Chapter 372-04 POLICY—MEETINGS
372-04-050 Commission decisions and actions at meetings. [Rule .04.120, filed 3/1/60.] Repealed by Order 71-13, filed 9/8/71.

Chapter 372-08 PRACTICE AND PROCEDURE

Chapter 372-12 WATER QUALITY STANDARDS
372-12-010 Definitions. [Rule .04.210 (part), filed 3/1/60.] Repealed by department of ecology Order 73-4, filed 7/6/73.
372-12-020 Preface. [Rule .04.210 (part), filed 3/1/60.] Repealed by department of ecology Order 73-4, filed 7/6/73.
372-12-030 Standards. [Order DE 72-9, § 372-12-030, filed 4/24/72; Rule .04.210 (part), filed 3/1/60.] Repealed by order of department of ecology Order 73-4, filed 7/6/73.
372-12-080 Classification. [Docket 67-2, § II B, filed 12/4/67.] Repealed by department of ecology Order 73-4, filed 7/6/73.

(2001 Ed.)
Title 372

Authority: RCW 90.48.110. Later promulgation, see chapter 173-240 WAC. See also chapter 248-92 WAC.

Title 372 WAC: Ecology—Water Pollution

372-20-055

Compliance with RCW 90.48.110. [Rule .04.230 (part), adopted 12/3/53.] Repealed by 79-02-033 (Order DE 78-10), filed 1/23/79. Statutory Authority: RCW 90.48.110. Later promulgation, see chapter 173-240 WAC. See also chapter 248-92 WAC.

372-20-060


372-20-070

Sewage treatment works*—Reports and plans to PCC. [Rule .04.232 (part), adopted 12/3/53.] Repealed by 79-02-033 (Order DE 78-10), filed 1/23/79. Statutory Authority: RCW 90.48.110. Later promulgation, see chapter 173-240 WAC. See also chapter 248-92 WAC.

372-20-080

Requirements for engineers. [Rule .04.232 (part), adopted 12/3/53.] Repealed by 79-02-033 (Order DE 78-10), filed 1/23/79. Statutory Authority: RCW 90.48.110. Later promulgation, see chapter 173-240 WAC. See also chapter 248-92 WAC.

372-20-090


372-20-100


Chapter 372-24

PERMITS TO DISCHARGE COMMERCIAL AND INDUSTRIAL WASTES

372-24-010

Promulgation. [Rule .04.251, promulgation, adopted 7/21/55.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW. Later promulgation, see chapter 173-216 WAC.

372-24-020

Foreword. [Rule .04.250, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-030

Definitions. [Rule .04.251, § I, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-040

Operations requiring permits. [Rule .04.251, § II, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-050

Applications. [Rule .04.251, § III, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-060

Temporary permits. [Rule .04.251, § IV, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-070

Permanent permits. [Rule .04.251, § V, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-080

Permit forms. [Rule .04.251, § VI, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-090

Enforcement. [Rule .04.251, § VII, filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.

372-24-100

Permit specifications—General. [Rule .04.260 (part), filed 3/1/60.] Repealed by 83-23-073 (Order DE 83-29), filed 11/18/83. Statutory Authority: Chapters 43.21A and 90.48 RCW.


[Title 372 WAC—p. 2.]

(2001 Ed.)
Chapter 372-36 WAC

COLUMBIA BASIN IRRIGATION AREA—SEWAGE AND WASTE

WAC
372-36-010 Foreword. Residents of the Columbia Basin Irrigation Project Area are, and will continue to be, faced with problems involving the disposal of sanitary sewage and wastes from industry. Since there are no continuous streams in the area, waste material must be disposed of either on land or in reservoirs or in the drains provided for return irrigation water.

Most drains on the upper project area discharge to Moses Lake or Potholes Reservoir which supply some of the irrigation water for the lower area. Other return waters will eventually find their way by various drains and waterways to the Columbia.

There are extensive plans for the recreational development of Moses Lake, Potholes Reservoir and other lakes in the project area.

