BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ENDORSING THE WATER QUALITY ISSUES REPORT	)))	RESOLUTION NO. 89-1121 Introduced by Rena Cusma Executive Officer

WHEREAS, the Metropolitan Service District is the designated Water Quality Management Planning Agency for the Portland metropolitan region under Section 208 of the Clean Water Act; and

WHEREAS, the U. S. Environmental Protection Agency requested that the Metropolitan Service District address specific regional water quality issues in future annual updates of the 208 Plan both in August of 1988 (recertifying the 1987 Plan update) and in May 1989 (recertifying the 1988 Plan update); and

WHEREAS, this Council has expressed its committment to respond to the Environmental Protection Agency's request, and to generally take a more active role in responding to significant water quality and water resource issues important to the region; and

WHEREAS, the Planning and Development Department has prepared a "Water Quality Issues Report" to provide an historical, current, and future context for water resources decision making including potential policy directions that the District may pursue in Fiscal Year 1989-90 to contribute to resolution of important water quality and water resource issues in the region; now, therefore

BE IT RESOLVED:

1. That the Council of the Metropolitan Service District receives and endorses the "Water Quality Issues Report."

2. That the Council directs the Planning and Development Department to work with cities, counties, sewer and water districts, appropriate state and federal agencies, the Council's Water Resources Policy Alternatives Committee, and other interested parties in the region to further define the scope of the water resources program outlined in the Report and the process for implementation of that program.

ADOPTED by the Council of the Metropolitan Service District this 27th day of July, 1989.

Mike Ragsdale

Mike Ragsdale, Presiding Officer

INTERGOVERNMENTAL RELATIONS COMMITTEE REPORT

Agenda Item No. _____

Meeting Date July 27, 1989

RESOLUTION NO. 89-1121, FOR THE PURPOSE OF ENDORSING THE WATER QUALITY ISSUES REPORT

Date: July 18, 1989 Presented By: Councilor Gardner

COMMITTEE RECOMMENDATION: At the July 18, 1989 Intergovernmental Relations Committee meeting, members present -- Councilors Collier, DeJardin, Devlin, and myself -- voted unanimously to recommend Council adoption of Resolution No. 89-1121. Councilor Bauer was absent.

COMMITTEE DISCUSSION/ISSUES: Planning & Development Department Director Rich Carson and Regional Planning Supervisor Pat Lee presented the staff report and a draft resolution for Committee consideration. The agenda scheduled the Water Quality Issues Report as a discussion item, but staff noted the Council Presiding Officer had requested a resolution be drafted to endorse the report. The endorsement would reflect Metro's efforts to develop a policy direction. By Resolution No. 89-1121, the Council would formally "receive and endorse" Planning & Development's Water Quality Issues Report which provides a background to Metro's role to date in water policy over-sight and management; outlines the status of Federal and State legislation for water quality program implementation, funding and regulation; and proposes some appropriate activities for Metro to undertake in revitalizing its legal responsibility for water quality planning and implementation.

Staff noted the report was presented at the July 13, 1989, Water Resources Policy Advisory Committee (WRPAC) meeting, chaired by Presiding Officer Ragsdale. Convened by Metro, WRPAC serves as the coordinating committee for recommending annual changes to the "208 Plan", required under the Federal Clean Water Act to apply for and receive funding. Staff discussed local jurisdictions' and water districts' wariness about Metro's re-emerging role in water quality planning and management. It was recalled that Metro is obligated to take a more active role in water quality issues per EPA's request (May 16, 1989 letter recertifying Metro's 1988 "208 Plan").

It was noted the report is consistent with Metro's hiring of a one-year senior analyst position to examine policy issues and develop program options; the report moves the development effort forward.

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METRO

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Portland, OR 97201-5398
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Memorandum

July 13, 1989

To: Water Resources Policy Alternatives Committee (WRPAC)

From: Mel Huie, Senior Regional Planner
Planning and Development Department

Sub: **1989 Proposed Changes and Amendments to the "208" Plan**

1. The "208" Collection System Service Areas Map will be updated to reflect all city boundaries as of July 1, 1989.

2. The "208" Sewerage Transmission and Treatment Map will be updated to reflect service providers as of July 1, 1989.

3. Beaverton: Update "208" Collection System Service Areas Map to reflect city boundaries as of 7-1-89.

4. Gladstone: Correction to "208" Sewerage Transmission and Treatment Map to reflect accurate boundaries between CSD #1 and Tri-Cities per Exhibit A.

5. Gresham: Three corrections to the "208" Collection System Map per Exhibit B.

6. Milwaukie: Update Study Area Boundaries on the "208" Collection System Service Areas Map to reflect the City's recent annexation and sewer construction along Stanley Ave. between Willow St. and Logus Rd.

7. Multnomah County: Amend the "208" Collection System Service Areas Map by deleting Inverness. See Exhibit C.

8. Portland: Amend the "208" Sewerage Transmission and Treatment Service Areas Map per exhibit. The proposal is to change the area shown on the exhibit from "USA Durham" to a study area. This area would be studied to determine the ultimate service area and provider. See Exhibit D.

9. USA: Same as the city of Portland's proposed amendment. See Exhibit E.

10. Tigard: Update "208" Collection System Service Areas Map to reflect city boundaries as of 7-1-89

Water Quality Issues Report

Planning and Development Department

Metropolitan Service District
Portland, Oregon

METRO

Water Quality Issues Report

Planning and Development Department
Metropolitan Services District
Portland, Oregon

July 1989

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PREFACE

This report on water quality issues was developed over the last fiscal year (1988-89). The Planning and Development Department staff participated on the Tualatin River Intergovernmental Coordinating Committee for the United Sewerage Agency's surface water management program and attended a variety of water quality seminars, workshops and hearings held regarding the Tualatin River water quality problems. Staff also participated on the Columbia Slough Project Coordinating Committee. Meetings were also held with the Department of Environmental Quality and with the region's water district and sewage agency managers.

The intent of the report is two-fold. First, it provides a historical, current and future context for decision making. Second, it defines a positive approach that METRO can take towards helping to solve regional water quality issues in FY 1989-90. The program is summarized as follows:

Municipal Wastewater Discharges

- Compile changes to sewer service area boundaries wastewater collection transmission and treatment facilities proposed by sewer service providers.
- Resolve conflicts that arise as a result of proposed changes.
- Identify sewer service study areas where boundary conflicts can't be resolved or where insufficient data is available to determine cost-effective and environmentally sensitive service alternatives.
- Revise text/map of Regional Wastewater Management Plan.

Stormwater Management

- Update METRO's stormwater management data base through inclusion of recently compiled water quality data.
  - 1988 State 305 b report and nonpoint sources assessment.
  - Tualatin River SWM Program and nonpoint source water quality sampling programs, WAMCO investigations, Jackson Bottom and other studies within the Tualatin watershed.
  - Columbia Slough Study.
  - Johnson Creek and other sampling programs as available.

- Initiate reconnaissance study of potential areawide stormwater management sites.

- Monitor EPA rulemaking for stormwater discharges.

- Commence update of Regional Stormwater Management Plan

Tualatin River and Columbia Slough TMDLs

- Develop strategies to assist local governments in addressing new rules and identifying actions METRO may take on program plans.

- Review any plans prepared by local governments and determine what 208 Plan changes may be necessary.

Columbia River National Estuary Program Designation

- Monitor progress

Water supply and water quality issues

- Investigate potential for integrating into an overall regional water resource management strategy.

DEQ's "Clean Water Strategy"/Dept. Water Resource's Basin Planning Program

- Participate in development of programs

Urban Growth Management Plan

- Integrate water resources management policies

BACKGROUND: THE "CLEAN WATER ACT"

CHAPTER I
BACKGROUND: THE "CLEAN WATER ACT"

The driving force behind virtually all water quality legislation and programs in the nation is the Federal Water Pollution Control Act of 1972. Commonly referred to as the "Clean Water Act", Section 101.(a) established the following national goals and policies:

> "The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that...
>
> (1) it is the national goal that the discharge of pollutants into the navigable waters of the United States be eliminated by 1985;
>
> (2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;
>
> (3) it is the national policy that discharge of toxic pollutants in toxic amounts be prohibited;
>
> (4) it is the national policy that federal financial assistance be provided to construct publicly owned waste treatment works;
>
> (5) it is the national policy that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State;
>
> (6) it is the national policy that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into navigable waters, waters of the contiguous zone, and the oceans; and
>
> (7) it is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution."

The above goals and policies constitute the legislative intent of the Clean Water Act. The ensuing 215 pages of the Act delineate

a maze of programs, procedures, standards, reports, federal funding allotments and state and local matches required to implement this intent (see Appendix A). From the start it recognized the need to address both point and nonpoint sources of pollution as well as recognizing the relationship between land use and the quality of the nation's waters.

