Chapter 173-100 WAC
GROUNDWATER MANAGEMENT AREAS AND PROGRAMS

WAC 173-100-010  Purpose. The purpose of this chapter is to establish guidelines, criteria, and procedures for the designation of groundwater management areas, subareas or zones and to set forth a process for the development of groundwater management programs for such areas, subareas, or zones, in order to protect groundwater quality, to assure groundwater quantity, and to provide for efficient management of water resources for meeting future needs while recognizing existing water rights. The intent of this chapter is to forge a partnership between a diversity of local, state, tribal and federal interests in cooperatively protecting the state's groundwater resources.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-010, filed 12/20/85.]

WAC 173-100-020  Authority. This chapter is promulgated by the department of ecology pursuant to RCW 90.44.400, 90.44.410, 90.44.420, 90.44.430 and 90.44.440.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-020, filed 12/20/85.]

WAC 173-100-030  Overview. This regulation establishes a process for the identification and designation of groundwater management areas and for the development of comprehensive groundwater management programs. From a general schedule of probable groundwater management areas, the department of ecology in cooperation with local government will designate specific groundwater management areas, subareas, or depth zones within such areas and will appoint a lead agency to develop a groundwater management program and an advisory committee to oversee the development of the program for each designated area. Following completion of the program and a public hearing to be held by the department of ecology, the program must be certified to be consistent with the intent of this chapter. The program will then be implemented through state regulations and local ordinances. The programs must thereafter be periodically reviewed.

(6/9/88)

WAC 173-100-040  Definitions. For the purposes of this chapter the following definitions shall apply:

1. "Aquifer" means a geologic formation, group of formations or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

2. "Department" means the Washington state department of ecology.

3. "Groundwater" means all waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.

4. "Groundwater advisory committee" means a committee appointed by the department to assist in the development of a groundwater management program.

5. "Groundwater area or subarea" means a geographic area designated pursuant to RCW 90.44.130.

6. "Groundwater management area" means a specific geographic area or subarea designated pursuant to this chapter for which a groundwater management program is required.

7. "Groundwater management program" means a comprehensive program designed to protect groundwater quality, to assure groundwater quantity and to provide for efficient management of water resources while recognizing existing groundwater rights and meeting future needs consistent with local and state objectives, policies and authorities within a designated groundwater management area or subarea and developed pursuant to this chapter.

8. "Groundwater management zone" means any depth or stratigraphic zone separately designated by the department in cooperation with local government for groundwater management purposes within a groundwater management area. Groundwater management zones may consist of a specific geologic formation or formations or other reasonable bounds determined by the department consistent with the purposes of this chapter.

9. "Groundwater right" means an authorization to use groundwater established pursuant to chapter 90.44 RCW, state common or statutory law existing prior to the enactment of chapter 90.44 RCW, or federal law.

10. "Groundwater user group" means an established association of holders of groundwater rights located within a proposed or designated groundwater management area.

11. "Lead agency" means the agency appointed by the department to coordinate and undertake the activities necessary for the development of a groundwater management program. Either the department or an agency of local government may be the lead agency.

12. "Local government" means any county, city, town, or any other entity having its own incorporated government...
for local affairs including, but not limited to, a metropolitan municipal corporation, public utility district, water district, irrigation district, and/or sewer district.

(13) "Local government legislative authority" means the city or town council, board of county commissioners, special district commission, or that body assigned such duties by a city, county or district charter as enacting ordinances, passing resolutions, and appropriating funds for expenditure.

(14) "Probable groundwater management area" means a specific geographic area identified by the department, in cooperation with other state agencies, local government and groundwater user groups, as a candidate area for designation as a groundwater management area pursuant to this chapter.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-040, filed 12/20/85.]

WAC 173-100-050 Probable groundwater management areas. The department in cooperation with local government and groundwater user groups shall identify probable groundwater management areas.

(1) Probable groundwater management areas may be proposed for identification at any time by the department upon its own motion or at the request of other state agencies, local government or groundwater user groups.

(2) Probable groundwater management area boundaries shall be delineated so as to enclose one or more distinct bodies of public groundwater as nearly as known facts permit. Probable groundwater management subareas shall be delineated so as to enclose all or any part of a distinct body of public groundwater. Boundaries shall be based on hydrogeologic properties such as limits to lateral extent of aquifers, major perennial rivers, and regional groundwater divides or as deemed appropriate by the department to most effectively accomplish the purposes of this chapter.

