

**BEFORE THE METRO COUNCIL**

**FOR THE PURPOSE OF ADOPTING AND  
IMPLEMENTING THE FY 1994-99  
WATER RESOURCES WORK PLAN**

**) RESOLUTION NO. 93-1873-A  
)  
) Introduced by Councilor Susan McLain and  
) Councilor Ed Washington**

**WHEREAS, The 1992 Metro Charter requires adoption of a Regional Framework Plan by December 31, 1997, which includes components addressing water source and storage, planning responsibilities mandated by state law, and other growth management and land use planning matters which the Council determines are of metropolitan concern; and**

**WHEREAS, The Regional Wastewater Management Plan is adopted under Section 3.02.002 of the Metro Code which provides for regional coordination and staging for construction of wastewater treatment facilities; and**

**WHEREAS, The Regional Stormwater Management Plan is adopted pursuant to ORS 268.310 (3) and 268.390 (1) which identifies water quality and stormwater management as regionally significant issues and identifies policy objectives to minimize soil erosion, control stormwater run-off to minimize streambank erosion, and protect and enhance the capacity of urban streams to provide habitat for fish and other aquatic organisms; and**

**WHEREAS, The Regional Urban Growth Goals and Objectives (RUGGOs) are adopted under Ordinance No. 91-418B and Objective 7 of the RUGGOs addresses water quality and water quantity issues for planning and management of water resources; and**

**WHEREAS, The Greenspaces Master Plan adopted by the Metro Council in July 1992 identifies the need to protect and enhance waterways and floodplains as one strategy to protect and manage greenspaces. It identifies watershed planning and coordinated stormwater management as important ways to protect valuable fish and wildlife habitat.**

**WHEREAS, The FY 1990-93 Water Resources Work Plan has expired and the Planning Committee requested a new water resources work plan; and**

WHEREAS, The draft FY 1994-99 Water Resources Work Plan was developed and presented to the Planning Committee on September 28, 1993, and the committee discussed the work plan and recommended it be presented to the Water Resources Policy Advisory Committee (WRPAC), the Metro Technical Advisory Committee (MTAC) and the Metro Policy Advisory Committee (MPAC) for comment and review; and

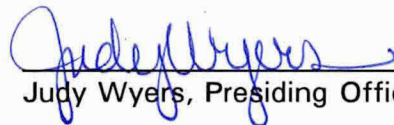
WHEREAS, The draft FY 1994-99 Water Resources Work Plan was presented to WRPAC on November 19, 1993, to MTAC on November 23, 1993, and to MPAC on December 8, 1993; and

WHEREAS, relevant committee comments and suggestions have been incorporated in the final FY 1994-99 Water Resources Work Plan; now, therefore,

BE IT RESOLVED,

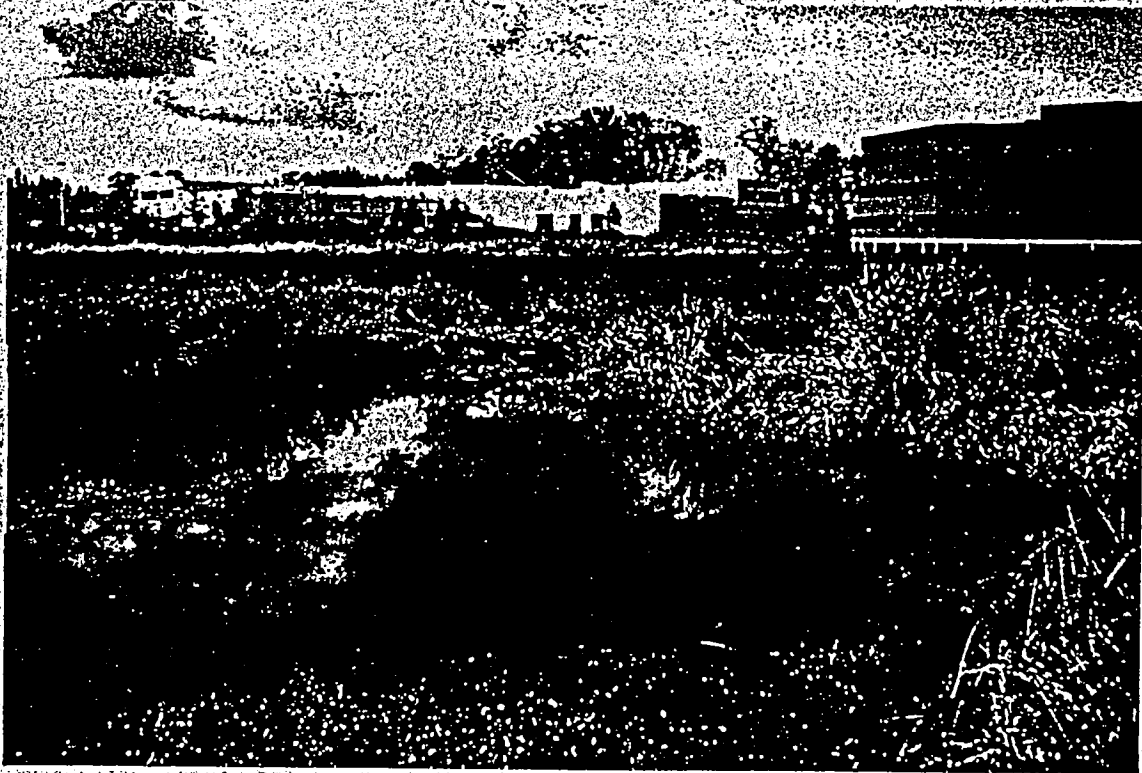
1. The FY 1994-99 Water Resources Work Plan, included in this resolution as Exhibit A-1, is hereby adopted as Metro's FY 1994-99 Water Resources Work Plan.
2. The 1990 Water Resources Work Plan is hereby replaced by the FY 1994-99 Water Resources Work Plan.

ADOPTED by the Metro Council this 23rd day of December, 1993.

  
Judy Wyers, Presiding Officer

# **WATER RESOURCES PROGRAM WORK PLAN**

**FY 1994-99**



**July 1993**



**Metro  
Planning Department  
600 N.E. Grand Avenue  
Portland, Oregon 97232-2736**

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***Photo on Front Cover: Creekside Corporate Park on Fanno Creek in Beaverton.***

## Executive Summary

### Introduction and Background

Clean water and adequate water supply are essential to the Metro Region's livability and future growth. Tremendous advances have been made in the last 20 years to improve regional water quality and to ensure future clean drinking water supplies. Future growth and development, however, will place increasing demands on the region's water supplies and impact water quality.

Metro's new regional growth management planning mandate and existing policies enable it to provide leadership in protecting and enhancing water resources. This five-year work plan examines Metro's existing water resource policies, identifies water resource issues of regional concern and describes a range of program options to address Metro's charter mandates regarding water resources.

### Issues

The 1992 Metro Charter identifies water supply and storage as work elements to be included in the Regional Framework Plan (RFP). In addition, the RFP can address state-mandated responsibilities and other issues of regional concern. Metro's 1992 *Areawide Water Quality Report* identified the following water quality issues of regional concern: stormwater management, water quality limited streams, wetlands and water quality and groundwater.

### Metro Policies

There are several existing Metro policy documents that address water resources which provide guidance in developing this work plan. Metro's 1988 *Regional Wastewater Management Plan* and 1982 *Stormwater Management Plan* identify Metro's regional planning role to ensure adequate regional wastewater management capacity and identify regional watersheds and the critical issues to address soil erosion and stream management.

The 1991 *Regional Urban Growth Goals and Objectives* (RUGGOs) identify both water quality and water quantity issues of regional significance in Metro's growth management planning. In addition, the *Greenspaces Master Plan* uses watersheds as its ecological planning unit and discusses the linkage between managing stormwater and protecting riparian resources. Finally, the *Metro Charter* identified water supply and storage as components of the RFP as well as other issues of regional concern. This work plan identifies water quality issues of regional concern and provides work program activities to address these issues.

### Accomplishments of 1990 Water Resources Work Plan

This plan builds on the many accomplishments from the 1990 Water Resources Work Plan. These include adoption of Metro's regional phosphate detergent ban in 1990, adoption of the 1990 and 1991 *Annual Wastewater Management Plan* updates, production of two well-received publications, completion of two Oregon Department of Environmental Quality (DEQ) water quality grants, coordination of the Water Resources Policy Advisory Committee (WRPAC), development of new Regional Land Information System (RLIS) data layers and coordination of several regional conferences and workshops.

### FY 1994-99 Work Plan Components

This work plan proposes work elements in the two main subject areas of water supply and water quality. The water quantity component includes adoption of the water supply work element for the RFP and technical assistance to the Phase II Regional Water Supply Planning effort. A water conservation work element is also proposed to complement on-going water supply planning.

The water quality elements include water quality modeling for the RFP, establishment of a watershed program including water quality modeling, technical assistance grants to test new best management practices and stream restoration techniques, and policy development of planning tools that can be used by local governments to protect water resources as growth occurs. Watershed planning is the overall umbrella which ties together the modeling, technical assistance, grant projects and policy development.

### Timeline and Budget

The work program elements to be implemented in the short-term include water quality modeling and technical assistance for the RFP, initiation of RFP work elements and initiation of the watershed program. Long-term projects include water quality modeling for selected watersheds, testing innovative best management practices and stream restoration techniques, and development of policy and land use planning tools that can be used by local governments and special districts.