The preservation of water quality in the surface and ground waters of this project is important since such quality will affect the use of the water for irrigation, recreation and water supply. The quality of the Roosevelt Lake water used for irrigation will undoubtedly be altered in some manner by the leaching action in the soils to which it is applied. This change in quality is sure to affect its subsequent use, but is a change which for the most part is beyond control. Changes in water quality due to sewage and wastes, however, are subject to control and it is imperative that such control be exercised.

In addition to the public health problem, one of the most aggravating problems which is sure to exist in a presently undetermined degree is that of algae growths. These growths will appear in drains, lake and reservoirs in which return water is collected. Soil leachings will provide some of the nutrients for this growth. Sewage and industrial wastes can, if not controlled, substantially add to these nutrients. Algae growths may interfere with the use of the waters for recreation and will substantially increase maintenance on drains, canals, farm laterals, and sprinkler systems.

Another problem involved in the control of wastes discharged to the return water is that of preventing the discharge of certain material in quantities which will affect the soils or crops to which the water is applied. It is not presently known that such materials will result from industrial developments in the area; however, it is desirable that their presence be anticipated and regulations for their control be applied.

(2001 Ed.)

Other problems which should be similarly anticipated are the effects of waste materials on domestic and industrial water supplies. Most of the present supplies are taken from underground sources and further demands for increased supplies will result from the development of the area. In this connection, sanitation is a primary factor, but is not the only consideration. Odors, tastes, color, turbidities and the presence of certain chemical compounds are factors influencing the quality of a water supply. Since sewage and waste disposal must be accomplished in many cases by land surface or subsurface application, the possible effects on ground water supplies require that these methods of disposal be carefully controlled.

In order to provide for the necessary control of the anticipated effects of sewage and waste disposal on water quality in this area, the following regulations have been adopted. These regulations may be altered from time to time as experience dictates.

Attention is here directed to another set of regulations of ecology which apply in this area. These are "Rules and regulations for the submission and approval of plans for the installation of public sewage and industrial waste works and for the operation of such works." (See chapter 372-20 WAC.)

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-010, filed 6/8/88; Rule .04.241, filed 3/1/60.]

WAC 372-36-020 Promulgation. The following regulations regarding the discharge of waste products to the canals, drains, wasteways, reservoirs and ground waters of the Columbia Basin Irrigation Project Area and the minimum standards for the treatment and disposal of sewage and industrial wastes in this area are hereby adopted and promulgated.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-020, filed 6/8/88; Rule .04.241, filed 3/1/60.]

WAC 372-36-030 Domestic sewage rules. (1) Municipal and community. (Including school and industrial installations):

(a) The discharge of raw sewage is prohibited under any circumstances.

(b) The discharge of sewage treatment plant effluent into canals used for irrigation or stock watering is prohibited.

(c) The discharge of sewage treatment plant effluent into drains, wasteways, or reservoirs, from which water is subsequently reused in canals and laterals is prohibited, except by specific approval where special circumstances may require such discharge.

(d) The disposal of sewage treatment plant effluent by land application methods is prohibited in locations where such disposal would adversely affect surface or ground water withdrawn for domestic purposes. Discharge at extreme depths is prohibited.

(Note: Rules and regulations of the state board of health prohibit irrigation of certain crops with sewage plant effluent.)

(e) The minimum degree of treatment shall, in any case, be at least the equivalent of primary treatment and disinfection of the effluent.

(2001 Ed.)
(f) Additional treatment, of a degree to be determined for each case, shall be provided where specific approval is granted for discharge to drains, wasteways, or reservoirs.

(g) Additional treatment, of a degree to be determined for each case, shall be provided prior to disposal by land application methods when necessary to prevent possible contamination of ground and surface waters, or creation of a nuisance.

(h) Notwithstanding (a) through (g) of this subsection, the degree of treatment, the provision for disinfection and method of disposal shall be a matter for the determination and approval of the department of ecology for each individual case.

(2) Individual farm unit, household or other source of domestic sewage not covered by subsection (1) of this section.

(a) No raw sewage or septic tank effluent shall be discharged to any canal, reservoir, drain or wasteway.

(b) Households, farm units, schools, small business concerns or other sources of domestic sewage involving a limited number of persons shall provide sewage disposal facilities as prescribed by the county health department of the county in which the source is located.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-030, filed 6/8/88; Rule .04.242, filed 3/1/60.]

