

ORDINANCE NUMBER 62-99

AMENDMENTS TO THE MASON COUNTY RESOURCE ORDINANCE

AN ORDINANCE amending the following sections of the Mason County Resource Ordinance, Ordinance 77-93, as amended: Section 17.01.080 Critical Aquifer Recharge Areas, and Section 17.01.240 Definitions, under the authority of Chapters 36.70 and 36.70A RCW.

WHEREAS, the Board of County Commissioners held a public hearing on June 8, 1999, to consider the recommendations of the Planning Commission, the Mason County Department of Community Development and citizens on the proposed amendments;

WHEREAS, the Mason County Planning Commission formulated its recommendations after a public hearing on July 14, 1998 and approved findings of fact;

WHEREAS, these hearings were duly advertised public hearings;

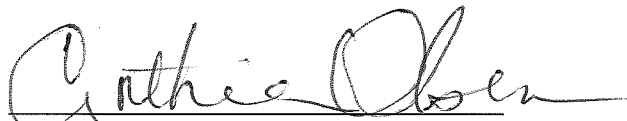
WHEREAS, these amendments are intended to comply with the Orders of the Western Washington Growth Management Hearings Board, Case No. 96-02-0073;


WHEREAS, the Mason County Board of County Commissioners formulated its decision after the public hearing and has approved findings of fact to support its decision as ATTACHMENT B;

NOW, THEREFORE, BE IT HEREBY ORDAINED, that the Board of County Commissioners of Mason County hereby approves and ADOPTS the amendments to the Mason County Resource Ordinance, #77-93, as amended, as described by ATTACHMENT A.

DATED this 22nd day of June, 1999.

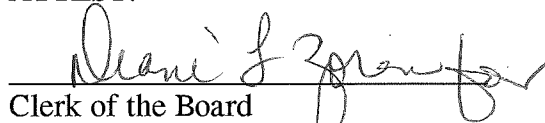
Board of County Commissioners
Mason County, Washington


Cynthia D. Olsen, Chair

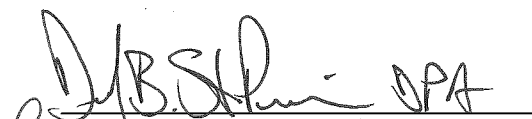

Mary Jo Cady, Commissioner


John A. Bolender, Commissioner

ATTEST:


Clerk of the Board

APPROVED AS TO FORM:


Prosecuting Attorney

ORDINANCE NUMBER 62-99

ATTACHMENT A

A new Section 17.01.080 CRITICAL AQUIFER RECHARGE AREAS, which will replace the existing section:

Section 17.01.080 CRITICAL AQUIFER RECHARGE AREAS

In order to protect the public health and safety, prevent the degradation of ground water aquifers used for potable water, and to provide for regulations that prevent and control risks to the degradation of ground water aquifers, the following standards for Mason County are described in Section 17.01.080. Critical Aquifer Recharge Areas are those areas which are determined to have an important recharging effect on aquifers used as a source for potable water and vulnerable to contamination from recharge. Critical Aquifer Recharge Areas are areas of special concern and are subject to the Mason County Health Codes.

Contents:

- A. Classification of Aquifer Recharge Areas
- B. Designation
- C. Pre-existing Uses
- D. Prohibited Uses and Activities
- E. Uses Requiring an Environmental Permit
- F. Subdivision Standards
- G. On-site Septic System Standards
- H. Well Head Protection Area - Notice
- I. Standards for an Environmental Permit for the Critical Aquifer Recharge Area
- J. BMP Monitoring and Inspection
- K. Map Amendments
- L. Reclassification of Specific Land Use Activity
- M. Reports
- N. Public Education/Notice
- O. Protection of Private Wells
- P. Secondary Containment and Recycling of Hazardous Materials

A. Classification of Aquifer Recharge Areas

- 1. Classes. Critical Aquifer Recharge Areas are classified as either Class I (Extremely Susceptible), Class II (Highly Susceptible), Class III (Moderately Susceptible), or

Class IV (Low Susceptibility), as described below.

2. Methodology. The aquifer classification system and maps were developed by a qualified geologist in consultation with the Washington Department of Natural Resources and considering data from the following sources;
 - a. Mineral Resources of the Southern Hood Canal Area, Washington; Mackey Smith and R. J. Carson; Department of Geology and Earth Resources - Geologic Map GM-21; 1976.
 - b. Geology and Related Water Occurrence, Southeastern Mason County, Washington; Dee Molenaar and John B. Noble; Water Supply Bulletin No. 29, Department of Water Resources, State of Washington; 1970.
 - c. Geologic Map of the South Half of the Shelton and South Half of the Copalis Beach Quadrangles Washington; Robert L. Logan; Washington Division of Geology and Earth Resources; Open file Report 87-9; 1987.
 - d. Geologic Map of North Central Mason County; R. J. Carson; Department of Geology and Earth Resources; Open File Report 76-2; 1976.
 - e. Soil Conservation Maps for Mason County Washington; various.
 - f. Topographic maps for Mason County; various.
 - g. Water Well records.