Funding will be sought from both federal appropriations and grants from regional federal sources such as the Environmental Protection Agency (EPA). Water quality modeling and establishment of the watershed program are appropriate for federal appropriations, while EPA grant funds are appropriate for testing best management practices or technical assistance grants and policy development. This work plan will be implemented with existing staff in the Planning Department's Growth Management Division and Data Resource Center.

### Adoption of Work Plan

The draft FY 1994-99 Water Resources Work Plan will be presented to the Metro Council Planning Committee in September 1993. It will then be presented to WRPAC and Metro Policy Advisory Committee (MPAC) for technical and policy comments. Following any revisions, the final work plan will be finalized with the Metro Council Planning Committee for recommendation for adoption by the Metro Council.

## I. Introduction and Background

Clean water and adequate water supply are essential to the region's livability and future growth. Adequate water resources for drinking, recreation and habitat for fish and wildlife are essential to the commerce, agriculture and economic viability of the region. The interconnected web of rivers and streams which have played such an important role in this region's history and economic success, are also vital to maintain our prosperity and quality of life.

### Growth Impacts on Water Resources

#### Water Quality

Tremendous advances have been made in the last 50 years to improve water quality in the region's rivers and streams. Most notably, the Willamette River flowing through downtown Portland now supports a thriving spring chinook migration and recreational activities. This is in sharp contrast to earlier in the century, when the Willamette River was a polluted dying river.

In addition, millions of dollars have been spent in the last several years to improve wastewater treatment on the Tualatin River. New EPA mandated technologies have reduced industrial discharges into local rivers and streams regionwide. These clean-up efforts reflect nationwide progress to improve water quality. Many of the national water quality goals, however, have not been achieved. The persistent problems of diffuse nonpoint source pollution still exist and remain a challenge in the Portland metropolitan region.

However, the condition of our local streams - tributaries of the Willamette, Columbia, Clackamas, Sandy and Tualatin Rivers - has suffered from the region's dramatic growth. Increasing urbanization and poor land use practices threaten the water quality of surface and groundwater in the metropolitan area. Water quality is diminished, groundwater is contaminated, water supplies are threatened, water recreation is restricted in certain areas, and fish and wildlife habitat has been degraded.

Construction runoff and agricultural practices have caused large sediment loads to be carried into streams. In urbanized areas rainfall runs off impervious (paved) surfaces without being absorbed into the soil. This urban stormwater runoff carries oil, grease and other pollutants into our waterways. Increases in runoff volume and intensity after development cause erosion problems, flooding and loss of vegetation that anchors soil and slows flood waters. All these impacts reduce the quality of the aquatic environment and its ability to support diverse aquatic plant and animal life.

Two water bodies, the Tualatin River and Columbia Slough, have been designated "water quality limited," meaning the water quality is below mandated standards. Another stream, Johnson Creek, is under consideration for this designation. Each of these water bodies cross multiple jurisdictions and include areas managed by many agencies. A comprehensive watershed management approach is needed to assess, analyze and remediate degradation of the region's surface and groundwater quality.

## Water Supply

The Portland metropolitan region has high quality drinking water from numerous surface water and groundwater sources. Future development and expected population increases, however, will place new demands on these resources. The region's water suppliers forecast mid-range average annual demand forecasts predict regionwide increases of 41 percent between 1990 and 2050. Comprehensive regional water supply planning is necessary to meet these future demands.

The 1992 summer drought caused residents to realize that climatic drought cycles are a reality in this region and water conservation must be integrated into how we use water. Potential water shortages due to droughts, increased demands on water consumption due to population increases, and increasing state emphasis on instream water rights all highlight the crucial need for proactive regional planning to meet future demands.

Inappropriate land use activities also impact water supply. Examples of industrial contamination of groundwater used for drinking water are found in the Portland metropolitan region. Land use planning and growth management, therefore, have a large role to play in ensuring adequate future water supplies.

## New Strategies Needed to Address Water Resource Issues

This new work plan identifies future regional water resource policy and planning activities within the framework of the new Metro Charter. It is a timely response to a number of issues:

### *Population Growth*

Increasing population, development and increasing impervious surfaces in the region make it increasingly important to balance desirable urban growth and protection of the natural environment. Population increases will also place additional demands on existing water supplies.

### *Public Awareness*

Growing public awareness of water resource issues, coupled with an interest in becoming involved in protecting and managing water resources, has motivated citizens to take action on different water resource issues. This is exemplified by vigorous citizen involvement and leadership in protecting and enhancing Johnson, Fairview and Fanno Creeks, Columbia Slough, Tualatin River and other streams in the region.

### *Regulatory Mandates*

Federal and state mandates, and constituent demands for sound resource management, will directly influence the need for siting and performance of future wastewater and stormwater facilities, allocation of new water rights, water conservation plans and identification of drinking water sources.

### *Comprehensive Watershed Planning*

Growing acceptance of the importance of comprehensive watershed planning in balancing the competing uses for water resources and protection of natural resources will result in formation of watershed councils.

Wise use and management of water resources is of paramount concern as our population expands. Water resources do not stay neatly within political or jurisdictional boundaries. Coordinated efforts among a coalition of agencies, organizations, industry and citizen groups will be required to address issues on a watershed-wide basis.

Watershed planning is an essential tool to comprehensively address water resource issues. This process includes the following elements:

- identification of the watershed unit
- involvement all relevant political jurisdictions and interest groups
- identification of significant problems and opportunities
- development of goals and objectives
- identification of an action plan to achieve watershed management objectives
- implementation of the action plan

## II. Metro's Role in Regional Water Resources Policy and Planning

### Introduction

Metro has an important and unique role to play in promoting decision-making and practices that protect the beneficial uses of water resources throughout the region. As the federally-designated "208" areawide water quality planning agency and with its new Charter mandates, Metro will play an important role in ensuring water resources are protected and enhanced as growth occurs.

### Background

Metro's involvement in regional water resource planning dates back to the 1960's and 1970's when Metro's predecessor the Columbia Regional Area Government (CRAG) compiled water and sewer infrastructure needs, and met federal reporting mandates. In 1974, CRAG was designated the region's Areawide Water Quality Planning Agency. These efforts culminated in Metro Council adoption of the 1980 Regional Wastewater Management Plan and the 1982 Regional Stormwater Plan.

In 1989, the Metro Council made a renewed commitment to water resource issues by hiring two staff members to revitalize the program. A *Water Quality Issues Report* was produced in July 1989, which evaluated regional water resource needs and identified a potential role for Metro. The following year, in 1990, the Metro Council Planning Committee approved the *Water Resources Work Plan* which emphasized stormwater management, water quality modeling and participation on other regional water initiatives.

### Metro Policies

There are several Metro policies that define its water quality and water quantity planning responsibilities. These policies are the foundation of this work plan and provide guidance for future policy and program development. Metro's water resource-related policies are:

A. **Metro Charter (1992).** The Metro Charter defines the components of the RFP. The following elements of the RFP relate to water resources:

- "water sources and storage"

The Metro Charter specifically identifies regional water sources and storage planning as an element of the RFP and an important planning function at Metro. The Metro Council therefore has the authority to adopt a regional water sources and storage plan.

- "planning responsibilities mandated by state law"

Metro has water resource planning authority mandated by federal law. Metro is the federally-designated areawide "208" water quality planning agency for the Portland metropolitan region. As part of this federal mandate, Metro completes an annual update of the Metro Regional Wastewater Management Plan for recertification by EPA. The annual update is submitted to the DEQ and the EPA. This federally-mandated planning role is addressed in the RFP component identified above.

"...other growth management and land use planning matters which the council, with consultation and advice of the MPAC, determines are of metropolitan concern and will benefit from regional planning."

In addition to the two water resource components listed above, there are several other water quality issues of regional concern. The **1992 Areawide Water Quality Report** identified the following water quality issues of regional concern:

- stormwater management
- water quality limited streams
- wetlands and water quality
- groundwater

**B. Regional Urban Growth Goals and Objectives (1991).** Objective 7 of the RUGGOs addresses water resources. It identifies both water quality and water quantity issues for planning and management of water resources. It calls for development of a long-term strategy coordinated by all relevant jurisdictions to comply with state and federal requirements for drinking water, to sustain beneficial water uses and to accommodate growth.

"Planning activities:

Planning programs for water resources management shall be evaluated to determine the ability of current efforts to accomplish the following, and recommendations for changes in these programs will be made if they are found to be inadequate:

-Identify the future resource needs and carrying capacities of the region for municipal and industrial water supply, irrigation, fisheries, recreation, wildlife, environmental standards and aesthetic amenities;

-Monitor water quality and quantity trends vis-a-vis beneficial use standards adopted by federal, state, regional and local governments for specific water resources important to the region;

-Evaluate the cost-effectiveness of alternative water resource management scenarios and the use of conservation for both cost containment and resource management;

-Preserve, create and enhance natural water features for use as elements in nonstructural approaches to managing stormwater and water quality."