(3) The criteria to guide identification of probable groundwater management areas shall include, but not be limited to, the following:

(a) Geographic areas where groundwater quality is threatened;

(b) Aquifers that are declining due to restricted recharge or over-utilization;

(c) Aquifers in which over-appropriation may have occurred and adjudication of water rights has not yet been completed;

(d) Aquifers reserved or being considered for water supply reservation under chapter 90.54 RCW for future beneficial uses;

(e) Aquifers identified as the primary source of supply for public water supply systems;

(f) Aquifers underlying a critical water supply service area where the coordinated water system plan established pursuant to chapter 70.116 RCW has identified a need for a groundwater management program;

(g) Aquifers designated as sole source aquifers by the federal Environmental Protection Agency;

(h) Geographic areas where the groundwater is susceptible to contamination or degradation resulting from land use activities;

(i) Aquifers threatened by seawater intrusion; or

(j) Aquifers from which major groundwater withdrawals have been proposed or appear imminent.

(4) The state agency, local government or groundwater user group requesting probable groundwater management area identification shall provide sufficient information for the department to determine if the area should be so identified. The department and other affected state and local governments and user groups may cooperate in preparing the request for identification.

(a) The request for identification shall be presented in a concise, factual report form and shall consider the guidelines and criteria set forth in subsections (2) and (3) of this section as they relate to the proposed area. It shall also contain: (i) Supporting data as to the need for such identification; (ii) a general description of and rationale for the proposed groundwater management area boundary; (iii) goals and objectives for the proposed groundwater management area; (iv) an estimated cost of developing the groundwater management program and potential funding sources; (v) recommendations for agencies, organizations and groups to be represented on the groundwater management area advisory committee; and (vi) a recommendation for the lead agency, taking into consideration the responsibilities contained in WAC 173-100-080.

(b) The recommendation for lead agency shall first be submitted to the county or counties with jurisdiction for written concurrence. Such written concurrence shall be included with the information required in (a) of this subsection. If such concurrence cannot be obtained, the department shall attempt to mediate an agreement between the parties.

(c) The agency or groundwater user group initiating the request for identification shall hold at least one public meeting for the purpose of receiving comments from the public, affected local, state and tribal agencies and groundwater user groups.

(d) Upon completion, the request for identification shall be submitted to the department and other affected state and local agencies and groundwater user groups for their review and comment. Comments shall be submitted to the department.

(5) If the department is proposing an area for identification, the department shall prepare a report containing the information in subsection (4)(a) of this section, hold a public meeting, and submit the report to affected state and local agencies and groundwater user groups for their review and comment.

(6) Based upon review of the request for identification together with any comments received and a finding that the proposed area meets the guidelines and criteria of subsections (2) and (3) of this section, the department shall identify the proposed area as a probable groundwater management area, establish the general planning boundaries and appoint a lead agency. When a probable groundwater management area is included within only one county and that county indicates its desire to assume lead agency status, the department shall appoint the county as lead agency. The department shall notify affected state and local agencies, groundwater user groups, tribal governments and local news media of such identification.

[Statutory Authority: Chapters 43.27A and 90.44 RCW. 88-13-037 (Order 88-11), § 173-100-050, filed 6/9/88. Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-050, filed 12/20/85.]

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**WAC 173-100-060 General schedule.** The department shall establish a general schedule for the designation of specific groundwater management areas. The general schedule shall guide the department in the designation of specific groundwater management areas and in the allocation of the department's available water resources funding and staffing.

1. The general schedule for designation of groundwater management areas shall identify the relative priority of each of the probable groundwater management areas. The relative priority of the probable groundwater management areas shall be based upon:
   a. The availability of local or state agency resources to develop and implement a groundwater management program;
   b. The significance, severity or urgency of the problems or potential problems described in the request for identification submitted for each area, with the highest priority given to areas where the water quality is imminently threatened;
   c. The department shall revise the general schedule as needed to comply with the intent of this chapter. After each revision the general schedule shall be published in the news media and the Washington State Register. A public hearing will be held in June of each year to receive public comment on the general schedule.

**WAC 173-100-070 Designation of groundwater management areas for program planning purposes.** The department shall designate groundwater management areas by order of the department in accordance with the general schedule. The department shall hold a public hearing within the county or counties containing the probable groundwater management area prior to such designation. The order shall be issued to the lead agency as well as the agency or groundwater user group originally requesting identification of the areas, with copies sent to other affected state agencies, local governments, tribal governments and those parties recommended for groundwater advisory committee membership. Copies of the order shall be published by the department in newspapers of general circulation within the area. The order shall contain a general description of the planning boundary for the groundwater management area and shall state that the department, in cooperation with the lead agency and local government, intends to appoint a groundwater advisory committee to oversee the development of a groundwater management program for the area.