WAC 372-36-040 Industrial wastes—General requirements. The following materials shall not be discharged to any drain or wasteway in excess of the concentration specified in each case. In no case will any of these materials be discharged to a canal:

1. No oils, tars, cleaning compounds or inflammables.
2. No phenols or pheno-like compounds in excess of 0.05 parts per million.
3. No toxic materials such as:
   a. Fruit washing compounds
   b. Wood preservatives
   c. Insecticides—aldrin, rotenone, BHC, DDT, and all other similar products
   d. No weed killers
   e. Metallic or nonmetallic products of metal processing or plating—acids, alkalies, cyanides, copper, etc.
4. Total salts, maximum 2500 parts per million.
5. No salts or elements injurious to crops, soils or animals—aluminium, boron, arsenic, selenium, lead, manganese, etc.
6. No wastes with a pH less than 6.5 or greater than 8.5.
7. No floating solids.
8. No suspended solids in excess of that which can be removed by approved clarification or settling with a 2-hour detention period.

[Rule .04.243(A), filed 3/1/60.]

WAC 372-36-050 Industrial wastes—Ground water requirements. Wastes containing materials listed in WAC 372-36-040 (1) through (5) above, shall not be disposed of in such a way as to enter the ground water.

[Rule .04.243(B), filed 3/1/60.]

WAC 372-36-060 Specific requirements of each industry—Milk plants. (1) Condenser water, cooling water and ice machine water may be discharged to drains or wasteways, but not to canals.

(2) Wastes after proper treatment may be discharged to a drain or wasteway, if such discharge is approved by the department of ecology. The preferred methods of disposal of milk waste are:

   a. Small receiving stations or bottling plants—connection to city sewers, or irrigation.
   b. All others—irrigation or treatment by filtration or activated sludge.

(3) Milk waste may be used directly for irrigation under a controlled system whereby no nuisance is caused.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-060, filed 6/8/88; Rule .04.243 (C)(1), filed 3/1/60.]

WAC 372-36-070 Specific requirements of each industry—Canning, freezing and dehydration. (1) Cooling waters may be discharged to drain or wasteway.

(2) Wastes shall be screened (20-mesh standard gauge) and disposed of by lagooning, irrigation or in leaching trenches.

[Rule .04.243 (C)(2), filed 3/1/60.]

WAC 372-36-080 Specific requirements of each industry—Meat packing. No wastes from slaughterhouses or meat packing plants shall be allowed to enter any drain or wasteway. Recommended methods of disposal are:

(1) In all cases, blood, paunch manure, fleshings and grease shall be collected for rendering or some other type of utilization.

(2) Wastes from small operations after complying with subsection (1) above may be accepted in city sewer system or may be treated by a combination grease trap-septic tank and drain field.

(3) Wastes from large plants after complying with subsection (1) above may be treated by filtration and the effluent used for irrigation but not discharged to a canal, drain or wasteway.

[Rule .04.243 (C)(3), filed 3/1/60.]

WAC 372-36-090 Specific requirements of each industry—Beet sugar. (1) No lime wastes, process waters or Steffen's waste shall be discharged to any drain or wasteway or in any way such that it may reach ground water.

(2) Flume water may be discharged to a drain or wasteway, but only after grit removal and reuse in the flumes with not more than 40 percent make-up. The waste water discharged to provide for the make-up must be settled in a tank equipped for continuous sludge removal and having a detention period of 2 hours.

(3) Flume water may be lagooned or used for irrigation.

[Rule .04.243 (C)(4), filed 3/1/60.]

WAC 372-36-100 Specific requirements of each industry—Potato washings. (1) Wash water shall not be
discharged to any wasteway or drain if it is possible to dispose of the water by irrigation on land.

(2) If wash water is to be discharged to any wasteway or drain it must first be settled in a tank equipped with continuous sludge removal equipment and having a detention period of 2 hours or in a lagoon with a similar detention period with sufficient additional space for sand and solids accumulation.

(3) Wash water may be lagooned or used for irrigation.

[Rule .04.243 (C)(5), filed 3/1/60.]

**WAC 372-36-110 Specific requirements of each industry—Sand and gravel washing.** No sand and gravel washings will be discharged to a drain or wasteway unless first passed through a lagoon with a settling period of 2 days.