Major amendments to the Act were adopted by Congress in 1977 and 1987. With the exception of Section 101.(a).(7), however, all the above goals and policies have remained in tact since 1972. Section 101.(a).(7) was added through the 1987 amendments.

The emphasis of the 1977 amendments was extending deadlines and federal funding programs for meeting specific provisions of the Act. The 1977 amendments were,in part, a tacit acknowledgement of the difficulty in putting the institutional framework in place to administer such an ambitious, complex and comprehensive nationwide program. It also began to mark an impatience in some quarters with the "planning" aspects of the program. "Sunset" or phase-out schedules were adopted reducing federal matching grants for water quality planning programs, despite a consistent record of higher than anticipated costs in formulating such programs.

The 1987 amendments marked more substantive changes in the direction of the program than the 1977 amendments. States were required to develop and implement programs to control nonpoint sources of pollution (stormwater runoff from farm and urban areas, construction sites, forestry and mining sites). A national estuarine cleanup program was initiated. Programs to deal with "toxic hot spots" were instituted to address toxic discharges that cause water quality problems in receiving waters, even though industries and municipalities have achieved pollution controls currently called for by the Act.

In the METRO area, the renewed emphasis on the nonpoint source programs are of greatest significance. While they have been called for since 1972, they have been the least addressed of the entire water quality program. Since the inception of the program regulatory and enforcement efforts have concentrated on municipal and industrial point source discharge permits and violations. The "carrot" aspect of federally subsidizing local municipal waste treatment facilities, initially at a 90-100% federal share of engineering and construction costs, was also very effective. It was believed that the most cost-effective results in cleaning up the nations waterways would be achieved by paying closest attention to major point source discharges.

The 1987 amendments also marked a dramatic reduction in the federal share of funding for municipal wastewater treatment and transmission facilities. No doubt this is a reflection of the five years of congressional debate and legislative branch/executive branch compromise over the "budget-busting" label former President

Reagan ascribed to the program. Congress successfully overrode the President's second veto of congressionally approved amendments in February, 1987. Notwithstanding the override, actual appropriations for the construction grants program have not been appropriated at the maximum allotments authorized by those amendments since their passage. President Bush's proposed budget amendments did not alter former President Reagan's proposed budget in this area.

The 1987 amendments also phase out the federal grants program altogether, instead calling for the substitution of State Revolving Loan (SRL) Funds for the federal facilities grants program. Grants may be authorized through FY 1990, but by FY 1992 a full transition to the SRL program is to occur. The State Environmental Quality Commission (EQC) adopted rules to implement the SRL program on March 3, 1989 and amended existing construction grant rules on June 2, 1989 in order to effect the transition from a grant-based to loan-based facilities program.

METRO'S HISTORICAL ROLE IN WATER QUALITY PLANNING

CHAPTER II
METRO'S HISTORICAL ROLE IN WATER QUALITY PLANNING

Original 208 Plan

METRO's predecessor, the Columbia Region Association of Governments (CRAG), adopted the original 208 Plan for the metropolitan area. The plan was certified by the state and the Environmental Protection Agency in 1978 as meeting the requirements of Section 208 of the Clean Water Act. CRAG was designated the agency responsible for the continuing planning process required by the Act. Section 208 of the Act includes the designated management agency matrix adopted as part of the 208 Plan (see Appendix B).

METRO adopted all of CRAG's existing plans and programs as its own, including the 208 Plan. METRO also assumed the responsibility for annually updating the Plan. One important distinction, however, is that METRO's jurisdiction extends only within its boundary, the urbanized portion of Clackamas, Multnomah, and Washington counties, rather than the full tri-county area addressed by CRAG. Areawide planning for those portions of the region outside the METRO boundary but inside the tri-county area (Sandy, Estacada, Government Camp, Molalla) became the responsibility of the state rather than METRO.

The 208 Plan was the result of a two year $1.7 million effort and was divided into four sections as follows (Appendix B includes a complete listing of the 208 Plan documents):

- Background information pertaining to the study area in general and specific information about the existing and projected conditions in individual sewerage systems;
- Recommended wastewater treatment facilities and sludge management plans for six planning units including:
    1. Columbia region (generally Multnomah County)
    2. Washington County
    3. Kellogg Creek (generally Clackamas County)
    4. Wilsonville/Canby
    5. Estacada
    6. Other independent service areas including Molalla, Mt. Hood Corridor, and Government Camp
- Combined sewer overflows in the City of Portland and urban stormwater runoff were also addressed in this section;

- Management and institutional arrangements necessary to implement the plan, including a financing plan;

- An environmental assessment of the proposed plan.

Results of the 208 plan included the following conclusions:

- The optimum sewerage plan for the CRAG area was the aggregate of cost-effective plans for each of the six regional planning units. Regionalization of sewerage facilities across those boundaries was infeasible.

- State implementation of the National Pollutant Discharge Elimination System (NPDES) system would adequately address industrial discharges to the regions waterways.

- Nonpoint sources of pollution, including combined sewer overflows, although monitored and quantified, were too complicated to comprehensively address through the 208 Plan. A complete nonpoint source management plan would subsequently be developed through the continuing planning process.

Annual 208 Updates

Since adoption of the CRAG 208 Plan in 1980, METRO has prepared annual updates of the Plan for areas within its jurisdiction. The updates have focussed on the changes to sewer district service area boundaries and extension, expansion, and replacement of sewer collection and transmission lines and treatment facilities. The updates maintain the areas eligibility for federal 201 facilities construction grants. Even though the grants program is phasing out, facilities seeking to utilize the State Revolving Loan Fund for planning, design, and construction will still be required to be consistent with the 208 plan as updated.

Regional Stormwater Management Plan

In February 1982 METRO adopted a seven volume Regional Stormwater Management Plan (Appendix C lists all documents incorporated into the Plan). This was an outgrowth of the continuing planning process of the 208 Plan and was developed in parallel with the Johnson Creek Flood Control and Pollution Abatement Study discussed below. The Regional Stormwater Management Plan addressed stormwater pollution in the following watercourses:

- Rock Creek - Washington and Multnomah Counties;

- Beaverton/Cedar Mill Creeks - Washington & Multnomah Counties;

- Fanno Creek - Washington, Multnomah, and Clackamas Counties;

- Tryon Creek - Multnomah and Clackamas Counties;
- Kellogg/Mt. Scott Creeks - Clackamas County;
- Johnson Creek - Multnomah and Clackamas Counties;
- Fairview Creek - Multnomah County;
- Beaver/Kelly Creeks - Multnomah County.

These watersheds each encompass land within several jurisdictions and as a whole cover about 50% of all land within the Metropolitan Service District. Not included was land draining directly to the Tualatin, Willamette, and Columbia Rivers and the Columbia Slough or through very minor tributaries to those streams.

The Regional Stormwater Management Plan adopted policies and guidelines in the following areas:

- Minimizing on-site erosion during site preparation and construction;
- Minimizing streambank and channel erosion by controlling the amount and rate of stormwater runoff;
- Managing 100-year floodplains in order to protect their natural function and minimize water quality degradation and property damage;
- Protecting and enhancing the capacity of urban streams to provide habitat for fish and other aquatic organisms.

The Plan identified "Best Management Practices" for controlling the discharge of stormwater related pollutants to watercourses, designated stormwater management agencies for the region (See Appendix C. Designated agencies included the individual cities and counties with land inside each of the eight drainage basins noted above), and called for a continuing planning process. METRO's responsibility was regional stormwater management planning and coordination. METRO was to coordinate with the designated management agencies to prepare drainage basin management programs to abate stormwater pollution. Due to a lack of resources, no continuing planning work has been done since 1982.

Johnson Creek Basin Flood Control and Pollution Abatement Project

The Johnson Creek Study was perceived by METRO as the prototype for implementation of stormwater management plans in urban watersheds throughout the region. In addition to responding to the commitment made in the 208 Plan to address urban stormwater pollution through the continuing planning process, the Johnson

Creek Project was also seen by METRO as a political opportunity to demonstrate its capability to address important issues in the region; in effect an opportunity to "announce" the newly-formed regional government's "arrival" on the scene.

In November 1979 the METRO Council approved a plan calling for the formation of a Local Improvement District (LID) to address flood control and pollution abatement in the Johnson Creek Basin. In anticipation of LID formation, Clackamas and Multnomah counties and the Cities of Portland, Gresham, Milwaukie and Happy Valley loaned METRO $40,000 to prepare preliminary plans and engineering specifications for the study.