Objective 7: Water Resources  
Metro Regional Urban Growth Goals and  
Objectives

- C. Greenspaces Master Plan (1992).** The protection and enhancement of open space and natural areas is directly linked with water resources planning and management. The Greenspaces Master Plan identifies the need to protect and enhance waterways and floodplains as one strategy to protect and manage greenspaces. The plan recognizes the detrimental impact of uncontrolled stormwater run-off on floodplains and associated habitat. It identifies watershed planning and coordinated stormwater management as important ways to promote protection of habitat valuable for fish and wildlife as well as recreation. The master plan uses watersheds as the basis for ecological planning and protection of resources. The policies and programs described in this work plan support and complement the Greenspaces Program.
- D. Regional Stormwater Management Plan (1982).** The Regional Stormwater Management Plan designates water quality and stormwater management as a regionally significant activity. It identifies eight major drainage basins in the Metro region. Its policies objectives are to:
- minimize soil erosion
  - minimize streambank and channel erosion by controlling stormwater runoff
  - manage the 100-year floodplain and floodway to protect their natural function and minimize water quality degradation
  - protect and enhance capacity of urban streams to provide habitat for fish and other aquatic organisms

The policy issues identified over 10 years ago in this plan are still relevant today.

- E. Regional Wastewater Management Plan (1988).** The Regional Wastewater Management Plan provides for regional coordination and staging for construction of wastewater treatment facilities. Wastewater treatment facilities must also service specific geographic areas and district boundaries must be delineated in treatment and distribution maps. The plan must be recertified each year by the EPA.

### **III. Goals of the Water Resources Program**

The goals of the water resources program are:

*A. To ensure sufficient quantity of surface water and groundwater available to the region.*

#### **Actions**

- Adopt and implement charter mandated water resource elements for the RFP. These elements will accommodate growth and sustain the beneficial uses of water resources.

*B. To protect and enhance water quality through coordinated growth management planning emphasizing integrated watershed management, technical assistance and public education.*

#### **Actions**

1. Adopt and implement charter mandated water quality elements for the RFP.
2. Provide technical assistance and information regarding stormwater management, stream restoration, and wetland and groundwater protection to ensure regional livability.
3. Provide regional water resource computer modeling technical assistance and mapping capabilities to growth management programs and watershed planning activities.
4. Provide coordination, technical assistance and training to promote watershed planning activities throughout the region. Facilitate coordination between watershed councils.
5. Promote regional testing, implementation and dissemination of information on best management practices to control and minimize soil erosion, stream degradation and stormwater impacts.

#### **IV. Purpose of the FY 1994-99 Water Resources Work Plan**

##### **Purpose**

On April 27, 1993, the Metro Council Planning Committee requested a revised water resources work plan. The purpose of this work plan is to:

- Review and evaluate the accomplishments of the 1990 Water Resources Work Plan.
- Define the tasks for the new FY 1994-99 Work Plan for Metro Council adoption.
- Guide staff in allocation of resources.
- Identify a strategy for gaining regional endorsement for this work plan.

##### **Approach**

The 1993 Water Resources Work Plan emphasizes:

- Adoption of charter-mandated water resource elements in the RFP.
- Coordinated growth management planning that protects and enhances water resources to ensure livability in the region.
- Integrated watershed planning to protect the full-range of beneficial uses.
- Coordination of federally-mandated regional wastewater planning functions.
- Technical assistance and information to support growth management planning programs.

##### **Implementation**

The following key elements are the basis for defining how the FY 1994-99 Water Resources Work Plan will be implemented:

***Regional Cooperation.*** Local governments, special districts, and state and federal agencies work together to protect and enhance water resources through coordinated pro-active planning, wise management and citizen involvement.

***Proactive Growth Management Planning.*** Minimize impacts to water resources, resulting in improved water quality and waterways that are fishable and swimmable.

***Coordinated Watershed Planning.*** Active watershed councils working in cooperation with local jurisdictions to plan and manage water resources.

***Citizen Involvement.*** Citizens actively involved as stewards of local streams, wetlands and rivers to monitor, protect and enhance the natural aquatic and riparian ecosystem in each watershed in the region.

***Policy, Ordinances, and Standards.*** Development of regionally consistent water resource policy, ordinances and standards.

***Natural Water Features.*** Protect, enhance and create natural water features as elements of nonstructural approaches to managing stormwater, protecting and enhancing streams and riparian areas, protecting water supply and water quality.

#### **Coordination with Other Metro Planning Policies**

The 1993 Water Resources Work Plan builds upon the water resource policies in the RUGGOs, Metro Charter, Greenspaces Master Plan, and Metro's Regional Wastewater and Stormwater Management Plans. These policies identify the water quality and water supply issues of regional concern that Metro should address in its planning functions. In addition, the Charter allows the Metro Council, in consultation with WRPAC and the MPAC, to identify additional issues of regional concern that can be addressed through regional planning.

## **V. Progress Report on 1990 Water Resources Work Plan**

### **A. Introduction**

The 1990 Water Resources Work Plan was approved by the Metro Council Planning Committee on July 12, 1990. The work plan included the following major work elements:

***Regional "208" Wastewater Management Plan:*** Prepare annual amendments to the plan, prepare Metro ordinance approving amendments and seek recertification from EPA.

***Stormwater Management:*** Update Stormwater Management Plan and seek Council approval.

***Water Quality Limited Streams:*** Produce RLIS maps of water quality conditions and participate in water quality monitoring and modeling activities in the Tualatin River watershed and Columbia Slough.

***Water Supply:*** Monitor regional programs and participate in regional and state planning activities.

***Urban Growth Management:*** Integrate water resource policies with urban growth policy development.

### **Program Staff**

The 1990 Work Plan represented a renewed interest and commitment to regional water resource issues by the Metro Council. The ***Water Quality Issues Report*** was produced in July 1989 and two water resource staff members were hired in 1989. One of these staff members, Jim Morgan, then became manager of the Smith and Bybee Lakes Management Program and another staff member, Rosemary Furfey, was hired in 1991 to continue the work. In March 1992, the water resources staff was reduced to one individual due to budget constraints and consolidation of the Planning and Development, and Transportation Planning Departments.

### **B. Progress Report on 1990 Work Plan Activities**

#### **Status of Major 1990 Work Plan Activities**

1. **Regional Phosphate Detergent Ban:** The regional phosphate ban was approved by the Metro Council on June 28, 1990. The Metro phosphate ban then served as a model for the statewide phosphorus ban which was adopted in 1991.
2. **Revised Stormwater Management Plan:** A subcommittee was formed to review the existing Metro Stormwater Management Plan. After several meetings the committee concluded the Plan could not be updated in its present form. As a result of this decision, the ***1992 Areawide Water Quality Report*** was written with a WRPAC Technical Task Group to identify regionally significant water quality issues and strategies to address these issues.

3. **RLIS digitization:** Several new data layers were added to RLIS. The new data layers include wetlands, topography, soils, natural areas and hydrography. Matching funds were acquired to add the topography and soils data layers.
4. **Water Quality Modeling:** Staff provided technical support to several regional water quality modeling efforts in the Tualatin and Willamette Rivers, and the Columbia Slough. In 1991, Metro was awarded a grant for \$24,000 from the DEQ to conduct water quality modeling in the Upper Columbia Slough and Fairview Creek watershed as part of DEQ's effort to establish total maximum daily loads (TMDLs) for selected pollutants in the Columbia Slough. The RLIS and Geographic Information System (GIS) were used in conjunction with calibration of the water quality model. Maps numbered 1, 2, and 3, respectively, were produced for the project. A final report entitled *Fairview Creek Water Quality Modeling Project* was submitted to DEQ in October 1992.

A phase II grant was awarded to Metro for \$26,400 by DEQ in 1992 to continue water quality monitoring and to implement a stream restoration project on Fairview Creek in coordination with local jurisdictions and citizen groups.

5. **Annual Regional Wastewater "208" Plan Update:** The Metro Regional Wastewater Plan was updated each year and necessary amendments to the plan were approved by ordinance by the Metro Council. The Plan was recertified each year by DEQ and EPA.
6. **Coordination with Region 2040 Project:** Staff coordinated a series of WRPAC subcommittee meetings for regional water suppliers and wastewater managers, water quality specialists to provide technical feedback on the proposed Region 2040 growth concepts.
7. **Leaf Compost Stormwater Filtration Project:** In an effort to address stormwater management and promote new best management practices, Metro received a DEQ grant for \$40,000 to implement three leaf compost stormwater filtration facilities in the Tualatin River watershed. W&H Pacific was hired to design and test the facilities. The regional cooperators are the City of Portland's Bureau of Environmental Services, Washington County's Department of Land Use and Transportation, and the Oregon Department of Agriculture. The project will be completed in December 1993.
8. **Water Resources Policy Advisory Committee Coordination:** WRPAC has met quarterly each year and has provided technical in-put and review on a variety of water resource planning issues including the Region 2040 Project and has recommended approval of the Annual Wastewater Update amendments to the Metro Council.
9. **Technical Assistance and Information:** Staff provided technical assistance and information in response to requests from the public on a variety of water quality issues. Staff were featured speakers at several conferences in the region. Staff also coordinated regional conferences in cooperation with other agencies and jurisdictions on numerous water resource issues. Several maps have been produced utilizing Metro RLIS data. These include Map No. 4 illustrating the major

watersheds and habitat types within the urban growth boundary, and Map No. 5 showing the topography of Newell Creek in Clackamas County. Metro staff provided technical assistance on the recently produced Fairview Creek urban stream brochure in Appendix 2.

10. **Watershed Planning:** Staff participated in regional watershed planning activities on Johnson, Fairview, Butternut and Hedges Creeks, and the Columbia Slough. Staff provided technical assistance on stream restoration techniques, stormwater management best management practices, water quality monitoring, citizen involvement and inter-agency coordination.