[Rule .04.243 (C)(6), filed 3/1/60.]

**WAC 372-36-120 Specific requirements of each industry—Livestock wastes.** (1) Feed lots or hog wallows shall not be located within 100 feet of any wells used for public water supply.

(2) Feed lots or hog wallows shall be so located that surface runoff or waste water from the lot will not enter any canal, drain, wasteway or reservoir.

(3) Livestock and poultry carcasses shall not be deposited in any canal, drain, wasteway or reservoir.

[Rule .04.243 (C)(7), filed 3/1/60.]

**WAC 372-36-130 Specific requirements of each industry—Miscellaneous operations.** (1) Garbage disposal areas and incinerators shall be so located to preclude discharge of drainage to any canal, drain, wasteway or reservoir.

(2) Operations not covered by these requirements will be considered individually and requirements established as the need arises.

[Rule .04.243 (C)(8), filed 3/1/60.]

**Chapter 372-52 WAC**

**WATER DISTRICTS REQUESTS FOR APPROVALS AND CERTIFICATIONS OF NECESSITY TO OPERATE SEWER DISTRICTS**

**WAC**

372-52-010 Definitions.

372-52-020 Purpose.

372-52-030 Application content.

372-52-040 Notification of interested parties.

372-52-050 Criteria for necessity.

372-52-060 Decision of ecology.

372-52-070 Limitation of an approval and a certification of necessity.

**DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER**


**WAC 372-52-010 Definitions.** For purposes of this chapter, the following definitions are applicable:

(1) "Ecology" shall mean the Washington state department of ecology.

(2001 Ed.)

"Approval and a certification of necessity" shall mean an order of ecology which gives approval to a water district to establish, maintain, construct and operate a sewer system in a proposed service area in accordance with RCW 57.08.065.

(3) "Necessity" shall mean a reasonable need and not mean an indispensable need.

(4) "Proposed service area" shall mean the area proposed to be served with a sewer system by the applicant water district.

(5) "Sewer system" shall mean a system of sewers and appurtenances for the collection, transportation, treatment and disposal of sewage and industrial wastes.

(6) "Sewage" shall mean the water-carried waste products or discharge from human beings or other wastes from residences, public or private buildings, or industrial plants, together with such ground, surface or storm waters as may be present.

(7) "Industrial wastes" shall mean the liquids, solids, or other wastes resulting from any process of industry, or from the development of any natural resource.

(8) "Drainage basin" shall mean a geographic area drained by a surface stream or body of impounded water together with all tributary surface streams and bodies of impounded surface water.

(9) "Sewer entities" shall mean any municipal or public corporations which by law are entitled to construct and operate a sewer system.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW, 88-13-029 (Order 88-62), § 372-52-010, filed 6/8/88; Order 68-105, § 372-52-010, filed 8/21/68, effective 9/21/68.]

**WAC 372-52-020 Purpose.** This regulation prescribes the procedure whereby a water district organized under the provisions of chapter 57.04 RCW may apply for and receive an approval and a certification of necessity from ecology in accordance with the provisions of RCW 57.08.065 in order to exercise powers of a sewer district in accordance with the provisions of Title 56 RCW, as now, or hereafter amended. Additionally, this regulation will define the criteria which ecology will consider in determining the eligibility of an applicant water district for an approval and a certification of necessity.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW, 88-13-029 (Order 88-62), § 372-52-020, filed 6/8/88; Order 68-105, § 372-52-020, filed 8/21/68, effective 9/21/68.]

**WAC 372-52-030 Application content.** In addition to the requirements of chapter 372-20 WAC, an application for an approval and a certification of necessity must be presented to ecology and shall include, but not be limited to, the following considerations:

(1) A general statement of the present and future sewage problems in the proposed area of service.

(2) A consideration of the relationship of the district to contiguous, nearby or overlapping sewer entities.

(3) Service areas considering reasonable drainage basin oriented planning.

(4) Population forecasts as a basis of sewer system design in the proposed service area.