In June, 1980 the LID was formed for the purpose of financing Phase I of the following three phase program for the Creek:

- Phase I - Capital improvement identification and planning phase. Preliminary engineering plans and specifications, and cost estimates prepared for major capital improvements.

- Phase II - Major capital improvement construction phase.

- Phase III - Operation and maintenance phase, including additional minor capital improvements.

The LID covered virtually the entire watershed and each property owner within the LID was subject to a tax assessment. Money generated by the LID was to serve as the necessary local match for a major investment in flood control by the Army Corps of Engineers.

Upset by the costs to be incurred through implementation of the plans proposed by the Corps of Engineers, property owners vociferously protested formation of the LID through the summer of 1980 and the METRO Council tabled the issue in November. Only Phase I was completed. A community outreach program was commenced thereafter to better comprehend the desires and concerns of property owners within the basin but no further planning and engineering studies were undertaken. In the spring of 1982 federal funds that had been allocated to the outreach effort had been expended and no further work has since been undertaken by METRO.

There was a backlash to the LID proposal which resulted in the State Legislature tightening up METRO's enabling legislation allowing the formation of LID's. METRO now has to go through virtually the same hoops as other agencies to obtain authorization to form such districts.

CURRENT WATER QUALITY ISSUES AND PROGRAMS

CHAPTER III
CURRENT WATER QUALITY ISSUES AND PROGRAMS

There is currently a high level of water quality activity ongoing in the region. Following is a discussion of activity at the federal, state, and local level that may affect the region.

Federal Programs

The principal activity EPA is working on at the present time is the rule making process for stormwater discharges. The 1987 amendment to Section 402 of the Clean Water Act calls for EPA to prepare NPDES permitting rules for stormwater discharges by February 4, 1989. EPA is running about a year behind on this schedule. Draft rules were issued in December 1988 for comment. The comment period ended March 7, 1989. Final rules are not anticipated to be adopted until February 1990.

The rules will have a significant impact on the region. They will apply to all industrial stormwater discharges and to all separate municipal storm sewer systems serving in excess of 100,000 population (Portland is the only system in the region affected by this provision). The rules will also apply to any industrial or municipal stormwater discharge to any state-designated "water quality limited" stream segment regardless of population served (Tualatin River and many of its tributaries, Columbia Slough, possibly Johnson Creek). As proposed, the rules would subject any commercial or industrial construction site of one acres or larger and any residential construction site of five acres or larger to a stormwater permit (construction activities are considered a subset of the industrial discharge category). Appendix D describes the proposed rules and application process in more detail.

State Programs

In March of 1988 EQC adopted Total Maximum Daily Pollutant Loads, TMDL's, for nitrogen and phosphorous in the Tualatin River pursuant to the Consent Decree issued in response to litigation filed by the Northwest Environmental Defense Center. This set in motion a comprehensive local cleanup program in Washington County spear-headed by the Unified Sewerage Agency (USA). A hearing was held in March 1989 to review USA's plans for controlling point source discharges to the Tualatin from USA's six waste treatment plants. Some aspects of the USA proposal were accepted at that time by the EQC, some were rejected, and some subjected to further study and subsequent reevaluation.

USA is also developing a nonpoint source pollution control program for the Tualatin. One component of nonpoint source program is development of rules for controlling erosion from construction

sites. On July 21, 1989 EQC is scheduled to consider adoption of rules to control erosion in the interim between now and adoption of the final nonpoint source program. The entire program for meeting TMDLs is required to be on-line by March of 1993. During 1988 DEQ also commenced a State Clean Water Strategy. It is intended to provide the framework for integrating DEQ's existing water quality programs with new requirements stipulated in the 1987 amendments to the Clean Water Act, including nonpoint sources of pollution and surface water toxics problems. The strategy is an overall management plan to guide agency decisions and will include the following:

- Priority lists for implementing control programs to improve the water quality of rivers, lakes, aquifers, and estuaries throughout the state.
- A priority list of water bodies requiring further water quality monitoring.
- A priority list for implementing protection and anti-degradation measures.

A draft of the Oregon Clean Water Strategy has been reviewed by EPA and DEQ is currently revising the document to respond to EPA's comments.

In November, the State Department of Environmental Quality (DEQ) issued a draft Nonpoint Source Strategy required by Section 319 of the Clean Water Act. The document, a component of the Clean Water Strategy, identifies stream segments within the state which cannot meet water quality standards due to nonpoint sources of pollution. The document identifies programs to assess and control the water quality impact of the following nonpoint sources of pollution:

- Agriculture;
- Grazing and range management;
- Forestry;
- Recreation;
- Mining;
- Transportation;
- Construction;
- Sewage and stormwater;
- Chemical storage and hazardous and solid waste disposal.

The document indicates that DEQ is looking toward other agencies to be the principal implementers of nonpoint source control programs instituted as a result of the investigation. In January, 1989 DEQ issued a manual outlining the process for designating nonpoint source management agencies and the responsibilities associated with becoming a designated management agency. In December, METRO staff reviewed and commented on DEQ's nonpoint source document requesting DEQ to consider nominating METRO as a designated management agency for 319 programs.

In March, DEQ published the report "Water Bodies Affected by Toxic Pollutants" required by Section 304 of the Act. The report identifies where beneficial uses of waters within the state are impaired due to conventional, nonconventional, and priority (toxic) pollutants and is another component of the Clean Water Strategy.

On March 3, 1989 EQC adopted rules establishing the State Revolving Loan Fund required by Title VI of the Clean Water Act.Also in March, Governor Goldschmidt nominated the Columbia River from its mouth to the Bonneville Dam as an estuary of national significance. If approved by EPA as a component of the National Estuary Program established by Section 320 of the Act, the region would be eligible for federal grants allotted by Congress to improve water quality in the nation's estuaries. As nominated, the Willamette River from its mouth at the Columbia to Willamette Falls in Oregon City would be included as part of the Columbia River Estuary.

On June 2, 1989 DEQ amended the construction grants rules to effect the transition from the grant-based to loan-based program. The final waste treatment facility construction priority list for the state is to be adopted in July of this year to guide the disbursement of federal grant funds to local jurisdictions in the state through FY 1990 at which time a complete transition to the revolving loan program is anticipated.

On June 14, 1989 DEQ held a hearing on the "1988 Water Quality Status Report" required to be submitted biennially to EPA by Section 305 b of the Act. It is the principal means by which EPA, Congress, the legislature and the public can evaluate Oregon's water quality, progress made in maintaining and restoring its water quality, and the problems that remain.

DEQ is proposing state legislation to establish and fund a Groundwater Protection Strategy for the state. The legislature is expected to act on the legislation within the next two weeks. If approved as proposed, some funds may be available to local jurisdictions to plan for its institution and implementation.

The Department of Water Resources is preparing Basin Plans for the Sandy and Willamette Rivers. They anticipate completion in the fall of 1990. The Columbia River Basin Plan will commence upon completion of the Sandy and Willamette Plans.

The objective of the River Basins Program is to comprehensively look at current uses of the river basins in the state, assess existing and future demands for use of the basins and formulate management plans to rationally manage and foster existing and desired uses. Issues to be addressed in the basin plans include:

- Watershed and riparian management;
- Water conservation/drought planning;
- Water quality;
- Water allocation;
- Ground water management;
- Water management for fish;
- Dams/reservoirs
- Hydropower development
- Near shore ocean resources;
- Wetlands management;
- Financing local infrastructure;
- Land use and water planning coordination.

METRO hosted a briefing for local jurisdictions on the Sandy and Willamette Basin planning process in November of 1988 and continues to monitor DWR's progress. On April 17, 1989 the Water Resources Commission (WRC) adopted the following priorities for allocation of water resources in the Willamette Basin:

- First priority is to; public instream uses designed to protect public uses (recreation, fish, and wildlife); public out-of-stream uses such a municipal water supplies; reservation of water rights intended to provide for future economic needs.
- Second priority to private out-of-stream uses, if unappropriated water is available.
- Public agencies and municipalities will be given priority if water rights reservations are submitted during the two-year Basin planning process. After that all water use requests, public and private, will receive equal treatment.

DWR also is conducting a groundwater study of the Cooper Mountain aquifer. Due to extensive withdrawals from this aquifer earlier in the decade the quantity and quality of groundwater were

deteriorating. A critical groundwater designation was applied by DWR in 1985 and an extensive monitoring and rationing program instituted. Recently, water levels are beginning to rise again and reconsideration of the allocations are being contemplated.

Local Programs

In response to establishment of TMDL's for phosphorous and nitrogen in the Tualatin River, a major program for meeting TMDL's is in progress under the direction of USA. As noted above, June of 1993 is the mandated deadline for implementing the program.