Appendix 1 summarizes the status of work accomplishments from the 1990 Water Resources Work Plan.

### Water Quality Issues of Regional Concern

#### *Introduction*

Water resource issues have evolved dramatically in the past three years. Today, new knowledge and approaches to address water resource problems on a watershed basis are challenging water resource managers. In addition, new federal water quality regulations and mandates require all resource managers to re-examine old practices and seek new solutions to the persistent problems of non-point source pollution. Federal and state initiatives are promulgating a watershed planning and analysis approach to water resources management.

The management practices of the past have clearly not solved the problems of water pollution, stormwater impacts, stream degradation, loss of wetlands and threats to municipal water supplies.

The **1992 Areawide Water Quality Report** identified new and emerging water resource issues of regional concern. This report was developed by an inter-agency Task Group made up of WRPAC representatives that analyzed regional water quality issues and proposed strategies to address the issues.

#### *Water Quality Issues of Regional Concern*

The **1992 Areawide Water Quality Report** identified four water quality issues of regional concern:

- Stormwater Management
- Significantly Polluted Streams
- Wetlands and Water Quality
- Groundwater

The report presented the following conclusions:

1. All four water quality issues listed above are interconnected and should be addressed through coordinated management strategies.

2. Management strategies must recognize potential cross-media (i.e., surface water contaminating groundwater) impacts to resources and maximize overall resource protection benefits.
3. A comprehensive watershed management approach must be used to effectively address water quality and quantity problems.
4. Education programs must be implemented to inform the public about water quality problems, how the public affects the resource and how citizens can become involved in solving these problems.

#### 1992 Areawide Water Quality Report Recommendations

The following principal recommendations were made by the Task Group that prepared the report as actions that could be carried out by any jurisdiction to address regional water quality problems:

1. Initiate comprehensive watershed planning and implement basin-wide water resources programs.
2. Identify, control and safely dispose of pollutants.
3. Test best management practices (BMPs) in the metropolitan region.
4. Conduct research on rivers and streams to improve water quality management programs and practices.
5. Educate and involve the public.
6. Properly maintain water quality management facilities.
7. Control land use impacts on water quality.
8. Establish land banking to protect natural resources.

#### **C. Evaluation of 1990 Water Resources Work Plan**

##### Accomplishments

The past three years have produced many successful water resource products and accomplishments. These include:

1. Adoption of Metro's Regional Phosphate Detergent Ban in 1990 and subsequent adoption of the statewide phosphate detergent ban in 1991.
2. Adoption by Metro Council of the 1991 and 1992 *Annual Wastewater Management Plan* updates.
3. Annual recertification and federal EPA approval of the Regional Wastewater Management Plan amendments.

4. Production of two well-received publications:  
*The Role of the State in Water Resource Management (1992)*  
*The Areawide Water Quality Report (1992)*
5. Continued management and coordination of quarterly meetings of WRPAC.
6. Receipt of three grants from DEQ:
  - a. Fairview Creek Water Quality Modeling Project (604(b) funds: \$24,000)
  - b. Leaf Compost Stormwater Filtration Project (EPA 319 funds: \$40,000)
  - c. Phase II: Fairview Creek Project (604(b) funds: \$24,000)
7. Submittal of the *Fairview Creek Water Quality Modeling Project* report to DEQ in 1992.
8. Development of new RLIS data layers:
  - wetlands
  - topography (\$10,000 matching funds)
  - soils (\$9,000 matching funds)
  - natural areas
  - hydrography
9. Coordination of several regional conferences, workshops and presentations to professional meetings and other public information initiatives:
  - Streamwalk Conference - April 1992
  - Presentation to National Rivers Conference - May 1992
  - Adopt-A-Stream Conference - October 1992
  - Presentation to DEQ Non-point Source Conference - April 1993
  - Field Tour for National Park Service on Johnson Creek - April 1993
10. Technical assistance to numerous regional watershed planning initiatives, including:
  - Johnson Creek
  - Fairview Creek
  - Columbia Slough

These activities and accomplishments are important first steps to re-establish Metro's role in regional water resource planning. Staff reductions (from two staff members to one) and budget limitations, however, curtailed activities in such areas as water supply planning, special district agreements, identification of stormwater management facilities and the revised Stormwater Management Plan.

## **VI. Five-Year Work Plan: FY 1994-99**

### **A. Introduction**

The Metro Charter emphasizes Metro's role in regional growth management planning. It specifically identifies water sources and storage as an element in the RFP. The Charter also states that the RFP should address planning responsibilities mandated by state law. In addition, the RFP can address other growth management and land use planning matters which the Council determines are of metropolitan concern and would benefit from regional planning. This work plan addresses each of these work elements.

#### **Work Plan Elements**

This FY 1994-99 Work Plan addresses the Metro Charter mandates, builds upon Metro's programmatic strengths, agency resources and accomplishments of the past three years. It identifies the issues of regional concern and the optimum role for Metro to provide regional leadership on water resource planning issues. The work plan focuses on the following major elements:

- Adoption of Water Resource Elements in the Regional Framework
- Coordination of Growth Management and Water Resources
- Development of a Watershed Program
- Recertification of the Annual Wastewater Management Plan

### **B. Program Activities**

#### **Work Program Outline**

1. *Growth Management and Water Supply Planning* (Metro Charter Mandate)
  - a. Coordinate with Phase II Regional Water Supply Study
    - 1) Produce Growth Management Data and RLIS Maps
    - 2) Produce Technical Materials and Public Education Information
  - b. Adopt Charter-Mandated Water Supply Elements for the RFP in Consultation with WRPAC and MPAC
  - c. Develop Water Conservation Program and Public Education and Technical Materials in Coordinator with region's water providers.
2. *Growth Management and Water Quality Planning* (Metro Policy)
  - a. Growth Management and Water Resources Coordination
    - 1) Adopt Water Quality Elements of RFP
    - 2) Provide Technical Water Resources Information to Region 2040 Project
    - 3) Determine Impact on Water Resources of Region 2040 Growth Concepts

- 4) Implement Innovative Demonstration Projects to Test Land Use Planning Techniques to Protect Water Resources
- 5) Coordinate with WRPAC and MPAC
- 6) Develop and Adopt Model Ordinances
- 7) Produce Technical Information and Public Education Materials
- 8) Establish Regional Technical Clearinghouse
- 9) Co-sponsor Workshops and Conferences

**b. Regional Watershed Program (EPA and State Initiatives)**

- 1) Coordinate Watershed Planning Activities
- 2) Use EPA-sanctioned Water Quality Computer Model to Test Watershed Management Options
- 3) Coordinate with WRPAC and MPAC
- 4) Adopt Viable Policies
- 5) Develop and Adopt Model Ordinances
- 6) Produce RLIS Natural Resource Inventory Maps
- 7) Test Innovative Best Management Practices
- 8) Co-sponsor Workshops
- 9) Produce Technical Information and Public Education Materials

**c. Annual Areawide Wastewater Management "208" Plan Recertification (Federal Mandate)**

- 1) Coordinate Annual Update for Recertification
- 2) Coordinate with WRPAC and MPAC

**Description of FY 1994-99 Work Plan Components**

**1. *Growth Management and Water Supply Planning* (Metro Charter Mandate)**

**a. Coordination with Phase II Regional Water Supply Plan**

- 1) Produce RLIS Data and Growth Management Maps

Work with the region's water suppliers to implement the Phase II Regional Water Supply Plan as it relates to Metro's growth management programs. Metro will provide technical assistance, maps and data from its RLIS and Region 2040 project.

- 2) Produce Technical Information and Public Education Materials

Produce selected technical materials and public education information to support Metro's role in regional water supply planning in coordination with region's water suppliers.

**b. Adoption of Charter-Mandated Water Supply Elements for the RFP**

- **Adopt Viable Policies in consultation with MPAC and WRPAC**

Adopt policies and work elements that address the water supply and storage elements required in the RFP in consultation with MPAC and WRPAC by 1996.

**c. Develop Water Conservation Program**

- **Produce Public Education and Technical Materials**

Produce water conservation public education information and technical materials in coordination with the region's water suppliers as part of the water supply element in the RFP.

**2. *Growth Management and Water Quality Planning* (Metro Policy)**

**a. Growth Management and Water Resources Coordination**

**1) Adopt Water Quality Elements of RFP**

Adopt the water quality elements of the RFP by 1996. Conduct the necessary research, data collection and analysis, and policy development needed to adopt this element. Work with WRPAC and MPAC on technical and policy issues prior to adoption of work element.

**2) Provide Technical Water Resources Information to Region 2040 Project**

Provide technical assistance to Region 2040 Project by coordinating WRPAC technical review of Region 2040 growth concepts, collecting infrastructure cost estimates for different growth concepts regarding sewers, stormwater and other parameters, and providing other technical information related to water resources.

**3) Determine Impact on Water Resources of RFP**

Use EPA-sanctioned computer model to model and evaluate the impact of changes in land use on surface water and groundwater in the region with Metro's chosen growth concept. The model will be calibrated to different watersheds in the region and land use and water resource management alternatives will be evaluated. This technical work will be carried out in cooperation with local governments and special districts and watershed council to develop local modeling tools that will enable local governments to effectively choose land use and water management alternatives to protect and enhance water quality. The tools will also allow for the assessment of management strategies directed towards Willamette River and Columbia Slough water quality needs.