[Title 372 WAC—p. 5]
WAC 372-52-040 Notification of interested parties. Prior to the submission of an application to ecology for an approval and a certification of necessity, an applicant water district shall:

(1) Notify all the contiguous and affected sewer entities in the area in which the water district is proposing to construct and operate a sewer system that the applicant water district will submit an application for an approval and a certification of necessity, and that ecology will consider all written comments and objections submitted to ecology from any contiguous and affected sewer entity if the same written comments and objections are received by ecology before a date which will be specified by ecology.

(2) Notify the county commissioners, county health officer, county engineer, county planning commission and the county boundary review board, if any, in the county of the proposed service area, that the applicant water district will submit an application for an approval and a certification of necessity and ecology will consider all written comments and objections submitted to ecology from any contiguous and affected sewer entity if the same written comments and objections are received by ecology before a date which will be specified by ecology.

(3) The dates for inclusion in the notification provided for in subsections (1) and (2) of this section will be furnished by ecology upon the request of any applicant water district to ecology.

WAC 372-52-050 Criteria for necessity. Ecology will issue an approval and a certification of necessity to an applicant water district if all of the following conditions are satisfied:

(1) The granting of an approval and a certification of necessity will eliminate or alleviate an existing or imminent water pollution problem as determined by ecology.

(2) A sewer system does not exist in a substantial portion of the proposed service area and no regularly constituted and established sewer entity intends to construct and operate a sewer system in a substantial portion of the proposed service area within the reasonably foreseeable future.

(3) The proposed service area conforms to any or all established sewage drainage basins designated pursuant to RCW 90.48.270.

(4) The proposed service area conforms to any or all established comprehensive plans for sewage drainage basins, established pursuant to RCW 90.48.280.

WAC 372-52-060 Decision of ecology. After ecology has made a decision either granting or denying a request for an approval and a certification of necessity, said decision shall constitute a "contested case" within the meaning of chapter 34.64 RCW and RCW 90.48.230.

WAC 372-52-070 Limitation of an approval and a certification of necessity. The granting of an approval and a certification of necessity by ecology shall only constitute approval to establish, maintain, construct, and operate a sewer system within the proposed service area requested in the initial application for an approval and a certification of necessity, and shall in no way constitute approval or authority to establish, maintain, construct and operate a sewer system in any area which may be annexed at some future time by the applicant water district.

Chapter 372-68 WAC

WATER POLLUTION CONTROL AND ABATEMENT PLANS FOR SEWAGE DRAINAGE BASINS

WAC

372-68-010 Authority.

372-68-020 Purpose.

372-68-030 Definitions.

372-68-040 Planning guide.

372-68-050 Procedures for coordination of basin planning.

372-68-060 Outline of minimum plan requirements.

372-68-070 Procedure for plan adoption.

372-68-080 Amendments to the water pollution control and abatement plan.

372-68-090 Relationship of water pollution control and abatement plans for sewage drainage basins to other plans required by ecology for public sewage and industrial waste works.

372-68-100 Sewage drainage basin delineation.

WAC 372-68-010 Authority. The state of Washington department of ecology pursuant to RCW 90.48.035, 90.48.270, and 90.48.280 hereby adopts and promulgates these rules and regulations for the development, submission,
and adoption of water pollution control and abatement plans for sewage drainage basins.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-68-010, filed 6/8/88; Order 70-38, § 372-68-010, filed 4/7/70.]

WAC 372-68-020 Purpose. The rules and regulations of the department of ecology contained herein set forth the procedures necessary to conform with RCW 90.48.280 and 90.48.290(3). Ecology's review must primarily assure that the plan provisions will give adequate protection to and preservation of present and future water quality as indicated in the water quality standards for interstate and intrastate waters as they now exist or may hereafter be amended.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-68-020, filed 6/8/88; Order 70-38, § 372-68-020, filed 4/7/70.]

WAC 372-68-030 Definitions. (1) Basin - See "sewage drainage basin," subsection (17) of this section.

(2) Ecology - The state of Washington department of ecology.

(3) Construction plans and specifications - The final engineering design before construction of facilities. Construction plans and specifications shall include, where applicable, sewerage system plans, plans of sewage pumping stations, plans for wastewater treatment facilities, and complete technical specifications for construction as set forth in WAC 372-20-030, 372-20-040, 372-20-060, 372-20-070(2), and 372-20-100(2). Construction plans and specifications shall be prepared according to criteria developed and selected in the preliminary engineering report (subsection (14) of this section).