METRO is a member of the Intergovernmental Coordinating Committee, one of three committees organized by USA to formulate the Surface Water Management (SWM) Program to address urban runoff and other nonpoint source problems (agricultural and forestry practices etc.) in the Tualatin watershed. The other two committees include the Steering Committee, which is composed of representatives from each of the jurisdictions within the basin which are jointly funding the SWM Program, and the Citizens Advisory Committee.

Work to date has focussed on establishing a stormwater management authority for the urban area of the basin and on formulating interim rules to control urban runoff, primarily that originating at construction sites, until they are superceded by permanent rules adopted as a part of the TMDL program or as a result of the new NPDES stormwater permitting rules. A proposal to expand USA's authority to include stormwater management responsibilities within their boundary has been submitted to the Portland Metropolitan Area Boundary Commission.

Bills have also been introduced before the legislature to ease existing statutory requirements that USA must meet before designation as a stormwater management authority. If all these initiatives fall into place, a referendum election could be held in November to determine if USA's authority is expanded. The interim rules are scheduled for hearing before EQC on July 21.

In parallel with USA's program for the Tualatin River, a separate but distinct Water Management Committee has been organized in Washington County. USA is a member of the Committee, but METRO is not. WAMCO, the acronym adopted by the Committee, arose as a water supply/water district consolidation effort but has evolved into a program to integrate water supply and water quality issues into a comprehensive water resources management plan for Washington County. Issues being addressed by WAMCO include the following:

- An analysis of water supply sources and their relationship to water district boundaries;

- An analysis of necessary water quality control programs and their relationship to USA's boundary;

- The distribution of existing and forecast population and associated water demands;

- An identification of existing water supply, storage, and transmission networks;

- The relationship between nonpoint water quality problems and groundwater protection.

WAMCO is promoting the concept of a regional water authority for Washington County to adopt and implement the overall water resources management plan. In a report published in May, it is recommended that USA become the umbrella water authority for the county. WAMCO member jurisdictions are expected to formally endorse the recommendation this month. Enabling legislation will need to be introduced in the 1991 biennium to allow this to occur.

In June, many of the WAMCO member jurisdictions requested the Bureau of Reclamation to conduct an engineering and financial feasibility study of a second dam on the upper Tualatin (Phase II of the Scoggins Reservoir Study) and pledged their financial support toward its completion. Beneficial uses of the reservoir identified as the basis for the required federal cost/benefit assessment include flow augmentation in the Tualatin as a water quality improvement technique, water supply, recreation, and possibly hydropower and fisheries.

In the last few months, a dialogue has commenced among Clackamas County, and the cities of Lake Oswego, Rivergrove, and West Linn regarding their responsibilities for responding to TMDLs in the Tualatin River. As these communities are outside of USA's jurisdiction but inside the Tualatin basin, they, too, must formulate management programs to control pollution from land within their jurisdiction.

The Jackson Bottom project is another program underway in the Tualatin Basin. Jackson Bottom is a 3,000 acre area within the floodplain and adjacent low lying areas of the Tualatin River south of Hillsboro on both sides of highway 219. 420 acres are currently in public ownership. For over ten years the City of Hillsboro, USA, the Oregon Department of Fish and Wildlife, the U.S. Soil Conservation Service, the Washington County Soil and Water Conservation District, and the Portland Audubon Society have been working to preserve and enhance the natural resources of Jackson Bottom.

Until now efforts have been directed primarily toward improving the area for wildlife habitat and recreation. Recently the coalition is broadening efforts to include the improvement of water quality in the Tualatin River as a primary objective. Toward this end, a concept master plan was published in January by the Jackson Bottom Wildlife Project Steering Committee to address long term

goals and objectives of the project. Key elements of the Concept Master Plan include the following:

- Expansion of wildlife habitat and forage areas to encourage more diverse wildlife populations;
- Development of an interpretive center for children and adults;
- Expanding access to the Tualatin River to encourage greater use of the river for recreation;
- Development of an extensive trail system to accommodate recreational and educational desires of walkers, joggers, and bicyclists;
- Redevelopment of the Clapshaw landfill, after closure, to accommodate active and passive recreational uses;
- Creation of seasonal storage ponds to store spring runoff in the Bottom for release during the dry summer months to augment flow in the river;
- Construction of wetlands to intercept and filter storm runoff;
- Construction of wetlands to "polish" treated effluent from USA's waste treatment facilities prior to release to the Tualatin;
- Encourage greater use of wastewater for irrigation.

The multi-use nature of the Concept Plan could become a prototype for similar programs in the region.

In December 1987, the Portland City Council authorized a $400,000 engineering and planning study to produce a Columbia Slough Management Plan. The Plan was undertaken to proactively respond to increasing regulatory emphasis by DEQ and EPA on water quality issues, in part brought about by litigation pertaining to the Tualatin River, citizen concern about water quality in the Slough, and the relationship of the Slough to other key City projects such as the Columbia South Shore Industrial Development.

The City's approach to the project is to first define the desired uses of the Slough (swimming, boating, wildlife habitat, urban drainageway), then to identify required water quality to enable desired uses, and then to select the appropriate water quality management techniques to achieve the water quality necessary and integrate them into a management plan that will allow the uses. A Background report documenting the results of investigations into existing water quality and identifying available water pollution control techniques was published in February.

Four potential end use scenarios have been identified. These range from management of the Slough as an urban drainageway, which would improve water quality minimally, to contact recreation, which would require significant improvement in water quality. Two middle of the road scenarios have also been identified emphasizing management of the Slough for wildlife habitat and recreation, although not contact recreation such as swimming. Preliminary cost estimates for achieving the end use scenarios have also been prepared. Later this summer or early fall the City Council is expected to select the preferred end use scenario in order for staff to commence preparation of the final Management Plan. METRO Planning and Development staff are serving on the Project Coordinating Committee, a technical advisory and coordinating body, for this study. Representatives of the Solid Waste Department are also coordinating preparation of the St. Johns Landfill closure plan with the City's proposed end use plan through this process. The Slough study has identified the landfill as a significant contributor to water quality problems in the Lower Slough.

DEQ's 1988 305 b report identifies Johnson Creek as a potentially water quality limited stream segment pending additional investigation and application of best management practices. The City of Portland has recently entered into an agreement with the U.S. Geological Survey to do background research on water management issues in the Johnson Creek Basin. The City has not yet defined what it wants to accomplish in the Basin but it is likely to address many of the same issues that METRO sought to address through its earlier Johnson Creek project. It is expected that a project coordinating committee similar to that of the Columbia Slough project will be formed by the City to help formulate any management plans. METRO will be a member of that committee.

POTENTIAL WATER QUALITY POLICY DIRECTIONS

CHAPTER IV
POTENTIAL WATER QUALITY POLICY DIRECTIONS

From inception of the Federal Water Pollution Control Act in 1972, Congress recognized that an areawide approach to water quality planning in metropolitan areas made sense due to the relationships among functional metropolitan economies, land use patterns, and water quality in the nation's watercourses. This was the premise for adopting Section 208 of the Act and remains applicable today.

CRAG formulated the original 208 Plan and METRO has since been responsible for the continuing planning process and annual updates of the Plan. Due to a lack of resources, METRO has not been able to maximize the regional dialogue on water resources issues since 1982. As a result, a decentralized approach to water quality management has evolved in the region, with a greater reliance on initiatives of state and local agencies than originally intended by Section 208 of the Act. While the system has remained generally effective, it has not operated as efficiently as may have been possible if fully coordinated at the regional level.

An outline of a work program (see Preface), organized by water quality issue, could be pursued to compile a regional water quality overview. This will be discussed at METRO's Water Resources Policy Alternatives Committee (WARPAC) meeting scheduled for July 13, 1989. WARPAC is the technical advisory committee for water resource issues appointed through Council resolution. It is the principal vehicle through which the annual updates of the 208 Plan have been recommended since adoption of the original plan.

208 Plan Update

The 208 Plan update in 1989 should commence the process of reassembling a regional water quality overview. In fact, in recertifying METRO as the designated areawide water quality planning agency for the Portland metropolitan area both in 1988 and earlier this year, EPA has urged METRO to reassume a leadership role in water quality planning. The significant impact that new rules and requirements will have on the region emphasize the regional context to which the Portland metropolitan area community can relate.

In response to the 1987 Amendments to the Clean Water Act, associated federal and state water quality rulemaking, and successful civil litigation filed to enforce provisions of the Act, a great deal of new water quality data will be available in the region which can form a basis on which to reassemble a regional picture of water quality problems, management needs and priorities. Simultaneous with the 1989 and 1990 updates of the 208 Plan, the State Clean Water Strategy, the Sandy and Willamette Basin Studies

and a number of related programs are underway through which regional clean water priorities can be expressed and incorporated into the statewide priority system. By compiling an accurate regional picture of water quality management needs, METRO can influence development of state programs to the advantage of the metropolitan region as a whole.