Interpretation of these data sources was performed by Geologist Gordon Adams. An explanation of that interpretation is included in a letter from Gordon Adams dated March 29, 1999.

3. Standards of Classification.

- a. Class I (Extremely Susceptible). Areas designated as Class I demonstrate hydrogeologic characteristics that allow for an extremely high susceptibility of an underground source of drinking water. These areas are identified as recessional outwash of thickness greater than 25 feet. Recessional outwashes are a geological formation predominantly composed of underground source of drinking water unconsolidated sands and gravels. These formations exhibit horizontal permeabilities greater than 30 feet per day (*horizontal permeabilities are generally 10 times less than vertical permeabilities*). Potential contaminants entering an underground source of drinking water can be expected to travel one mile in six months or less.
- b. Class II (Highly Susceptible). Areas designated as Class II demonstrate hydrogeologic characteristics that allow for a high susceptibility of an underground source of drinking water. These areas are identified as recessional outwash and alluvium 25 feet or less in thickness. These geologic formations are composed of unconsolidated sands and gravels interlain with discontinuous layers of hardpan and silty clays. Depth to water is generally 25 to 125 feet below land surface. These formations exhibit horizontal permeabilities in the range of 30 to 15 feet per day. Potential contaminants entering an

underground source of drinking water can be expected to travel one mile in a time frame greater than six months and up to one year.

- c. Class III (Moderately Susceptible). Areas designated as Class III demonstrate hydrogeologic characteristics that allow for a moderate susceptibility of an underground source of drinking water. These areas are identified as advance outwash. The geologic formations consist of discontinuous layers of clayey gravel and sand and layers of silt and clay, which are more continuous and have been compacted into hardpan. Depth to water is greater than 125 feet below land surface. These formations exhibit horizontal permeabilities in the range of 15 to 3 feet per day. Potential contaminants entering an underground source of drinking water can be expected to travel one mile in a time frame greater than one year and up to five years. Class III areas include those well head protection areas, not otherwise designated as a Class I, II, or III critical recharge area, and recorded with the Mason County Department of Community Development.
- d. Class IV (Low Susceptibility). Areas designated as Class IV demonstrate hydrogeologic characteristics that allow for a low susceptibility of an underground source of drinking water. These areas are identified as advance outwash found in the southwest part of Mason County along the Satsop drainage.

B. Designation

The lands and fresh waters of Mason County meeting the Critical Aquifer Recharge Areas Classification, plus 300 feet beyond the mapped boundary of all Class I, II or III areas, are hereby designated under RCW Chapter 36.70A as Critical Area Protection Zones requiring protection for public health.

C. Pre-existing Uses

Uses legally existing as of the date of adoption of this ordinance and which are listed under Sections D. (Prohibited Uses and Activities) or E. (Uses Requiring an Environmental Permit) are defined to be pre-existing uses. Pre-existing uses may continue operation pursuant to the following provisions and procedures. The purpose of these provisions is to assure that pre-existing uses that represent a threat to the aquifer are brought into compliance with the provisions of this chapter over time and to the highest degree possible. These provisions shall not be construed to mean that a pre-existing business must cease operations even if the type of business operates as a prohibited use per section D. below. The following procedures and requirements are hereby established;

Upon identification of a legal pre-existing use, the county shall contact the operator and/or owner in order to develop a compliance plan and time line for bringing the pre-existing use into

compliance to the highest degree practicable and which provides an acceptable low level of risk to the aquifer.

1. The County will negotiate with the owner/operator to identify a reasonable time frame and necessary steps to bring the use into compliance with this chapter.
2. Technical assistance will be offered the owner/operator by state and/or local personnel to enable the owner/operator to bring the operation into compliance.
3. The County will require that a written compliance plan be developed and agreed to by the owner/operator setting forth the compliance steps that will be taken and the agreed time frame under which these steps will be completed.
4. The compliance plan shall be agreed to in a reasonable time as defined by the Director on a case-by-case basis.
5. Such compliance plan will take the form of a contract between the County and the owner/operator.
6. No expansion of any non-conforming aspect of the use or business activity will be permitted.
7. Failure to meet the terms of the contract, including time frames agreed to, shall constitute a breach of contract subject to all applicable law. If legal action on the part of the County becomes necessary to enforce the contract, the owner/operator shall be liable for all legal expenses.

D. Prohibited Uses

The following uses or activities are considered high impact uses due to the probability and/or potential magnitude of their adverse effects on groundwater and shall be prohibited in Class I, Class II and Class III Critical Aquifer Recharge Areas.

1. Landfill
2. Wood preserving, not fully contained operations
3. Electroplating
4. Dry cleaners excluding drop-off only operations
5. Class V injection wells, but limited to subclasses 5F01, 5D03, 5D04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24.
6. Surface mining operations within designated urban growth areas, or within Class I, II, or III areas contiguous with the urban growth areas.
7. Radioactive disposal sites
8. Outdoor auto wrecking operations
9. Hazardous waste transfer and treatment
10. Land spreading disposal sites where disposal is above agronomic rates (as defined in WAC 173-304)
11. Feedlots
12. Dumping of chemicals into a on-site septic system of a type or quantity that exceeds the systems designed capacity to treat.