**4) Implement Innovative Demonstration Projects to Test Land Use Planning Techniques to Protect Water Resources**

Coordinate and manage an innovative demonstration grant program to test land use planning, growth management and site development design alternatives and techniques to protect water resources. This can include creative site development designs and construction that protect and enhance natural water features, development of riparian buffer protection in newly developing area, creative redevelopment strategies that enhance existing or degraded water features, and testing of innovative land use strategies that protect both greenspaces and water resources as growth occurs. In addition, a review and evaluation will be conducted of existing land use strategies to protect and enhance water resources. Grants will be provided on an annual basis for three years. A publication will be developed in coordination with Metro's Public Affairs Department to document programs and project results.

**5) Coordinate with WRPAC and MPAC**

Seek WRPAC and MPAC technical and policy review and feedback to water resources projects as related to growth management. Coordinate quarterly WRPAC meetings to serve as a forum for review and consultation on water resource planning activities.

**6) Adopt Viable Policies**

Adopt viable watershed planning policies to support growth management policies.

**7) Develop and Adopt Model Ordinances**

Develop and adopt model ordinances that support Metro policy regarding protection and enhancement of water resources. Model ordinances are developed in cooperation with selected jurisdictions and special districts and serve as models for local governments to adapt to their own needs and local conditions.

**8) Produce Technical Information and Public Education Materials**

Produce technical information and public education materials to document selected topics related to growth management and water resource issues. Develop associated public education materials in coordination with Public Affairs Department to address different water issues related to growth management.

**9) Establish Regional Technical Clearinghouse**

Establish and maintain a regional clearinghouse on selected water resource topics including stormwater management, best management practices, watershed planning, water supply planning, land use planning strategies to

protect water resources, wetland protection, stream restoration, GIS applications to water resource management, water quality modeling and maps.

**10) Co-sponsor Workshops and Conferences**

Coordinate and co-sponsor regional workshops and conferences to promote innovative growth management strategies that protect and enhance water resources.

**b. Regional Watershed Program (EPA and State Initiatives)**

**1) Coordinate Watershed Planning Activities**

Develop criteria to select regionally-significant watershed planning activities for Metro to implement in cooperation with local jurisdictions and relevant state and federal agencies. Coordinate selected watershed planning activities.

**2) Use EPA-sanctioned Water Quality Computer Model to Test Watershed Management Options**

Use Metro EPA-sanctioned water quality modeling and RLIS mapping capabilities to test different land use management options developed in the watershed planning process. Work with local jurisdictions and special districts to develop local modeling capabilities and testing of management options.

**3) Coordinate with WRPAC and MPAC**

Consult with and seek advice from WRPAC and MPAC for technical and policy guidance periodically during the watershed planning process.

**4) Develop and Adopt Model Ordinances**

Develop and adopt model ordinances that support the goals and objectives of the watershed planning program. These ordinances will then be adapted to local situations and adopted by local jurisdictions to allow for consistency in ordinances and resource protection throughout the watershed.

**5) Produce RLIS Natural Resource Inventory Maps**

Produce selected watershed resource inventory maps to support data collection and resource identification activities as the watershed plan is developed. Use RLIS data layers and add new data information as needed.

**6) Test Innovative Best Management Practices and Stream Restoration Techniques**

Test innovative best management practices for erosion control and stream restoration techniques to protect riparian habitat and protect water quality to promote the goals of the watershed planning program.

**7) Co-sponsor Workshops**

Coordinate and co-sponsor workshops and conferences to share information from regional watershed planning efforts.

**8) Produce Technical Information and Public Education Materials**

Produce technical information and public education materials to support watershed planning activities and share results of watershed program.

**c. Annual Areawide Wastewater Management "208" Plan Recertification (Federal Mandate)**

**1) Coordinate Annual Update for Recertification**

Conduct survey of jurisdictions and region's wastewater managers to compile changes in the transmission and collection maps for wastewater management districts. Coordinate reporting to DEQ and EPA, and Metro Council ordinance to recommend plan for recertification.

**2) Coordinate with WRPAC and MPAC**

Seek WRPAC and MPAC, technical and policy review of annual update of Metro's Wastewater Management Plan.

### C. Timeline

## FY 1994-99 Water Resources Work Plan Timeline

ID	Name	Duration	Scheduled Start	Scheduled Finish	1994				1995				1996				1997				1998				1999				2000				2001							
					1r	1st	2nd	3rd	4tr	1st	2nd	3rd	4tr	1st	2nd	3rd	4tr	1st	2nd	3rd	4tr	1st	2nd	3rd	4tr	1st	2nd	3rd	4tr	1st	2nd	3rd	4tr							
1	Adopt Water Supply Element of RFP	129w	1/1/94 8:00am	6/21/96 5:00pm																																				
2	Coordinate with Phase II Reg. Supply Plan	129w	1/1/94 8:00am	6/21/96 5:00pm																																				
3	Dev. Water Conservation Program	156w	1/1/95 8:00am	12/26/97 5:00pm																																				
4																																								
5	Adopt Water Quality Element of RFP	156w	7/1/94 8:00am	6/26/97 5:00pm																																				
6	Water Quality Modeling for RFP	260w	1/1/95 8:00am	12/24/99 5:00pm																																				
7	Implement Demonstration Program	156w	1/1/95 8:00am	12/26/97 5:00pm																																				
8	Coordinate with WRPAC and MPAC	280w	1/1/94 8:00am	5/14/99 5:00pm																																				
9	Develop and Adopt Model Ordinances	104w	1/1/97 8:00am	12/29/98 5:00pm																																				
10	Produce Technical Info. and Pub. Ed. Materials	156w	1/1/97 8:00am	12/28/99 5:00pm																																				
11	Eestablish Technical Clearinghouse	52w	1/1/97 8:00am	12/30/97 5:00pm																																				
12	Co-sponsor Workshops and Conferences	260w	7/1/94 8:00am	6/24/99 5:00pm																																				
13																																								
14	Coordinate Watershed Planning Activities	260w	7/1/94 8:00am	6/24/99 5:00pm																																				
15	Watershed Modeling	156w	1/1/95 8:00am	12/26/97 5:00pm																																				
16	Coordinate with WRPAC and MPAC	260w	7/1/94 8:00am	6/24/99 5:00pm																																				
17	Adopt Viable Policies	104w	1/1/97 8:00am	12/29/98 5:00pm																																				
18	Develop and Adopt Model Ordinances	104w	1/1/97 8:00am	12/29/98 5:00pm																																				
19	Test Innovative Best Management Practices	208w	1/1/94 8:00am	12/26/97 5:00pm																																				
20	Produce Tech. Info. and Public Education Mat.	260w	7/1/94 8:00am	6/24/99 5:00pm																																				
21	Co-sponsor Workshops and Conferences	260w	7/1/94 8:00am	6/24/99 5:00pm																																				

#### **D. FY 1994-99 Budget**

The Water Resources Work Plan budget reflects successful acquisition of federal and state funds to implement the water quality modeling and watershed program. The EPA may be a source of grant funds for the demonstration projects for land use planning and best management practices.

The work plan will be implemented using existing staff and resources in the Planning Department's Growth Management Division and Data Resources Center. A specific budget will be developed after the Metro Planning Committee selects the final programs to be included in the work plan before it is submitted to the Metro Council.

## **VII. Adoption of FY 1994-99 Work Plan**

The draft Water Resources Program Work Plan will be presented to the Metro Council Planning Committee on September 28, 1993. The presentation will inform the Councilors about the proposed work plan elements and seek their comments on this initial draft. Following Planning Committee review, the Draft Work Plan will be shared with WRPAC for their information and technical comments at their next quarterly meeting in November 1993. The draft Plan will also be presented to MPAC in November as an informational update on Metro's water resource activities.

After incorporating the relevant and appropriate comments from WRPAC and MPAC, the draft will be finalized. The final work plan will then again be presented to the Metro Council Planning Committee for their recommendation to endorse the plan and forward it to the Metro Council for adoption by resolution.

The plan will be presented to the Metro Council for adoption in December 1993.

## **VIII. Conclusion**

This is an ambitious work plan. It clearly places Metro as a regional leader in water resource planning and technical assistance. The new Metro Charter and growth management planning mandates require Metro to take regional leadership on water resource issues of regional concern. Metro, however, cannot accomplish these tasks alone. Each work plan element must be coordinated with appropriate local jurisdictions, special districts, state and federal agencies, and citizen groups. By providing the vision and leadership on these issues Metro can ensure that water resources will be protected and enhanced as the region grows. This role is essential to the region's future livability and economic viability.