**WAC 173-100-080 Lead agency responsibilities.** The lead agency shall be responsible for coordinating and undertaking the activities necessary for development of the groundwater management program. These activities shall include collecting data and conducting studies related to hydrogeology, water quality, water use, land use, and population projections; scheduling and coordinating advisory committee meetings; presenting draft materials to the committee for review; responding to comments from the committee; coordinating SEPA review; executing interlocal agreements or other contracts; and other duties as may be necessary. The lead agency shall also prepare a work plan, schedule, and budget for the development of the program that shows the responsibilities and roles of each of the advisory committee members as agreed upon by the committee. Data collection, data analysis and other elements of the program development may be delegated by the lead agency to other advisory committee members.

**WAC 173-100-090 Groundwater advisory committee.** (1) The groundwater advisory committee shall be responsible for overseeing the development of the groundwater management program; reviewing the work plan, schedule and budget for the development of the program; assuring that the program is technically and functionally sound; verifying that the program is consistent with this chapter and with the respective authorities of the affected agencies; and formulating and implementing a public involvement plan.

2. The membership of each groundwater advisory committee shall represent a broad spectrum of the public in order to ensure that the groundwater is protected and utilized for the greatest benefit to the people of the state. The committee shall include, but not be limited to, representation from the following groups:
   a. Local government legislative authorities within the designated area;
   b. Planning agencies having jurisdiction within the designated area;
   c. Health agencies having jurisdiction within the designated area;
   d. Groundwater user groups within the designated area, including domestic well owners;
   e. The department;
   f. Department of social and health services;
   g. Other local, state, and federal agencies as determined to be appropriate by the department;
   h. Tribal governments, where a groundwater management program may affect tribal waters;
   i. Public and special interest groups such as agricultural, well drilling, forestry, environmental, business and/or industrial groups within the area, as determined to be appropriate by the department.

3. The department shall appoint, by letter, members and alternates to the groundwater advisory committee after seeking nominations from the groups listed above. Members and alternates shall serve until the groundwater management program for the area is certified. The department may appoint replacement members or alternates upon request of the appointee or the groundwater advisory committee.

4. The lead agency shall hold the first meeting of the groundwater advisory committee within sixty days of the appointment of the committee. Public notice shall be given for each meeting. The lead agency shall chair the first meeting, during which the advisory committee shall determine, by general agreement, rules for conducting business, including voting procedures, and the chairperson of the advisory committee.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-080, filed 12/20/85.]

(6/9/88)
WAC 173-100-100 Groundwater management program content. The program for each groundwater management area will be tailored to the specific conditions of the area. The following guidelines on program content are intended to serve as a general framework for the program, to be adapted to the particular needs of each area. Each program shall include, as appropriate, the following:

1. An area characterization section comprised of:
   (a) A delineation of the groundwater area, subarea or depth zone boundaries and the rationale for those boundaries;
   (b) A map showing the jurisdictional boundaries of all state, local, tribal, and federal governments within the groundwater management area;
   (c) Land and water use management authorities, policies, goals and responsibilities of state, local, tribal, and federal governments that may affect the area's groundwater quality and quantity;
   (d) A general description of the locale, including a brief description of the topography, geology, climate, population, land use, water use and water resources;
   (e) A description of the area's hydrogeology, including the delineation of aquifers, aquitards, hydrogeologic cross-sections, porosity and horizontal and vertical permeability estimates, direction and quantity of groundwater flow, water-table contour and potentiometric maps by aquifer, locations of wells, perennial streams and springs, the locations of aquifer recharge and discharge areas, and the distribution and quantity of natural and man-induced aquifer recharge and discharge;
   (f) Characterization of the historical and existing groundwater quality;
   (g) Estimates of the historical and current rates of groundwater use and purposes of such use within the area;
   (h) Projections of groundwater supply needs and rates of withdrawal based upon alternative population and land use projections;
   (i) References including sources of data, methods and accuracy of measurements, quality control used in data collection and measurement programs, and documentation for and construction details of any computer models used.