(4) Drainage basin - An area from which surface runoff is carried away by a single drainage system. Ecology has delineated sewage drainage basins as defined in subsection (17) of this section for the purpose of administering this long-range water pollution control and abatement planning program.

(5) Industrial wastes - The liquid, solid, or other wastes from industrial processes, as distinct from domestic or sanitary wastes. These wastes may result from any process of industry, manufacture, trade or business, or from the development of any natural resource.

(6) Interceptor or intercepting sewer - A sewer that receives domestic and industrial dry-weather flow from a number of transverse sewers or outlets and frequently additional predetermined quantities of storm water (if from a combined system), and conducts such waters to a point for treatment and disposal.

(7) Interstate waters - The entire stretch within the state of Washington of all rivers, lakes, and other waters that flow across or form a part of the state or international boundaries anywhere along their length, including coastal waters. Coastal waters are further defined as the ocean waters along coasts, straight or indented, which are subject to the ebb and flow of the tides.

(8) Intrastate waters - The surface waters whose drainage basins are solely contained within the boundaries of the state of Washington and are not affected by tidal influence.

(9) Municipal wastewater - Basically domestic sewage but including sewage discharging from sanitary conveniences of office buildings, factories and institutions, and such industrial wastes as may be allowed by the municipal code.

(10) Planning agency - That organization approved or designated by ecology which has the responsibility and authority for preparing the basin plans as specified in WAC 372-68-060 and which will, where possible, implement the approved plans through its authority to finance, construct, and operate the necessary facilities.

(11) Planning area - A sewage drainage basin (subsection (17) of this section) or combinations thereof which have close geographic, political, or social ties.

(12) Planning guide - The document which specifies in detail the recommended and required content of a water pollution control and abatement plan for a sewage drainage basin. See WAC 372-68-040.

(13) Planning level - That point in the anticipated community growth for which needs and solutions are determined. Planning levels of either the present, 1980, 1990, and 2000 or the present, 1985, and 2000 are recommended.

(14) Preliminary engineering report - A thorough engineering study which develops a sound and economical plan for a particular sewerage and/or treatment facility project (or projects), provides methods of operation and maintenance of such facility, and sets forth the water quality and design criteria to be used in the preparation of construction plans and specifications according to WAC 372-20-005, 372-20-030, 372-20-040, 372-20-060, 372-20-070(1), and 372-20-100(1). Such preliminary engineering report should be developed within the framework of the water pollution control and abatement plan for that sewage drainage basin in which it is located.

(15) Service area - That area which is or can be served by a sewerage system. Future service areas should be determined according to population density and need with consideration being given to the basin approach.

(16) Sewage - See "wastewater," subsection (20) of this section.

(17) Sewage drainage basin - These basins are adopted under WAC 372-68-100. The boundaries of the basins are as shown on the attached map.

(18) Sewage drainage basin plan - See "water pollution control and abatement plan for sewage drainage basins," subsection (21) of this section.

(19) Sewer - A pipe or conduit that carries wastewater or drainage water.

(20) Wastewater - The spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants and institutions, together with any groundwater, surface water, and storm water that may be present.

(21) Water pollution control and abatement plan for a sewage drainage basin - A plan which describes a drainage basin or portions thereof and provides for control and abatement of water pollution and the protection of water quality in such basin by a logical interim and long-range plan for
(22) Water resource inventory area (WRIA) - See "sewage drainage basin," subsection (17) of this section.

WAC 372-68-040 Planning guide. The "sewage drainage basin and urban area planning guide for water pollution control and abatement" contains recommendations and suggestions with respect to the development of such plans and is hereby approved by the state of Washington department of ecology. This guide should be used as the basis for the preparation of all water pollution control and abatement plans. Recent developments in the field of water quality should be incorporated into this guide.

WAC 372-68-050 Procedures for coordination of basin planning. (1) A plan will be prepared for each basin by the planning agencies having authority within that basin. Each agency will plan only for that area for which it has authority or for other areas by agreement.