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## APPENDIX 1

### METRO PLANNING DEPARTMENT

#### STATUS OF 1990 WATER RESOURCE WORK PLAN COMPONENTS

<u>Project Name</u>	<u>Status</u>	<u>Milestones/Progress</u>	<u>Comments</u>
1. Water Resource Management Reconnaissance	Completed January 1990	<ul style="list-style-type: none"> <li>Stakeholders interviewed</li> <li>Meetings Conducted</li> </ul>	
2. WRPAC Reorganization	Completed April 1990	<ul style="list-style-type: none"> <li>New committee members added</li> <li>Broader range of issues discussed</li> </ul>	
3. Regional Water Supply Formats	Completed April 1990	<ul style="list-style-type: none"> <li>Washington County format prepared</li> </ul>	
4. Phosphate Detergent Ban	Completed June 1990	<ul style="list-style-type: none"> <li>Regional phosphate ban approved by Metro Council on June 28, 1990</li> <li>State ban adopted in 1991</li> </ul>	
5. State Role in Water	Completed	<ul style="list-style-type: none"> <li>Report produced entitled: "Role of State in Water Resources Management" published in September 1991</li> </ul>	
6. Revised Stormwater Management Plan	Eliminated	<ul style="list-style-type: none"> <li>WRPAC Stormwater Committee formed</li> <li>Stormwater Committee advised work plan revision - task postponed</li> </ul>	
7. Regional Surface Water Quality Mapping	Ongoing	<ul style="list-style-type: none"> <li>Completed for Fairview Creek watershed</li> </ul>	
8. Digitization of Soil Surveys	Completed	<ul style="list-style-type: none"> <li>Soil Conservation Service (SCS) maps digitized</li> <li>Data available on Metro RLIS system</li> </ul>	
9. Water Conservation Policy	Eliminated	<ul style="list-style-type: none"> <li>Staff participated in Department of Resource Water Conservation Advisory Committee meeting</li> </ul>	
10. Information Workshop on Anacostia River Restoration Project	Completed	<ul style="list-style-type: none"> <li>Workshop held on June 30, 1993</li> <li>Keynote speaker: Lori Herson-Jones</li> </ul>	
11. Identify Regional Stormwater Management Facilities	Not Initiated		
12. Special Districts Agreement	Eliminated	<ul style="list-style-type: none"> <li>One agreement initiated and developed to draft stage</li> </ul>	

**METRO PLANNING DEPARTMENT**

**STATUS OF 1990 WATER RESOURCE WORK PLAN COMPONENTS**

<u>Project Name</u>	<u>Status</u>	<u>Milestones/Progress</u>	<u>Comments</u>
13. TMDL Study Database a. Tualatin River b. Columbia Slough c. Johnson Creek	Eliminated	<ul style="list-style-type: none"> <li>• Meetings attended</li> <li>• Tested NPSMAP model</li> <li>• Cooperated on data development</li> </ul>	
14. Water Quality Modeling	Completed	<ul style="list-style-type: none"> <li>• DEQ 604(b) grant received October 1991</li> <li>• Fairview Creek Watershed Modeling Project implemented October 1991 - October 1992</li> <li>• Final report to DEQ October 1992</li> </ul>	Grant amount \$24,000
15. Water Supply Assessment	Ongoing	<ul style="list-style-type: none"> <li>• Coordination with City of Portland Water Bureau and regional water suppliers</li> <li>• Regional census data provided</li> </ul>	
16. Stormwater and Wastewater Plan Merger	Eliminated	<ul style="list-style-type: none"> <li>• <u>Areawide Water Quality Report</u> published in April 1992 as analysis of regional water quality issues</li> </ul>	
17. RLIS Data Layers	Completed	<ul style="list-style-type: none"> <li>• Several new data layers added to RLIS system <ul style="list-style-type: none"> <li>- topography</li> <li>- National Wetlands Inventory (NWI)</li> <li>- Natural Areas</li> <li>- Hydrography</li> </ul> </li> </ul>	
18. Smith and Bybee Lakes	Ongoing	<ul style="list-style-type: none"> <li>• Recreational Plan developed and initiated</li> <li>• Landfill Revegetation Plan started</li> <li>• Biological Study initiated</li> <li>• Water flow structure installed</li> <li>• Fish tissue sampling completed</li> <li>• Trail construction started</li> <li>• Property acquisition in progress</li> </ul>	
19. Annual "208" Plan Update	Completed/ Ongoing	<ul style="list-style-type: none"> <li>• 1991 Plan completed</li> <li>• 1992 Plan completed</li> <li>• 1993 Update underway (approved by WRPAC on July 28, 1993)</li> </ul>	

**METRO PLANNING DEPARTMENT**

**STATUS OF 1990 WATER RESOURCE WORK PLAN COMPONENTS**

<b><u>Project Name</u></b>	<b><u>Status</u></b>	<b><u>Milestones/Progress</u></b>	<b><u>Comments</u></b>
20. Coordination with Region 2040 Project	Ongoing	<ul style="list-style-type: none"><li>• Meetings with regional wastewater and water supply providers to evaluate growth concepts</li><li>• WRPAC meeting to comment on growth options</li><li>• Survey of regional wastewater managers for information on base case analysis</li><li>• Review of RFP to analyze cost implications of growth concepts</li><li>• Continued meetings with WRPAC members</li></ul>	
21. Fairview Creek Phase II Project	Ongoing	<ul style="list-style-type: none"><li>• Water quality monitoring continued</li><li>• Stream restoration project implemented</li><li>• Final report completed December 1993</li></ul>	<ul style="list-style-type: none"><li>• \$26,400 DEQ 604(b) Grant</li></ul>
22. Leaf Compost Stormwater	Ongoing	<ul style="list-style-type: none"><li>• Design of three stormwater filtration projects</li><li>• Construction of three filtration sites</li><li>• Monitoring of facilities</li><li>• Final report December 1993</li></ul>	<ul style="list-style-type: none"><li>• \$40,000 DEQ 319 Grant</li><li>• Cooperative project with City of Portland</li></ul>
23. Regional Water Supply Issues	Ongoing	<ul style="list-style-type: none"><li>• Identify Metro roles to meet new charter mandate</li><li>• Implement policy direction</li><li>• Coordinate with Regional Water Supply Plan</li></ul>	
24. Metro Water Resources Policy Advisory Committee Coordination	Ongoing	<ul style="list-style-type: none"><li>• Conduct quarterly meetings</li><li>• Conduct survey of members (June 1993) to identify meeting topics</li><li>• Provide policy and technical advice to Metro Council on 2040 growth options</li><li>• Approve Annual "208" Update to Metro Regional Wastewater Management Plan</li><li>• Advise Region 2040 Project on water-related issues</li></ul>	
25. Technical Assistance	Ongoing	<ul style="list-style-type: none"><li>• Prepare RLIS maps for selected projects</li><li>• Conduct workshops on selected technical issues</li><li>• Provide technical information to public as requested</li></ul>	

**METRO PLANNING DEPARTMENT**

**STATUS OF 1990 WATER RESOURCE WORK PLAN COMPONENTS**

<b><u>Project Name</u></b>	<b><u>Status</u></b>	<b><u>Milestones/Progress</u></b>	<b><u>Comments</u></b>
26. Public Education and Information	Ongoing	<ul style="list-style-type: none"><li>• Produce Fairview Creek Urban Stream brochure, July 1993</li><li>• Sponsored Anacostia River Watershed Workshop, June 30, 1993</li><li>• Co-sponsored conferences<ul style="list-style-type: none"><li>- Adopt-A-Stream Conference</li><li>- Citizens Monitoring Conference</li></ul></li><li>• Conduct presentations at conferences and workshops</li></ul>	
27. Watershed Planning	Ongoing	<ul style="list-style-type: none"><li>• Participate in regional watershed planning initiatives:<ul style="list-style-type: none"><li>- Johnson Creek</li><li>- Fairview Creek</li><li>- Columbia Slough</li><li>- Hedges Creek</li><li>- Butternut Creek</li><li>- Columbia Slough</li></ul></li></ul>	

## STAFF REPORT

### CONSIDERATION OF RESOLUTION NO. 93-1873 FOR THE PURPOSE OF ADOPTING AND IMPLEMENTING THE FY 1994-99 WATER RESOURCES WORK PLAN

Date: November 24, 1993

Presented by Rosemary Furfey

## FACTUAL ANALYSIS

On September 28, 1993, the draft FY 1994-99 Water Resources Work Plan was presented to the Planning Committee. Committee members expressed their support for the plan and directed staff to make informational presentations about the plan to the Water Resources Policy Advisory Committee (WRPAC), the Metro Technical Advisory Committee (MPAC) and the Metro Policy Advisory Committee (MPAC).

Informational presentations about the work plan were made to WRPAC on November 19, 1993, to MPAC on November 23, 1993, and to MPAC on December 8, 1993.

Committee members expressed interest and support for the Work Plan and their written and oral comments are summarized below:

Written comments were received from Tim Erwert, Steering Committee Chair for the Regional Water Supply Planning Study. He emphasized the importance that the Regional Water Supply Planning study meet the requirements for inclusion into Metro's Regional Framework Plan (RFP) and adoption of a water sources and storage element in the RFP. He stressed the need to avoid any duplication of data collection and analysis and that the current regional water supply planning effort should meet Metro's needs. In addition, he recommended that Metro not initiate its own water conservation program, but rather join the current effort being sponsored by the region's water providers.

WRPAC and MTAC members recognized the important role Metro can play in providing technical assistance, regional coordination between jurisdictions and state agencies, and water quality modeling for local jurisdictions.

Committee members at MTAC recognized the need for water resources to be planned on a regional basis, similar to the way transportation planning is carried out by Metro, but committee members did not want Metro duplicating services or regulatory functions currently being carried out by local jurisdictions.

Committee members acknowledged the unique role Metro has regarding the connection between land use and growth management which all impact water resources.

Committee members acknowledged the Metro policy foundation for water resource planning, including the new Metro Charter mandate for adoption of a regional water

supply plan as part of the Regional Framework Plan.