Regional Stormwater Management Plan Update

The Clean Water Act amendments of 1987 placed a renewed emphasis on stormwater management, subjecting industrial and municipal discharges to the National Pollutant Discharge Elimination System permit process. The draft rules, if adopted, would have a significant impact on water quality and land use programs currently in place.

METRO's Regional Stormwater Management Plan has already laid the foundation for implementing the proposed stormwater rules. It divides the region into eight urban watersheds, has identified best management practices and several implementing agencies for management of the system. While an overall structure is provided, the document is too generic to respond to the specific's of the draft rules, both in terms of the inventories required and the specific implementation programs and priorities. A massive data gathering effort would be required, most of it based on existing data or casual field observation, to update the Plan.

A potential approach to the Plan would be for METRO to aggregate, synthesize, and evaluate inventory data supplied by local jurisdictions and possibly the State. Effective stormwater management programs and control techniques could then be identified and ,in concert with local jurisdictions, management programs designed for identified watersheds. The implementation and maintenance responsibilities of management and maintenance entities could then be delineated, and the actual structure of the permit program instituted and administered within the overall regional framework.

The lack of a funding source for METRO to comprehensively update the Regional Stormwater Management Plan would be a major constraint. It is likely that a comprehensive update to the Plan would require additional personnel and be a multi-year effort. The 205(j) funds are the only known existing source from which METRO could draw and it is likely that they will be phased out with the transition from a federal facilities grant program to a state revolving loan program.

There is also the possibility, however, that the local costs for implementing the draft stormwater rules will be so high that the federal government might be forced to allocate new grant funds specifically for this purpose. This is an unlikely scenario,

however, given the President's current reticence to fund Clean Water Act programs at maximum authorized levels.

Selective Stormwater Management Initiatives

Short of a comprehensive update of the Regional Stormwater Management Plan, METRO could undertake narrower, more selective initiatives in this area. Simply working within and interpreting the draft stormwater rules for local jurisdictions, developing checklists of activities needed to implement the rules, etc. may be useful. Developing a manual of "best management practices" through which stormwater quality objectives may be met is another area of "technical assistance" METRO could provide. Coordination of local stormwater efforts is another area of potential involvement.

More closely related to physical planning efforts, METRO could undertake a reconnaissance of potential areawide stormwater retention sites. It may be possible to identify opportunities for extending and enhancing wetlands and corridors of natural vegetation that could serve the dual purpose of furthering METRO's parks and natural areas program and retaining and treating stormwater. Such a program could also focus on just one or a limited number of the watersheds identified in the Regional Stormwater Management Plan rather than all of them. For example, we may want to work jointly on Johnson Creek with the City of Portland, or perhaps with USA on those urban drainages within Washington County. "The North Clackamas County Blue Ribbon Committee on Government Services" lists METRO among the agencies to be considered as a possible "regional" drainage authority for east urban unincorporated Clackamas County. Similarly we may want to assemble detailed stormwater management programs on one or a more specified drainages as called for in the adopted Plan.

Designated Management Agency for DEQ's 319 Program

The purpose of the 319 Plan is to describe a system of programs and practices which will protect the water quality of Oregon's waterways through control of nonpoint sources of pollution. The Plan is proposed to cover a five year period commencing when the EQC and EPA adopt the planning program to achieve implementation of best management practices for nonpoint source pollution. Hearings on the draft plan are scheduled for this summer with adoption of the program plan anticipated by the end of 1989. As part of the program, DEQ will have the following responsibilities:

- Develop appropriate water quality standards;
- Coordinate monitoring of water quality and beneficial use support;

- o Identify nonpoint source program needs and objectives;
- o Facilitate the development of effective nonpoint source programs;
- o Evaluate the effectiveness of best management practices and program implementation;
- o Providing leadership in identifying and obtaining the funding and staffing resources necessary to carry out the program.

DEQ will be looking toward federal, state, and local interagency agreements and memoranda-of-understanding to facilitate implementation of the program. This will be done through a formalized process of nomination and negotiation with potential management agencies. Each designated management agency (DMA) will have a different set of responsibilities and jurisdictions. The roles may vary from one nonpoint source management issue to another. Urban stormwater management seems to be a most logical nonpoint source responsibility for METRO. Section 319 of the Act allocates federal grants for nonpoint source management programs although no funds have yet been appropriated pursuant to section 319.

All DMA's must demonstrate the following characteristics:

- o Possess the legal authority, technical competence, organizational ability, and financial resources to carry out all or part of a nonpoint source control program, as stipulated in an agreement with DEQ;
- o Is a public organization with public accountability and with active public involvement in its program;
- o May be a single agency, a program within DEQ, or a system of agencies working together to implement a nonpoint source control program.

Columbia River National Estuary

If the federal government endorses Governor Goldschmidt's nomination of the Columbia River as an estuary of national significance, METRO would be a logical entity to coordinate this region's input into associated water quality management plans. We need to track progress of the proposal closely to be prepared to assume leadership in this area. Section 320 of the Clean Water Act does allocate federal grants toward estuarine water quality programs, although appropriations have not yet been approved.

Integrating Water Supply and Water Quality Issues

In order to truly manage water resources, there is a need to integrate water supply and water quality issues into a comprehensive water resources management plan that tracks the storage, distribution and use of potable water from its source to its ultimate outfall. Full reclamation of water is the logical outcome of implementing the Clean Water Act. This is the direction that has evolved in Washington County through WAMCO. While METRO has not been very involved with that committee, nor very aware of its progress, the concept is a good one and should be promoted throughout the region. Initial discussion with representatives of the WAMCO Steering Committee indicate that closer coordination with METRO is feasible. Better information sharing would be a good first step. Once we learn what they have, we would be in a better position than WAMCO to promote the concept in other portions of the region.

Urban Growth Management Plan

The Clean Water Act recognizes the clear link between land use and water quality. Comprehensive land use plans determine in large part the probable locations of point source discharges to the nation's waters as well as potential pollutant loadings from nonpoint sources of pollution based on generalized land use categories. METRO will forge that linkage in the region through preparation of an Urban Growth Management Plan. Water quality is one of the issues that should guide future urban growth in the Portland metropolitan region.

The Plan and associated data base could serve as the regional basis of water quality planning. In addition to the land use scenarios presented in the Plan, the geographic information system being developed utilizes the same software (ARC-INFO) that DEQ is utilizing in developing the State Clean Water Strategy. DWR also is using this system in its Basin Plans. A compatible land use/water quality data base can be compiled through these programs and could be integrated into a very powerful planning tool not previously available in the region.

APPENDIX A

APPENDIX A
FEDERAL WATER QUALITY PROGRAM FRAMEWORK

The format of the Clean Water Act is straightforward. It is divided into six major chapters, known as "Titles" as follows:

- Title I, "Research and Related Programs," declares national water quality goals/policies and states the overall Act's intent. It outlines the research and demonstration programs eligible for federal funding to promote the Act's goals.

- Title II, "Grants for Construction of Treatment Works," delineates the federal grant programs for designing and constructing local publicly owned sewage transmission and treatment facilities. It also includes the provisions for areawide waste treatment management planning programs that the Act identifies as the key comprehensive planning programs through which the goals of the Act are to be achieved. Both point and nonpoint sources of water pollution are to be addressed by these programs as well as a land use framework for minimizing future impacts to water quality.

- Title III, "Standards and Enforcement," identifies the water quality standards and water quality assessment processes to be applied in meeting the goals of the Act. These are to be promulgated and carried out by public agencies and establish the empirical basis on which progress in meeting the goals of the Act is evaluated. If public agencies do not responsibly administer Title III in a timely fashion, it can become the basis of citizen suits against public agencies for non-enforcement of the Act's provisions.

- Title IV, "Permits and Licenses," establishes the regulatory basis through which point source discharge violations can be cited, civil penalties assessed, and enforcement orders adopted either by designated regulatory agencies or the courts. This chapter of the Act establishes the Federal National Pollutant Discharge Elimination permit system through which the quality and quantity of point source discharges to the waters of the United States are regulated. It also establishes the Corps of Engineers program for regulating dredge and fill activities in the nations waters. This is the federal basis on which permits for altering wetlands and associated mitigation programs are required.

- Title V, "General Provisions," lists provisions typical of most legislation including definition of terms used in the Act, employee protection clauses pertaining to "whistle - blowing," federal procurement processes, and "separability" clauses stating that if any one or a combination of sections is successfully challenged in a court of law, it does not jeopardize other provisions of the Act. This chapter of the

Act also gives every citizen of the United States standing in a court of law to challenge public and private actions or inaction that are not in compliance with its provisions.