(2) Within each basin a single agency or committee will be responsible for coordination of the water pollution control and abatement planning efforts. Where possible, such agency or committee will also be responsible for the preparation and implementation of the water pollution control and abatement plan.

(3) To facilitate covering a logical planning area, a single agency may be made responsible for more than one basin.

(4) A single planning document may be proposed in which more than one basin is included, providing the basins are clearly designated.

(5) Any municipality may prepare and submit a separate service area plan through the basin plan coordinating agency or committee to ecology.

(6) The basin plan-coordinating agency or committee should be agreed upon by, but not limited to, ecology and county, municipal, metropolitan, regional and special purpose agencies having authority within the basin.

(7) Such agreement will be formalized by contract as provided for in chapter 39.34 RCW, the Interlocal Cooperation Act, when legally possible.

(8) Ecology shall assume the responsibility for preparation and coordination of the sewage drainage basin plans or will designate a plan-coordinating agency from among those agencies having jurisdiction within the basin.

WAC 372-68-060 Outline of minimum plan requirements. The water pollution control and abatement plan shall include but not be limited to:

(1) Introduction (includes statement of purpose and intent, acknowledgments, summary of findings, and base map).

(2) Basis for planning
   (a) Physical environment
   (i) Topography - general description
   (ii) Soil and drainage characteristics - adequate interpretation of soil types and surface grades to determine suitability for septic tank filter fields
   (iii) Hydrology - a brief summary of stream discharge records to include maximum, mean and minimum annual flows and 7-day 10-year low-flow; areas where low-flow establishment is needed; where applicable, a brief summary of information pertaining to the water table and flood plains (100 year floods)
   (iv) Water quality - a brief summary of available water quality data; classification by interstate and intrastate water quality standards
   (v) This section is to include maps of topography, soil and drainage characteristics, flood plains, watercourse classification and water quality problem areas, and location of sampling stations for quantity and quality.
   (b) Social and economic growth
   (i) Economy - to include a brief summary of commerce and industrial development
   (ii) Population - to include trends, projections, and population densities based on census tracts or their equivalent for each planning level
   (iii) Land use and zoning - based on (i) and (ii) above summarize existing and projected zoning and land use for each planning level
   (iv) This section is to include maps of present and future land use and population densities
(3) Inventory of existing facilities and sources and characteristics of wastes
   (a) Collection systems - to include the delineation of service areas, operating authorities, the general location and capacities of interceptors, adequacy of facilities, population served, industries served, major commercial complexes served, and combined storm-sanitary sewers; also to include the numbers and general locations of individual waste disposal facilities.
   (b) Treatment facilities - to include, for municipal treatment plants and industrial wastewater discharges, locations of treatment facilities, volumes and characteristics of wastes treated, degree of treatment, and adequacy of facilities; also for municipal treatment facilities the operating authority should be specified.
   (c) Other water quality considerations - to include discussion and location of other water quality effect sources including but not limited to:
      (i) Municipal wastes
      (ii) Industrial wastes
      (iii) Individual sanitary discharges
      (iv) Storm runoff
      (v) Soil erosion and land development runoff
      (vi) Agricultural waste water, including irrigation return flow and animal feedlot wastes
      (vii) Wastes from vessels and marinas
      (viii) River impoundments
(ix) Log storage, including cold decking and rafting
(x) Dredging and dredging spoils
(xi) Solid waste disposal runoff and seepage water
(d) This section to include maps showing the general location of service areas and interceptors, municipal and industrial treatment facilities, and "other" water quality problem areas.

(4) Present and future water pollution control needs
(a) Collection systems - to include specification of immediate needs and, for each future planning level, delineation of service areas, operating authorities, general location and capacities of interceptors, population, industries, and major commercial complexes served, combined storm-sanitary sewers to be replaced by separate sewers, approximate number of connections, and percent of homes within the service area to be served.
(b) Treatment plants - to include specification of immediate needs, and for each future planning level, general location of treatment facilities, volumes and characteristics of wastes treated, and degree of treatment for municipal and industrial wastewater discharges; also for municipal treatment facilities the operating authority should be specified.
(c) Other water quality considerations - to include means of alleviating other water quality problems which now exist and to prevent such deleterious effects in the future.
(d) Recommended legal considerations - list and explain policy statements, ordinances, and legislation to prevent future water quality deterioration.
(e) This section is to include maps showing future service areas, general locations and capacities of interceptors and municipal and industrial treatment plants, and "other" water quality problem areas.