2. A problem definition section that discusses land and water use activities potentially affecting the groundwater quality or quantity of the area. These activities may include but are not limited to:
   - Commercial, municipal, and industrial discharges
   - Underground or surface storage of harmful materials in containers susceptible to leakage
   - Accidental spills
   - Waste disposal, including liquid, solid, and hazardous waste
   - Storm water disposal
   - Mining activities
   - Application and storage of roadway deicing chemicals
   - Agricultural activities
   - Artificial recharge of the aquifer by injection wells, seepage ponds, land spreading, or irrigation
   - Aquifer over-utilization causing seawater intrusion, other contamination, water table declines or depletion of surface waters
   - Improperly constructed or abandoned wells
   - Confined animal feeding activities

The discussion should define the extent of the groundwater problems caused or potentially caused by each activity, including effects which may extend across groundwater management area boundaries, supported by as much documentation as possible. The section should analyze historical trends in water quality in terms of their likely causes, document declining water table levels and other water use conflicts, establish the relationship between water withdrawal distribution and rates and water level changes within each aquifer or zone, and predict the likelihood of future problems and conflicts if no action is taken. The discussion should also identify land and water use management policies that affect groundwater quality and quantity in the area. Areas where insufficient data exists to define the nature and extent of existing or potential groundwater problems shall be documented.

3. A section identifying water quantity and quality goals and objectives for the area which (a) recognize existing and future uses of the aquifer, (b) are in accordance with water quality standards of the department, the department of social and health services, and the federal environmental protection agency, and (c) recognize annual variations in aquifer recharge and other significant hydrogeologic factors.

4. An alternatives section outlining various land and water use management strategies for reaching the program's goals and objectives that address each of the groundwater problems discussed in the problem definition section. If necessary, alternative data collection and analysis programs shall be defined to enable better characterization of the groundwater and potential quality and quantity problems. Each of the alternative strategies shall be evaluated in terms of feasibility, effectiveness, cost, time and difficulty to implement, and degree of consistency with local comprehensive plans and water management programs such as the coordinated water system plan, the water supply reservation program, and others. The alternative management strategies shall address water conservation, conflicts with existing water rights and minimum instream flow requirements, programs to resolve such conflicts, and long-term policies and construction practices necessary to protect existing water rights and subsequent facilities installed in accordance with the groundwater management area program and/or other water right procedures.

5. A recommendations section containing those management strategies chosen from the alternatives section that are recommended for implementation. The rationale for choosing these strategies as opposed to the other alternatives identified shall be given;

6. An implementation section comprised of:
   (a) A detailed work plan for implementing each aspect of the groundwater management strategies as presented in the recommendations section. For each recommended management action, the parties responsible for initiating the action and a schedule for implementation shall be identified. Where possible, the implementation plan should include specifically worded statements such as model ordinances, recommended governmental policy statements, interagency agreements, proposed legislative changes, and proposed amendments to
local comprehensive plans, coordinated water system plans, basin management programs, and others as appropriate;

(b) A monitoring system for evaluating the effectiveness of the program;

(c) A process for the periodic review and revision of the groundwater management program.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-100, filed 12/20/85.]

**WAC 173-100-110 SEPA review.** The proposed groundwater management program shall be subject to review pursuant to the State Environmental Policy Act, chapter 43.21C RCW, as required under the applicable implementing regulations.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-110, filed 12/20/85.]

**WAC 173-100-120 Hearings and implementation.** (1) Upon completion of the groundwater area management program, the department shall hold a public hearing within the designated groundwater management area for the purpose of taking public testimony on the proposed program. Local governments are encouraged to hold joint hearings with the department to hear testimony on the proposed management program. Following the public hearing, the department and each affected local government shall prepare findings on the groundwater management program within ninety days. This period may be extended by the department for an additional ninety days. The findings shall evaluate the program's technical soundness, economic feasibility, and consistency with the intent of this chapter and other federal, state and local laws. The findings shall identify any revisions necessary before the program can be certified and shall contain a statement of the agency's concurrence, indicating its intent to adopt implementing policies, ordinances and programs if required, or a statement of nonconcurrence with the program if such be the case.

(2) The lead agency will consolidate the findings and present them to the advisory committee. Statements of nonconcurrence shall be resolved by the committee and the program revised if necessary.

(3) The program shall then be submitted by the groundwater advisory committee to the department which shall certify that the program is consistent with the intent of this chapter.

(4) Following such certification, state agencies and affected local governments shall adopt or amend regulations, ordinances, and/or programs for implementing those provisions of the groundwater management program which are within their respective jurisdictional authorities.

(5) The department, the department of social and health services and affected local governments shall be guided by the adopted program when reviewing and considering approval of all studies, plans and facilities that may utilize or impact the implementation of the groundwater management program.

[Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-120, filed 12/20/85.]

(6/9/88)