- Title VI, "State Water Pollution Control Revolving Funds," was added through the Act's 1987 amendments. It outlines the process through which state revolving loan funds are to be established and certified. It delineates the federal allotments process for allocating seed grants to states to foster the nationwide transition from a federal construction grants to state revolving loans program for construction of publicly owned waste transmission and treatment systems.

The individual sections of the Act are numbered to correspond to the six Titles. Sections under Title I are numbered sequentially starting with Section 101. They currently end at Section 118. Sections under Title II are numbered starting with Section 201 and currently end at Section 219. The same format is used in the other four Titles. It is useful to remember this format since planners, lawyers, other technocrats and interests often refer to specific water quality activities in terms of the sections of the Act in which they are stipulated. It's part of the "jargon." For example, Title II Section 208 of the Clean Water Act calls for the creation of Areawide Waste Treatment Management Plans, also referred to as "208" plans.

The Clean Water Act is so complex that to fully understand and implement its provisions you really cannot segment out and focus on any one section. There are certain sections whose provisions more directly relate to water quality planning, as opposed to facilities construction and operation. These are the areas where METRO has been and is likely to be most active. The planning aspects of these sections are discussed below.

Section 101 establishes the legislative intent of the Clean Water Act and articulates the goals and policies noted above. This section also establishes the water quality program hierarchy. It establishes the U. S. Environmental Protection Agency (EPA) as the federal administrator of the program. It establishes states as the managers of the construction grants program, the national pollution discharge program and programs pertaining to dredging and filling in the nations waterways. It calls for areawide waste treatment management planning processes to assure adequate control of sources of pollutants in each state. EPA is the chief executive officer, the states are the regional managers/administrators, and designated areawide agencies (METRO) are the line managers and supervisors.

Section 201 establishes the federal construction grants program for publicly owned waste transmission/treatment facilities, the core of the Act's municipal point-source pollutant control strategy.

Section 205 establishes the allotments, i. e. formulas, under which

federal grant funds authorized by congress are to be allocated to the states to implement specific programs stipulated in the Act. Of particular significance to METRO, this section contains provisions requiring states to pass through a percentage of the annual construction grants appropriations to "regional public comprehensive planning organizations" for development and implementation of water quality management plans.

Section 207 identifies the congressional spending authorizations, the overall potential "pot" of federal funds, for implementing provisions of the Act in specific fiscal years. While the authorizations identify funding ceilings, they should not be confused with ultimate appropriations over which the Executive Branch has more control. Actual federal appropriations have not been at the maximum levels authorized by Congress the last several years. As indicated above, the current Executive Branch budget proposal for FY 1990 is consistent with this trend.

Section 208 establishes the areawide waste treatment management planning program. The Act recognizes that as a result of urban-industrial land use concentrations and other factors in common characteristic of identifiable geographic areas, such as the Portland metropolitan area, an areawide approach to water quality planning makes sense. Thus the Act both enables and encourages formation and designation of areawide agencies as the principal unit of government for the planning and implementation of water quality improvement programs.

Section 208 also states that the State is to be the principal planning agency for all portions where areawide planning agencies are not designated. Consequently, in 1975 METRO'S predecessor, the Columbia Region Association of Governments (CRAG) was designated by Governor Robert Straub as the areawide agency for the region. In 1978 CRAG adopted and the State and EPA certified the 208 Plan for the region. METRO adopted the Plan as its own in 1980. All 208 Plans are required to address the following:

- Identification of treatment works necessary to meet the anticipated municipal and industrial waste treatment needs of the area over a twenty-year period, updated annually, including any requirements for the acquisition of land for treatment purposes; the necessary waste water collection and urban storm water runoff systems; and a program to provide the necessary financial arrangements for the development of such treatment works; and an identification of open space and recreation opportunities that can be expected to result from improved water quality;

- Establishment of construction priorities for such works and time schedules for initiation and completion of such works;

- Establishment of a regulatory program to implement Section

201, regulate the location and modification to any facilities discharging to the area, and assure that industrial and commercial discharges to municipal treatment systems meet applicable pretreatment standards;

- Identification of those agencies necessary to construct, operate, and maintain all facilities required by the plan and to otherwise carry out the plan;

- Identification of the measures necessary to carry out the plan (including financing), the period of time necessary to carry out the plan, the costs of carrying out the plan within such time, and the economic, social, and environmental impact of carrying out the plan in such time;

- A process to identify agriculturally and silviculturally related nonpoint sources of pollution and their cumulative effects on water quality, procedures and methods (including land use requirements) to control, as feasible, such sources;

- A process to identify, if appropriate, mine related sources of pollution and set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

- A process to identify construction activity related sources of pollution and set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

- A process to identify, if appropriate, salt water intrusion into rivers, lakes, and estuaries resulting from reduction of fresh water flow from any cause and set forth procedures and methods to control such intrusion to the extent feasible where such procedures and methods are otherwise a part of the waste treatment management plan;

- A process to control the disposition of all residual waste generated in such area which could affect water quality;

- A process to control disposal of pollutants on land and in subsurface excavations within such area to protect ground and surface water quality.

208 plans are to be certified annually by the Governor or his designee and submitted to the Administrator of the EPA for his approval. At the time that this occurs, the Governor in consultation with the designated areawide agency, also designates one or more waste treatment management agencies for carrying out provisions of the plan and submits them for approval of EPA. Once a plan is in place and implementing agency (ies) are designated and approved, no federal 201 grants are allocated except to designated

agencies and no appropriated grant funds may be used except for waste treatment facilities contained in the adopted plan. Neither may any national pollution discharge permit be issued for any point source in conflict with the adopted plan.

Section 301 establishes the process and timeframes for EPA and the State to establish effluent quality standards for certain categories of point source discharges and for identifying and applying best practicable control technology to meet effluent quality standards.

Section 302 introduces the concept of establishing effluent quality limitations on the basis of the impact of the discharges on the quality of the receiving waters. This differs from Section 301 in that the standards are set for the purpose of achieving or maintaining the desired uses of the receiving waters as opposed to the chemical composition of the effluent itself.

Section 303 requires States to establish water quality standards for waterways within and along its boundaries. Where applicable water quality standards are not being met, this section requires the adoption of total maximum daily loads (TMDL's) for specific pollutants necessary to achieve adopted standards. As a result of litigation, this process has occurred to the Tualatin River. TMDL's have been established by DEQ and approved by EPA for nitrogen and phosphorous. The high level of activity currently underway in Washington County is attempting to respond directly to establishment of TMDL's.

Section 304 requires States to compile a list of those waters which after application of necessary effluent or water quality standards still cannot meet adopted standards due to toxic wastes discharged from point sources. EPA is required to adopt a plan establishing effluent guidelines for such toxic pollutants and update it biennially.

Section 305 requires States to biennially inventory all navigable waters in each state and prepare a report which includes:

- A description of the water quality of all navigable waters during the preceding year;
- An analysis of the extent to which those waters provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water;
- An analysis of the extent to which the elimination of the discharge of pollutants has met or will meet the desired water quality standards for the above uses and recommendations as to additional actions necessary to achieve those uses for specific waterways;

- An estimate of the environmental impact, economic and social costs necessary to achieve goals of the act and the timeframe it is estimated to take;

- A description of the nature and extent of nonpoint sources of pollutants and recommendations as to the programs necessary to control each category of nonpoint sources and the costs of implementing such programs.

The information included in DEQ's 1984 and 1986 "305" reports were the basis upon which the Northwest Environmental Defense Center successfully litigated the need to establish TMDL's for the Tualatin River and other water quality limited stream segments in Oregon. A hearing on the 1988 report was held on June 14, 1989.

Section 309 outlines penalties for violations to certain permit programs established by the Act and procedures for reporting violations and prosecuting violators.

Section 314 calls for biennial reports to be prepare by states addressing water quality problems of lakes including the following issues:

- An identification and classification according to eutrophic condition of all publicly owned lakes in each state;

- A description of procedures, processes, and methods (i.e., land use requirements) to control sources of pollution of such lakes;

- A description of methods and procedures, in conjunction with appropriate Federal agencies, to restore the quality of lakes;

- Methods and procedures to mitigate the harmful effects of high acidity, including innovative methods of neutralizing and restoring buffering capacity of lakes and methods of removing from lakes toxic metals and other toxic substances mobilized by high acidity;

- A list/description of publicly owned lakes for which desireable uses are known to be impaired by poor water quality or which need a management program to meet applicable water quality standards, and a list of lakes where water quality has deteriorated as a result of high acidity that maybe reasonably assumed to have resulted from acid deposition;

- An assessment of the status and trends of water quality in lakes, including the extent to which the use of lakes is impaired as a result of point and nonpoint sources of pollution and an identification of the nature and extent of pollutant loadings from both point and nonpoint sources.