(5) Plan considerations
(a) Collection systems and treatment plants - to include factors not included in the previous section which would affect the logical and orderly implementation of the plan. Such factors should include interim and alternate measures and the criteria to govern the extension of sewer lines.
(b) Other water quality considerations - to include consideration of other phases of environmental quality such as water supply, solid wastes management, and air pollution as they might be affected by the water pollution control and abatement plan.

(6) Capital improvements program
(a) Approximate construction schedule - to include scheduling of immediate need items including those listed in the implementation and enforcement plans for interstate and intrastate waters and for ten years beyond the plan completion date.
(b) Cost estimates and financing - to include general construction costs of the various elements of the plan and a brief evaluation of the sewer service charges and financial considerations necessary to finance needed construction.

(7) Format and updating
(a) This outline is not necessarily meant to be used as a pattern for the plan format. Provisions to review this plan every five years or more often as development warrants and to update as necessary will be included.
(b) Ecology will designate, prior to August 1, 1970, which state, regional and/or federal documents should be used as references in forecasting social and economic trends. Such documents will include, but not be limited to, resource development, land use proposals, demographic data, industrial growth, and financial forecast documents.

WAC 372-68-070 Procedure for plan adoption. (1) Two copies of said water pollution control and abatement plan will be submitted to ecology for review. Within thirty days of receipt ecology will approve or reject said plan in writing. Upon ecology approval a public hearing will be scheduled for a date within thirty days of said approval. This hearing will be preceded by the appropriate notices as set forth in RCW 42.32.010. Such hearing may be continued from time to time, and at the termination thereof, ecology may reject the plan proposed or adopt it with such modifications as it shall deem proper. Said adoption will take place within sixty days of the termination of the hearing. One copy of the water pollution control and abatement plan adopted by ecology will be stamped with the approval stamp of ecology and returned to the agency which submitted said plan with instructions to notify all involved entities within fifteen days.

(2) Ecology will consider for adoption plans for sub-areas within a basin if it shall deem such adoption desirable or necessary to prevent undue delay in the construction of urgently needed water pollution control facilities. In all such cases the sub-area plan should be developed according to WAC 372-68-060 and should be submitted through the basin plan-coordinating agency if possible.

WAC 372-68-080 Amendments to the water pollution control and abatement plan. After a plan has been adopted, occasions may arise when a change in certain parts of the plan provisions is necessary. Proposed deviations from the adopted water pollution control and abatement plan which affect the adequacy and efficiency of plan provisions shall be submitted to ecology in duplicate. Such amendments will then follow the review, hearing, and adoption sequence specified in WAC 372-68-070.

WAC 372-68-090 Relationship of water pollution control and abatement plans for sewage drainage basins to other plans required by ecology for public sewage and industrial waste works. (1) Ecology recognizes three basic phases of planning:
(a) Water pollution control and abatement plan (for sewage drainage basins)
(b) Preliminary engineering report
(c) Construction plans and specifications

(2) These phases are defined as given in WAC 372-68-030. The water pollution control and abatement plan, which covers all water pollution sources, is wider in scope than the
other two phases, which deal primarily with the design and construction of wastewater collection and treatment works. The last two phases are progressively more detailed than is the water pollution control and abatement plan. Preliminary engineering reports for proposed wastewater collection and/or treatment facilities must comply with the water pollution control and abatement plan for the sewage drainage basin in which they are located. Construction plans and specifications for a proposed facility must comply with the preliminary engineering report for that facility.

(3) It is acceptable to combine the other phases of planning for proposed water pollution control facilities with the water pollution control and abatement plan subject to limitations as specified in WAC 372-20-030. Such a combined plan will receive as many certifications of approval as the phases of planning which it satisfied.

WAC 372-68-100 Sewage drainage basin delineation. Ecology, pursuant to RCW 90.48.270 hereby adopts as sewage drainage basins the water resource inventory areas delineated as shown.