The FY 1994-99 Water Resources Work Plan has now been revised and updated based on the comments and suggestions made by committee members. The final version of the FY 1994-99 Water Resources Work Plan is attached as Exhibit A.

## BACKGROUND

At the request of the Planning Committee, a new FY 1994-99 Water Resources Work Plan has been written identifying water resource issues of regional concern and describing Metro policies that address both water quantity and water quality issues. The work plan also describes and evaluates the accomplishments of the 1990 Water Resources Work Plan.

The work plan identifies future work elements in the two main subject areas of water supply and water quality. This includes adoption of the water supply and water quality work elements of Metro's Regional Framework Plan (RFP) and coordination with the Phase II Regional Water Supply Planning Study. The water quality elements use the watershed unit as a basis for water quality modeling for the RFP, establishment of a watershed program, technical assistance, policy development of planning tools with local government and public education.

This plan builds on the many accomplishments from the 1990 Water Resources Work Plan. These include adoption of Metro's regional phosphate detergent ban in 1990, adoption of the 1990 and 1991 Annual Wastewater Management Plan updates, production of two well-received publications, completion of two Oregon Department of Environmental Quality (DEQ) water quality grants, coordination of the Water Resources Policy Advisory Committee (WRPAC), development of new Regional Land Information System (RLIS) data layers and coordination of several regional conferences and workshops.

## EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 93-1873.

## **PLANNING COMMITTEE REPORT**

### **CONSIDERATION OF RESOLUTION NO. 93-1873A, FOR THE PURPOSE OF ADOPTING AND IMPLEMENTING THE FY 1994-99 WATER RESOURCES WORK PLAN**

Date: December 16, 1993

Presented By: Councilor Kvistad

**Committee Recommendation:** At the December 14 meeting, the Planning Committee voted unanimously to recommend Council adoption of Resolution No. 93-1873A. Voting in favor: Councilors Van Bergen, Devlin, Gates, Kvistad, Monroe, and Moore.

**Committee Issues/Discussion:** Rosemary Furfey, Senior Regional Planner, presented the staff report. She explained that the resolution originated from direction from the Planning Committee last September. The revised work plan has been reviewed by the Water Resources Policy Advisory Committee (WRPAC), the Metro Policy Advisory (MPAC), and the Metro Technical Advisory Committee (MTAC). All three groups have approved the plan.

She reviewed a few of the comments regarding the work plan. One letter contained a strong recommendation that there be no duplication of effort between Metro's planning efforts in water supply and other ongoing efforts from local water providers, particularly in regards to water conservation. She assured both the writer and the committee that there is no interest in duplicating efforts and there is recognition that the water providers are to be considered the experts in this area. However, Metro reserves its right regarding regional land use planning (e.g. growth management, urban reserves, urban growth boundary location) to plan for the region's water supply.

Councilor Moore reiterated her comments made at MPAC regarding the need to work strongly on the water quality aspects of the plan and that this work be tied to the transportation system and land uses that are impacting urban streams. This isn't being done now. She strongly suggested that when the watershed basin studies begin that Fanno Creek basin is the place to start.

Councilor McLain commented on the importance of the water program that needs consideration during the upcoming budget process.

Councilor Kvistad commented on Metro's role in planning and "sourcing" of supply. He asked why it was not referenced in the report. He wants to make sure that Metro reinforce their role in regional "sourcing" and planning, not just in waste water and storm water. He asked that this be clarified on page five of the work plan. Ms. Furfey

reiterated that Metro is the body to adopt the "Regional Wastewater Management Plan" for the region, as is required by the federal government.

Councilor Devlin echoed Councilor Kvistad's comments. He asked whether there had been discussion about Metro's unique qualification in this study - Metro is the only jurisdiction without a financial stake in the program. All other agencies involved have their financial future dependent on the plan that is produced.

The vote of the committee was unanimous to approve the resolution, assuming that new language on page five would be prepared by Ms. Furfey as per Councilor Kvistad's suggestion.

## STAFF REPORT

### CONSIDERATION OF RESOLUTION NO. ~~93-1873-A~~ FOR THE PURPOSE OF ADOPTING AND IMPLEMENTING THE FY 1994-99 WATER RESOURCES WORK PLAN

Date: November 24, 1993

Presented by Rosemary Furfey

## FACTUAL ANALYSIS

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Committee members acknowledged the unique role Metro has regarding the connection between land use and growth management which all impact water resources.

Committee members acknowledged the Metro policy foundation for water resource planning, including the new Metro Charter mandate for adoption of a regional water

supply plan as part of the Regional Framework Plan.

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## **BACKGROUND**

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## **EXECUTIVE OFFICER'S RECOMMENDATION**

The Executive Officer recommends adoption of Resolution No. 93-1873.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING AND  
IMPLEMENTING THE FY 1994-99  
WATER RESOURCES WORK PLAN

) **RESOLUTION NO. 93-1873-A**  
)  
) Introduced by Councilor Susan McLain and  
) Councilor Ed Washington

WHEREAS, The 1992 Metro Charter requires adoption of a Regional Framework Plan by December 31, 1997, which includes components addressing water source and storage, planning responsibilities mandated by state law, and other growth management and land use planning matters which the Council determines are of metropolitan concern; and

WHEREAS, The Regional Wastewater Management Plan is adopted under Section 3.02.002 of the Metro Code which provides for regional coordination and staging for construction of wastewater treatment facilities; and

WHEREAS, The Regional Stormwater Management Plan is adopted pursuant to ORS 268.310 (3) and 268.390 (1) which identifies water quality and stormwater management as regionally significant issues and identifies policy objectives to minimize soil erosion, control stormwater run-off to minimize streambank erosion, and protect and enhance the capacity of urban streams to provide habitat for fish and other aquatic organisms; and

WHEREAS, The Regional Urban Growth Goals and Objectives (RUGGOs) are adopted under Ordinance No. 91-418B and Objective 7 of the RUGGOs addresses water quality and water quantity issues for planning and management of water resources; and

WHEREAS, The Greenspaces Master Plan adopted by the Metro Council in July 1992 identifies the need to protect and enhance waterways and floodplains as one strategy to protect and manage greenspaces. It identifies watershed planning and coordinated stormwater management as important ways to protect valuable fish and wildlife habitat.

WHEREAS, The FY 1990-93 Water Resources Work Plan has expired and the Planning Committee requested a new water resources work plan; and

WHEREAS, The draft FY 1994-99 Water Resources Work Plan was developed and presented to the Planning Committee on September 28, 1993, and the committee discussed the work plan and recommended it be presented to the Water Resources Policy Advisory Committee (WRPAC), the Metro Technical Advisory Committee (MTAC) and the Metro Policy Advisory Committee (MPAC) for comment and review; and

WHEREAS, The draft FY 1994-99 Water Resources Work Plan was presented to WRPAC on November 19, 1993, to MTAC on November 23, 1993, and to MPAC on December 8, 1993; and

WHEREAS, relevant committee comments and suggestions have been incorporated in the final FY 1994-99 Water Resources Work Plan; now, therefore,

**BE IT RESOLVED,**

1. The FY 1994-99 Water Resources Work Plan, included in this resolution as **Exhibit A-1**, is hereby adopted as Metro's FY 1994-99 Water Resources Work Plan.
2. The 1990 Water Resources Work Plan is hereby replaced by the FY 1994-99 Water Resources Work Plan.

ADOPTED by the Metro Council this \_\_\_\_ day of \_\_\_\_\_, 1993.

\_\_\_\_\_  
Judy Wyers, Presiding Officer

## II. Metro's Role in Regional Water Resources Policy and Planning

### Introduction

Metro has an important and unique role to play in promoting decision-making and practices that protect the beneficial uses of water resources throughout the region. As the federally-designated "208" areawide water quality planning agency and with its new Charter mandates, Metro will play an important role in ensuring water resources are protected and enhanced as growth occurs.

### Background

Metro's involvement in regional water resource planning dates back to the 1960's and 1970's when Metro's predecessor the Columbia Regional Area Government (CRAG) compiled water and sewer infrastructure needs, and met federal reporting mandates. In 1974, CRAG was designated the region's Areawide Water Quality Planning Agency. These efforts culminated in Metro Council adoption of the 1980 Regional Wastewater Management Plan and the 1982 Regional Stormwater Plan.

In 1989, the Metro Council made a renewed commitment to water resource issues by hiring two staff members to revitalize the program. A ***Water Quality Issues Report*** was produced in July 1989, which evaluated regional water resource needs and identified a potential role for Metro. The following year, in 1990, the Metro Council Planning Committee approved the ***Water Resources Work Plan*** which emphasized stormwater management, water quality modeling and participation on other regional water initiatives.

### Metro Policies

There are several Metro policies that define its water quality and water quantity planning responsibilities. These policies are the foundation of this work plan and provide guidance for future policy and program development. Metro's water resource-related policies are:

- A. **Metro Charter (1992).** The Metro Charter defines the components of the RFP. The following elements of the RFP relate to water resources:

• "water sources and storage"

The Metro Charter specifically identifies regional water sources and storage planning as an element of the RFP and an important planning function at Metro. The Metro Council therefore has the authority to adopt a regional water sources and storage plan.

• "planning responsibilities mandated by state law"

Metro has water resource planning authority mandated by federal law. Metro is the federally-designated areawide "208" water quality planning agency for the Portland metropolitan region. As part of this federal mandate, Metro completes an annual update of the Metro Regional Wastewater Management Plan for recertification by EPA.