This report is to be incorporated into the 305 reports prepared biennially by States. Section 314 also establishes a grant program for addressing assessment of lake water quality and preparation and implementation of clean-up programs.

Section 319 was added during the 1987 amendments to the Clean Water Act specifically to address nonpoint source pollution problems. It requires States to submit a report identifying waters that are not expected to meet water quality standards because of nonpoint source pollution and submit a management program describing methods that are proposed to reduce nonpoint pollution within eighteen months of adoption of the 1987 amendments (the amendments were adopted on February 4, 1987). DEQ published a draft report and distributed it for comment in November 1988. This information has been incorporated into DEQ's 1988 305 report.

Both the Act and DEQ's report allow regional or local agencies to become "designated management agencies" for implementing Section 319. In addition, the Act sets aside some grant monies to implement Section 319 at a maximum 60:40 federal:local match. METRO has requested DEQ to consider naming us a designated management agency for the program. A 50:50 federal:local matching grant program for groundwater protection is also established by Section 319.

Section 320 of the Act establishes a comprehensive program for cleaning up the nations estuaries, including a separate grant program. In March 1989 Governor Goldschmidt nominated the Columbia River as an estuary of national significance from its mouth to the Bonneville Dam.

Section 402 of the Act establishes the NPDES requiring point source discharges from industry and municipalities to obtain regulatory permits. States manage the permit program for EPA.

For the first time, the 1987 amendments subjected stormwater discharges to the NPDES permit program. Within 2 years of adoption of the 1987 amendments EPA is to adopt permit application requirements for all industrial stormwater discharges and for separate storm sewer systems serving a population of 250,000 or more. Within 4 years of adoption of the amendments permit application requirements are to be adopted for separate storm sewer systems serving more than 100,000 but less than 250,000. By 1992, application requirements may be extended to any:

> "discharge for which the Administrator of the State, as the case may be, determines that the stormwater discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to the waters of the United States."

EPA is currently in the process of rulemaking to address these provisions of Section 402. In their draft stormwater rules it is interesting to note that EPA defines residential construction activity on sites 5 acres or more in size as an industrial discharge. For commercial and industrial sites, the size threshold is one acre. After October 1992 it is likely that the permits will be required for additional stormwater discharges.

Section 404 establishes the Corps of Engineers permitting program relating to the dredge and fill activities in the nations waterways. The permit process is the regulatory basis through which mitigation programs are required when wetlands (encompassed within the broad definition of the nations waterways) may be disturbed by proposed dredging, draining or fill activities. Legislation has been proposed (SB 3) that would provide the Division of State Lands greater permit issuance authority in this area.

Section 405 establishes a program to regulate the concentration of toxics in sewage sludge. It stipulates that NPDES permits for publicly owned treatment works are also to be used to regulate the quality and disposal of sewage sludge.

Section 505 states that any citizen may commence a civil action on his own behalf against any person, including the U. S. and any other governmental instrumentality or agency for violating and effluent standard or limitation under the Act or an order issued by the Administrator of EPA or the State with respect to such standard or limitation. Civil action may also be commenced against the Administrator where there is an alleged failure to perform any act or duty under the Act which is not discretionary. The term citizen is defined as a person or persons having an interest which is or may be adversely affected.

Section 516 requires EPA to submit a comprehensive status report on the measures taken toward implementing the objectives of the Act within 90 days of convening of each session of Congress. Problems with implementing specific provisions of the Act as well as associated cost estimates to fully implement the Act are to be included. No later than February 10, 1990, EPA is also to submit a report on the financial status and operations of revolving loan funds established by Title VI of the Act.

Section 601 authorizes capitalization grants to each state for the purpose of establishing a water pollution control revolving fund for construction of publicly owned treatment works, for nonpoint source management programs, and for national estuary programs.

Section 602 requires States to enter into capitalization grant agreements with EPA in order to be eligible for such grants. Among the conditions the State has to commit to is a 20% match of the total amount of all capitalization grants made under Title VI.

Section 603 requires States to establish revolving loan funds before capitalization grants can be issued. Eligible types of assistance for which revolving loan funds may be utilized include:

- Loans made for the construction of treatment works provided that they are made at or below market interest rates (including interest free loans) at terms not to exceed 20 years;

- To buy or refinance the debt obligation of municipalities, inter-municipal, and interstate agencies at or below market interest rates where debt obligations were incurred after March 7, 1985;

- To guarantee or purchase insurance for local obligations where such action would improve credit market access or reduce interest rates;

- As a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the State if the proceeds of the sale of such bonds will be deposited in the fund;

- To provide loan guarantees for similar revolving funds established by municipalities or inter-municipal agencies;

- To earn interest on fund accounts; and

- For the reasonable costs of administering the fund and conducting activities under Title VI provided such amounts shall not exceed four percent of all grant awards to such fund under this Title.

Section 604 requires that any capitalization grants issued to the States must be obligated within the fiscal year in which it was issued and the following fiscal year, otherwise it is to be returned to the federal government and reallotted to other States.

Section 606 requires each State to annually prepare an Intended Use Plan identifying the intended uses of the amounts available to its revolving fund for the forthcoming year. An Annual Report is also to be prepared describing how in fact the funds were spent and comparing actual expenditures to those anticipated in the Intended Use Plan.

Section 607 authorizes appropriation ceilings for capitalization grants for fiscal years 1989 - 1994.

APPENDIX B

APPENDIX B
REGIONAL WASTEWATER MANAGEMENT PLAN DOCUMENTS AND DESIGNATED MANAGEMENT AGENCIES

1. Regional Wastewater Management Plan, Maps, and Text, as amended December 1988, Metropolitan Service District

2. Volume 1, Proposed Plan, November 1977, as amended by amendments 1 through 8 adopted October 2, 1980, Metropolitan Service District

3. Volume 2, Planning Process, November 1977, Columbia Region Association of Governments (adopted by Metropolitan Service District, October 1980)

4. Technical Supplement 1, Planning Constraints

5. Technical Supplement 2, Water Quality Aspects of Combined Sewer Overflows, Portland, Oregon

6. Technical Supplement 3, Water Quality Aspects of Urban Stormwater Runoff, Portland, Oregon

7. Technical Supplement 4, Analysis of Urban Stormwater Quality from Seven Basins near Portland, Oregon

8. Technical Supplement 5, Oxygen Demands in the Willamette

9. Technical Supplement 6, Improved Water Quality in the Tualatin River, Oregon, Summer 1976

10. Technical Supplement 7, Characterization of Sewage Waste for Land Disposal Near Portland, Oregon

11. Technical Supplement 8, Sludge Management Study

12. Technical Supplement 9, Sewage Treatment Through Land Application of Effluents in the Tualatin River Basin and Supplemental Report, Land Application of Sewage Effluents - Clackamas and Multnomah Counties. Portland - Vancouver Metropolitan Area Water Resources Study, U. S. Army Corps of Engineers, 1979

13. Technical Supplement 10, Institutional, Financial and Regulatory Aspects

14. Technical Supplement 11, Public Involvement

15. Technical Supplement 12, Continuing Planning Process

16. Technical Supplement 13, Stormwater Design Manual

17. City of Gresham Sewerage System Master Plan, Brown and Caldwell, December 1980

18. Sewerage System Facility Plan for the I-205 Corridor and the Johnson Creek Basin, City of Portland, Oregon, Bureau of Environmental Services, June 1984

19. Sewerage System Master Plan Update, Central County Service District No. 3, Multnomah County, Oregon, Kramer, Chin and Mayo, Inc., July 1983

20. Mid-Multnomah County Sewer Implementation Plan, CH2M HILL, September 1985

21. Findings and Order In the Matter of the Proposal to Declare a Threat to Drinking Water in a Specially Defined Area in Mid-Multnomah County Pursuant to ORS 454.275 et seq., Environmental Quality Commission, as ordered on April 25, 1986

22. Evaluation of Hearing Record for Proposal to Declare a Threat to Drinking Water in a Specially Defined Area in Mid-Multnomah County Pursuant to ORS 454.275 et seq., Department of Environmental Quality, January 1986 and February 1986

23. City of Gresham Waste Water Treatment Plant Facilities Plan, Brown and Caldwell, February 1985, Amended January 1986 by Black and Veatch

