out in good faith by the parties hereto; and

11. Any dispute between the parties regarding carrying out the requirements of Subsections (D)(1) through (D)(10) of this Section shall be resolved pursuant to Section 15 of this Agreement.

SECTION 19

AUTHORITY TO MAKE DECISIONS

- A. This Agreement provides for various approvals, waivers, executions of further documents implementing this Agreement, or other decisions or actions to be made or taken on behalf of City and Metro hereunder. Except as provided in Section 6(B) of this Agreement and in Subsection (B) of this Section, such approvals, waivers, executions, or other decisions or actions shall be deemed made or taken if in writing and executed by the Commissioner in Charge, if on behalf of City, and by the Metro Executive Officer, if on behalf of Metro. Any amendments to this Agreement and any further consolidation agreement must be approved by the City Council, the Metro Council, and ERC if then in existence.
- B. The process for City approval of Metro amendments to Metro Code Chapter 6.01 shall be as follows:
 1. Metro shall provide to the Commissioner in Charge and to the City Auditor the proposed Code amendment.
 2. Within thirty (30) days from receipt of the proposed Code amendment the City Council shall review and approve or disapprove it by resolution. In the event of disapproval, the City Council shall state the reasons for disapproval and proposed revisions, if any. A failure by the City Council to act within the thirty (30) days period shall be deemed an approval.
 3. In the event Metro revises a proposed amendment, following City approval, then the proposed revision shall be provided to the Commissioner in Charge and to the City Auditor for City review according to the same procedure as governed City review of the initial proposal.
 4. In the event Metro revises a proposed amendment, following City disapproval, but proposes revisions different than those proposed by City, then the proposed revisions shall be provided to the Commissioner in Charge and to the City Auditor for City review according to the same procedure as governed City review of the initial proposal.

SECTION 20

ASSIGNMENT AND TRANSFER

This Agreement shall not be assignable or transferable by either party or by operation of law except with the written consent of the other party. A consenting party may impose any conditions on the consent that are reasonable under the circumstances. The assignee or transferee shall be bound by all the provisions of this Agreement. The assignor or transferor shall not be relieved of any obligations under this Agreement unless the written consent of the other party expressly so provides.

SECTION 21

ATTORNEYS' FEES

In the event of a suit or action to interpret or enforce the provisions of this Agreement, the prevailing party shall be entitled to recover from the other party such sum as the court may adjudge reasonable as attorneys' fees at trial and on appeal of the suit or action, in addition to all others sums provided by law.

SECTION 22

NOTICE

Any notice provided for hereunder shall be deemed sufficient if deposited in the United States mail, certified mail, return receipt requested, postage prepaid, addressed either to the following address or to such other address or addresses as the recipient shall have notified the sender of by notice as provided herein:

Metro: Executive Officer
 Metropolitan Service District
 2000 S. W. First Avenue
 Portland, OR 97201-5398

With a copy to:
Clerk of the Council
Metropolitan Service District
2000 S.W. First Avenue
Portland, OR 97201-5398

City: City Auditor
City of Portland
1220 S. W. Fifth Avenue
Portland, OR 97204

With a copy to:
Commissioner in Charge of ERC
City of Portland
1220 S.W. Fifth Avenue
Portland, Oregon 97204

Notice hereunder shall be deemed received three (3) days after mailing as provided in this Section or on actual delivery to the addressee, whichever occurs first.

SECTION 23

EXECUTION OF FURTHER DOCUMENTS

In order to complete implementation of the provisions of this Agreement, it may be necessary for Metro, Metro ERC, City, and ERC to execute further documents enabling implementation. Each of them shall execute such further documents and take such other steps as are reasonably necessary or appropriate to implementing the provisions hereof.

SECTION 24

WAIVERS

The waiver of any provision of this Agreement, whether a waiver as to a particular application of the provision or as to all applications of the provision, shall be binding on the party making the waiver only if in writing and executed by the party. Unless otherwise expressly provided in the written waiver, the waiver by a party of performance of a provision as to a particular application shall not be a waiver of nor prejudice the party's right to require performance of the provision as to other applications or of any other provision.

SECTION 25

ENTIRE AGREEMENT

This Agreement is the entire agreement between the parties. This Agreement may not be modified except by a written amendment dated and approved and signed by all the parties hereto then in existence. No party shall be bound by any oral or written statement or course of conduct of any officer, employee, or agent of the party purporting to modify this Agreement.

APPROVED AS TO FORM:

City Attorney

CITY OF PORTLAND

By: _____
J. E. Bud Clark, Mayor

By: _____
Mike Lindberg, Commissioner
of Public Affairs

By: _____
Barbara Clark, Auditor

APPROVED AS TO FORM:

Metro General Counsel

METROPOLITAN SERVICE DISTRICT

By: _____
Rena Cusma,
Executive Officer

APPROVED AS TO FORM:

**EXPOSITION-RECREATION
COMMISSION**

By: _____
_____, Chairperson

ITEMS TO BE INCLUDED IN CONSOLIDATION AGREEMENT
November 4, 1992

The following provisions are contained in Coliseum Operating or Development Agreements and OAC wants them reflected in the amended Consolidation Agreement. MERC staff are aware of many/most of them and are already implementing some of the provisions.

1. MERC must provide OAC a list of all outstanding contracts by December 1. OAC will agree to assume all contracts that are given to it by that date.
2. An inventory of all personal property, equipment, fixtures located at Coliseum and necessary for its operation must be completed by December 1.
3. MERC must maintain Coliseum at normal/budgeted levels and not defer necessary maintenance and repair.
4. New agreements entered into by MERC must be subject to City/OAC approval and must have language that deals with construction interruptions and necessary seismic improvements.
5. Consumables at Coliseum remain at Coliseum on OAC assumption.
6. MERC to work with OAC , contractors and customers to minimize disruption and related financial impacts.
7. MERC must cooperate with OAC during transition period, including providing space for OAC employees.
8. MERC to continue to aggressively market and book Coliseum during transition.
9. MERC cooperate with City to accommodate seismic improvements.