The annual update is submitted to the DEQ and the EPA. This federally-mandated planning role is addressed in the RFP component identified above.

- "...other growth management and land use planning matters which the council, with consultation and advice of the MPAC, determines are of metropolitan concern and will benefit from regional planning."

In addition to the two water resource components listed above, there are several other water quality issues of regional concern. The **1992 Areawide Water Quality Report** identified the following water quality issues of regional concern:

- stormwater management
- water quality limited streams
- wetlands and water quality
- groundwater

**B. Regional Urban Growth Goals and Objectives (1991).** Objective 7 of the RUGGOs addresses water resources. It identifies both water quality and water quantity issues for planning and management of water resources. It calls for development of a long-term strategy coordinated by all relevant jurisdictions to comply with state and federal requirements for drinking water, to sustain beneficial water uses and to accommodate growth.

**"Planning activities:**

Planning programs for water resources management shall be evaluated to determine the ability of current efforts to accomplish the following, and recommendations for changes in these programs will be made if they are found to be inadequate:

-Identify the future resource needs and carrying capacities of the region for municipal and industrial water supply, irrigation, fisheries, recreation, wildlife, environmental standards and aesthetic amenities;

-Monitor water quality and quantity trends vis-a-vis beneficial use standards adopted by federal, state, regional and local governments for specific water resources important to the region;

-Evaluate the cost-effectiveness of alternative water resource management scenarios and the use of conservation for both cost containment and resource management;

-Preserve, create and enhance natural water features for use as elements in nonstructural approaches to managing stormwater and water quality."

**Objective 7: Water Resources**

## Metro Regional Urban Growth Goals and Objectives

- C. Greenspaces Master Plan (1992).** The protection and enhancement of open space and natural areas is directly linked with water resources planning and management. The Greenspaces Master Plan identifies the need to protect and enhance waterways and floodplains as one strategy to protect and manage greenspaces. The plan recognizes the detrimental impact of uncontrolled stormwater run-off on floodplains and associated habitat. It identifies watershed planning and coordinated stormwater management as important ways to promote protection of habitat valuable for fish and wildlife as well as recreation. The master plan uses watersheds as the basis for ecological planning and protection of resources. The policies and programs described in this work plan support and complement the Greenspaces Program.
- D. Regional Stormwater Management Plan (1982).** The Regional Stormwater Management Plan designates water quality and stormwater management as a regionally significant activity. It identifies eight major drainage basins in the Metro region. Its policies objectives are to:
- minimize soil erosion
  - minimize streambank and channel erosion by controlling stormwater runoff
  - manage the 100-year floodplain and floodway to protect their natural function and minimize water quality degradation
  - protect and enhance capacity of urban streams to provide habitat for fish and other aquatic organisms

The policy issues identified over 10 years ago in this plan are still relevant today.

- E. Regional Wastewater Management Plan (1988).** The Regional Wastewater Management Plan provides for regional coordination and staging for construction of wastewater treatment facilities. Wastewater treatment facilities must also service specific geographic areas and district boundaries must be delineated in treatment and distribution maps. The plan must be recertified each year by the EPA.

## STAFF REPORT

### CONSIDERATION OF RESOLUTION NO. 93-1873-A FOR THE PURPOSE OF ADOPTING AND IMPLEMENTING THE FY 1994-99 WATER RESOURCES WORK PLAN

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Date: November 24, 1993

Presented by Rosemary Furfey

## FACTUAL ANALYSIS

On September 28, 1993, the draft FY 1994-99 Water Resources Work Plan was presented to the Planning Committee. Committee members expressed their support for the plan and directed staff to make informational presentations about the plan to the Water Resources Policy Advisory Committee (WRPAC), the Metro Technical Advisory Committee (MPAC) and the Metro Policy Advisory Committee (MPAC).

Informational presentations about the work plan were made to WRPAC on November 19, 1993, to MPAC on November 23, 1993, and to MPAC on December 8, 1993.

Committee members expressed interest and support for the Work Plan and their written and oral comments are summarized below:

Written comments were received from Tim Erwert, Steering Committee Chair for the Regional Water Supply Planning Study. He emphasized the importance that the Regional Water Supply Planning study meet the requirements for inclusion into Metro's Regional Framework Plan (RFP) and adoption of a water sources and storage element in the RFP. He stressed the need to avoid any duplication of data collection and analysis and that the current regional water supply planning effort should meet Metro's needs. In addition, he recommended that Metro not initiate its own water conservation program, but rather join the current effort being sponsored by the region's water providers.

WRPAC and MTAC members recognized the important role Metro can play in providing technical assistance, regional coordination between jurisdictions and state agencies, and water quality modeling for local jurisdictions.

Committee members at MTAC recognized the need for water resources to be planned on a regional basis, similar to the way transportation planning is carried out by Metro, but committee members did not want Metro duplicating services or regulatory functions currently being carried out by local jurisdictions.

Committee members acknowledged the unique role Metro has regarding the connection between land use and growth management which all impact water resources.

Committee members acknowledged the Metro policy foundation for water resource planning, including the new Metro Charter mandate for adoption of a regional water

supply plan as part of the Regional Framework Plan.

The FY 1994-99 Water Resources Work Plan has now been revised and updated based on the comments and suggestions made by committee members. The final version of the FY 1994-99 Water Resources Work Plan is attached as Exhibit A.

## **BACKGROUND**

At the request of the Planning Committee, a new FY 1994-99 Water Resources Work Plan has been written identifying water resource issues of regional concern and describing Metro policies that address both water quantity and water quality issues. The work plan also describes and evaluates the accomplishments of the 1990 Water Resources Work Plan.

The work plan identifies future work elements in the two main subject areas of water supply and water quality. This includes adoption of the water supply and water quality work elements of Metro's Regional Framework Plan (RFP) and coordination with the Phase II Regional Water Supply Planning Study. The water quality elements use the watershed unit as a basis for water quality modeling for the RFP, establishment of a watershed program, technical assistance, policy development of planning tools with local government and public education.

This plan builds on the many accomplishments from the 1990 Water Resources Work Plan. These include adoption of Metro's regional phosphate detergent ban in 1990, adoption of the 1990 and 1991 Annual Wastewater Management Plan updates, production of two well-received publications, completion of two Oregon Department of Environmental Quality (DEQ) water quality grants, coordination of the Water Resources Policy Advisory Committee (WRPAC), development of new Regional Land Information System (RLIS) data layers and coordination of several regional conferences and workshops.

## **EXECUTIVE OFFICER'S RECOMMENDATION**

The Executive Officer recommends adoption of Resolution No. 93-1873.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING AND  
IMPLEMENTING THE FY 1994-99  
WATER RESOURCES WORK PLAN

) RESOLUTION NO. 93-1873  
)  
) Introduced by Councilor Susan McLain and  
) Councilor Ed Washington

WHEREAS, The 1992 Metro Charter requires adoption of a Regional Framework Plan by December 31, 1997, which includes components addressing water source and storage, planning responsibilities mandated by state law, and other growth management and land use planning matters which the Council determines are of metropolitan concern; and

WHEREAS, The Regional Wastewater Management Plan is adopted under Section 3.02.002 of the Metro Code which provides for regional coordination and staging for construction of wastewater treatment facilities; and

WHEREAS, The Regional Stormwater Management Plan is adopted pursuant to ORS 268.310 (3) and 268.390 (1) which identifies water quality and stormwater management as regionally significant issues and identifies policy objectives to minimize soil erosion, control stormwater run-off to minimize streambank erosion, and protect and enhance the capacity of urban streams to provide habitat for fish and other aquatic organisms; and

WHEREAS, The Regional Urban Growth Goals and Objectives (RUGGOs) are adopted under Ordinance No. 91-418B and Objective 7 of the RUGGOs addresses water quality and water quantity issues for planning and management of water resources; and

WHEREAS, The Greenspaces Master Plan adopted by the Metro Council in July 1992 identifies the need to protect and enhance waterways and floodplains as one strategy to protect and manage greenspaces. It identifies watershed planning and coordinated stormwater management as important ways to protect valuable fish and wildlife habitat.

WHEREAS, The FY 1990-93 Water Resources Work Plan has expired and the Planning Committee requested a new water resources work plan; and

WHEREAS, The draft FY 1994-99 Water Resources Work Plan was developed and presented to the Planning Committee on September 28, 1993, and the committee discussed the work plan and recommended it be presented to the Water Resources Policy Advisory Committee (WRPAC), the Metro Technical Advisory Committee (MTAC) and the Metro Policy Advisory Committee (MPAC) for comment and review; and

WHEREAS, The draft FY 1994-99 Water Resources Work Plan was presented to WRPAC on November 19, 1993, to MTAC on November 23, 1993, and to MPAC on December 8, 1993; and

WHEREAS, relevant committee comments and suggestions have been incorporated in the final FY 1994-99 Water Resources Work Plan; now, therefore,

BE IT RESOLVED;

1. The FY 1994-99 Water Resources Work Plan, included in this resolution as Exhibit A, is hereby adopted as Metro's FY 1994-99 Water Resources Work Plan.
2. The 1990 Water Resources Work Plan is hereby replaced by the FY 1994-99 Water Resources Work Plan.

ADOPTED by the Metro Council this \_\_\_\_ day of \_\_\_\_\_, 1993.

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Judy Wyers, Presiding Officer