24. City of Gresham Mid-County Interceptor Sewers Facility Plan, Brown and Caldwell, May 1987

DESIGNATED WASTWATER MANAGEMENT AGENCIES

MANAGEMENT AGENCY CLASSIFICATIONS

Management Agency	Operating*	Planning	Regulatory
Beaverton	C	X	X
Cornelius	C	X	X
Durham		X	
Fairview	C	X	X
Forest Grove	C	X	X
Gladstone	C	X	X
Gresham	T,C	X	X
Happy Valley	C	X	X
Hillsboro	C	X	X
Johnson City	C	X	X
King City	C	X	X
Lake Oswego	T,C	X	X
Maywood Park	C	X	X
Milwaukie	C	X	X
Oregon City	C	X	X
Portland	T,C	X	X
Rivergrove	C	X	X
Sherwood	C	X	X
Tigard	C	X	X
Troutdale	T,C	X	X
Tualatin	C	X	X
West Linn	C	X	X
Wilsonville	T,C	X	X
Wood Village	C	X	X
Clackamas County		X	X
Multnomah County		X	X
Washington County		X	X
Clackamas County S.D.#1	T,C	X	X
Dunthorpe-Riverdale County S.D.	C	X	X
Tri-City Service District	T,C	X	X
West Hills S.D. #2	C	X	X
Oak Lodge Sanitary District	T,C	X	X
Unified Sewerage Agency	T,C	X	X
Metro	Solid Waste Facilities Only	X	X
State DEQ	NA	X	X
State Water Resources Department	NA	X	X
Department of Agriculture	NA	NA	X
Department of Forestry	NA	NA	X
Portland Metropolitan Area Local Government Boundary Commission	NA	NA	X

*T = Treatment and/or Transmission System Operation
C = Collection System Operation
NA = Not Applicable

APPENDIX C

APPENDIX C
REGIONAL STORMWATER MANAGEMENT PLAN DOCUMENTS AND DESIGNATED MANAGEMENT AGENCIES

STORMWATER MANAGEMENT DOCUMENTS

1. Regional Stormwater Management Plan Text, Metropolitan Service District, February 1982

2. Regional Drainage Basin Maps, Metropolitan Service District, February 1982

3. Regional Stormwater Management Inventory, Metropolitan Service District, April 1980

4. Technical Supplement 13, Stormwater Management Design Manual, Metropolitan Service District, Spring 1980

5. Technical Report #1, Basic Data Report, Portland State University, 1981

6. Technical Report #2, Instream Water Quality, Portland State University, 1981

7. Technical Report #3, Effectiveness of Selected Management Practices, Portland State University, 1981

8. Technical Report #4, Regional Drainage Basins Report, Portland State University, 1981

9. Technical Report #5, Monitoring Report, Portland State University, 1981

DESIGNATED STORMWATER MANAGEMENT AGENCIES

LOCAL DRAINAGE MANAGEMENT AGENCIES BY REGIONAL DRAINAGE BASIN

1. Rock Creek Basin

   Hillsboro
   Portland
   Multnomah County
   Washington county

2. Beaverton/Cedar Mill Creek Basin

   Beaverton
   Portland
   Multnomah County
   Washington County

3. Fanno Creek Basin

   Beaverton
   Durham
   Lake Oswego
   Portland
   Tigard
   Tualatin
   Clackamas County
   Multnomah County
   Washington County

4. Tryon Creek Basin

   Lake Oswego
   Portland
   Clackamas county
   Multnomah County

5. Kellog/Mt. Scott Creek Basin

   Gladstone
   Happy Valley
   Milwaukie
   Clackamas County
   Washington County

6. Johnson Creek Basin

   Gresham
   Happy Valley
   Milwaukie
   Portland
   Clackamas County
   Multnomah County

7. Fairview Creek Basin

   Fairview
   Gresham
   Troutdale
   Wood Village
   Multnomah County

8. Beaver/Kelly Creeks

   Gresham
   Troutdale
   Multnomah County

APPENDIX D

APPENDIX D
PROPOSED FEDERAL STORMWATER DISCHARGE RULES AND APPLICATION PROCESS

The draft rules outline stormwater permit application processes for both the industrial and municipal stormwater permit programs. Application requirements for industrial stormwater permits include submittal of the following information:

- A narrative and map of topographic features indicating the drainage areas in which a permit application is proposed;
- An estimate of the impervious area of the site;
- A discussion of current management practices used to control stormwater pollutants from the site;
- A narrative and chronology of the history of any leaks or spills that have occurred on the industrial site;
- A certification that outfalls to which the site contributes discharges have been evaluated for non-stormwater discharges;
- Quantitative testing data of stormwater discharges to which the industrial site contributes.

In addition to construction sites as defined above, all industries that discharge stormwater directly into U.S. waters are required to obtain a permit. Even though a discrete stormwater conveyance system, such as a pipe or culvert, may not be identified, hazardous waste treatment, storage and disposal facilities, landfills, salvage yards and scrap yards, and any other stormwater discharges contributing to a violation of water quality standards, or which are significant contributors of pollutants may be subject to the NPDES program at the discretion of EPA or the State.

In order to expedite the permitting process to the extent feasible, the proposed rules allow the filing of group applications and the issuance of group permits for specific types of industries as a category (i.e. all wood pulp mills, all textile mills, etc.) or all land uses with similar characteristics and stormwater pollution potential (i.e. retail commercial plazas and warehouses in excess of 500,000 square feet of floor area, etc.). These could be for a municipality, region, state, or the nation. Group permit applications would be required to submit the following information:

- A list of proposed participants/joint applicants broken down by the nine EPA-recognized nationwide precipitation zones;
- A summary of the industrial activities of each participant;
- A narrative explaining why the participants are suitable for

consideration of a group permit;

- A description of the groups material storage practices and list of significant materials stored outdoors;

- An identification of the specific ten percent of the facilities that will submit quantitative water quality and discharge data for review on behalf of the group;

- A series of topographic maps indicating the drainage area in which each facility is located;

- Information on impervious areas, existing structural stormwater controls at each facility, past and present material storage practices, chronology of past leaks and spills at each facility;

- Certification that outfalls to which individual participants discharge have been evaluated for non-stormwater discharges;

- Water quality and discharge test data for the specified ten percent of the facilities;

Through October 1992, municipal stormwater permits will only be required for separate storm sewer systems serving in excess of 100,000 population and for municipal stormwater discharges, regardless of size, that may be interfering with achievement of water quality objectives that would enable designated beneficial uses of the nation's waterways. After 1992 it is quite possible that the municipal stormwater permit system would apply to all municipal stormwater discharges.

The draft rules propose a two-part application process for municipal stormwater discharges. The following information would be required to be submitted for part one:

- A statement of the legal public entity that manages stormwater and associated discharges and a description of its funding authority and sources;

- An identification of stormwater discharge sources including topographic maps, estimates of drainage areas,land use activities in drainages, description of facilities that discharge into the stormwater system, location of known system outfalls and existing management practices and structural controls relating to stormwater management;

- A compilation of existing data on the volume and quality of stormwater discharges;

- A list of receiving water bodies and existing information on receiving water quality;

- Documentation of a field screening of major outfalls to detect possible illicit connections to the storm sewer system. Major outfalls are defined as pipes, culverts and other point sources that are a minimum of 36 inches in diameter or its equivalent and discrete conveyance system (ditch, swale, gully etc) associated with a drainage of 50 acres. If land is zoned for industrial activity the definition would include all point sources with a diameter of 12 inches or more or conveyances serving an area of two acres or more. The screening would include an less burdensome water quality testing program prescribed in the draft rules;

- A listing of outfalls for further investigation in part two of the application based on results of the screening program;

- An identification of the outfalls to be utilized for collection of stormwater quality data in part two of the application.

Part two of the application process would include the following information submittals:

- A description of the proposed administration program for stormwater management including responsibilities of the co-permittees, if any, legal authority to control pollutants in stormwater discharges, prohibit illicit connections to stormwater systems and illicit discharges to the nation's waters, to require compliance with stormwater management programs, funding mechanisms to administer the program, and administrative capabilities of the organization(s);

- An identification of known major outfalls and drainage areas, location of landfills and publicly owned lands, an inventory of facilities that discharge stormwater associated with industrial activity into the municipal system, the location of major structural stormwater controls;

- A characterization of stormwater discharges based on stormwater quality testing program prescribed in the draft rules;

- Stormwater management implementation programs including programs to control illicit connections and illegal dumping, reduce pollutants in commercial and residential areas, reduce pollutants in construction site runoff, reduce pollutants from industrial discharges into municipal stormwater systems. Stormwater pollution controls may be imposed on a system-wide, watershed, or jurisdictional basis, or on individual outfalls;

- A five year program and priority list for controlling stormwater pollution. Proposed that permits would be renewed every five years.