13. Hazardous waste storage facilities unless accessory to an otherwise permitted use and approved under State hazardous waste permit.

E. Uses Requiring an Environmental Permit

The following activities are allowed in Class I, Class II and Class III Aquifer Recharge Areas after issuance of a Permit per subsection I. below. This requirement is not intended to apply to schools, colleges, hospitals and other public institutions where the activities are incidental or accessory to the principal activity. This requirement is not intended to apply to a home occupation or cottage industry, where the amounts of hazardous materials use are below the thresholds established and regulated in the Uniform Fire Code. Permit review shall be by the Administrative Review process specified in section 17.01.120.

1. Chemical Manufacturing
2. Chemical mixing and remanufacture
3. Above and below ground storage tanks and pipes used to contain regulated substances (see section 17.01.240)
4. Facilities that conduct biological research
5. Boat repair shops
6. Chemical research facilities
7. Gasoline service stations
8. Pipelines (petroleum and chemical transfer)
9. Printing and publishing operations that use printing liquids
10. Below ground transformers and capacitors
11. Sawmills producing over 10,000 board feet per day
12. Solid Waste handling and processing facilities
13. Vehicle repair, recycling, and auto wrecking activities
14. Mortuary
15. Furniture stripping
16. Motor vehicle service garages
17. Chemical processing of photographic film
18. Creosote and asphalt manufacturing and treatment facilities
19. Golf courses or ranges
20. Medium quantity generators (of dangerous, acutely hazardous, and toxic extremely hazardous waste)
21. Large quantity generators (of dangerous, acutely hazardous, and toxic extremely hazardous waste)
22. Activities reclassified as eligible for a Permit after County approval of a request to reclassify per subsection L.
23. Fully contained wood preserving operations.
24. Surface mining operations permitted under general permit by the Washington State Department of Ecology and not otherwise prohibited per Subsection D.

F. Subdivision Standards and Evaluation Requirements.

1. Subdivision, short subdivisions and other divisions of land in areas of special concern shall be evaluated for their impact on groundwater quality as follows:
 - a. In urban growth areas, land divisions may be allowed which create lots less than one acre in size which rely on individual on-site septic systems. Such approvals shall be conditioned so that the total development allowed within the area to be divided shall not exceed an average density of one dwelling unit per acre, or an equivalent waste-water volume, until such development is served by public sewer.
 - b. In urban growth areas, land divisions may be allowed which create lots less than one acre in size which rely on a community on-site septic systems. Such approvals shall be conditioned so that the total development allowed within the area to be divided shall not exceed an average density of one dwelling unit per acre, or an equivalent waste-water volume, until such development is served by public sewer. In addition, said system shall be evaluated to assure that it does not have localized effects that might have a significant adverse impact on wells or surface water bodies. Information for the evaluation shall be provided by the applicant in the form of a Site Evaluation Report as specified in subsection M.2.
 - c. Outside of urban growth areas, subdivisions which provide for clusters of residential development where the density of the cluster of residential lots exceed one lot per acre, or where development will rely on a community on-site septic system, shall be evaluated to assure that they do not have localized effects that might have a significant adverse impact on wells or surface water bodies. Information for the evaluation shall be provided by the applicant in the form of a Site Evaluation Report as specified in subsection M.2.
2. Approval of a permit for 1. b. or c. above shall be based on a review of the report and a determination that there are no probable significant adverse impacts to wells, springs, surface water bodies, or off-site ground water quality.

G. On-site Septic System Standards

1. The proper operation and maintenance of community or on-site septic systems is required in the critical aquifer recharge areas. The standards and procedures to be met to assure this are as set forth in the "Mason County On-Site Sewage Operation and Maintenance Program" and any subsequent implementing regulations. Participation in this program is mandatory for existing and new septic systems in the critical aquifer recharge areas.

2. New construction

- a. New construction which relies on on-site septic systems shall not be allowed to exceed a density of one dwelling unit per acre, or an equivalent waste-water volume, except for the development of one dwelling on lots existing or vested by December 5, 1996, where the on-site septic system can comply with all Environmental Health Department standards. For the purposes of this section, the sewage flow of one single family dwelling equals one unit volume of sewage equals 450 gallons per day. An exception to this may be made where a sewage treatment system or plant is used that processes the effluent so that the total of contaminants is equivalent to or less than that which would be produced by one dwelling unit per acre in suitable soils using individual on-site septic systems. The intensity of non-residential development that is allowed in compliance with this standard shall be calculated from Table 1. Alternative calculations for activities not included in Table 1 may be proposed, but the calculation method and conclusions must be approved by the County Environmental Health Department.
 - b. Where such development relies on a new on-site sewage treatment plant or other new on-site community septic system, said plant or system shall not have localized affects that might have a significant adverse impact on wells or surface water bodies. Information for the evaluation shall be provided by the applicant in the form of a Site Evaluation Report as specified in subsection M.2. Approval of a permit shall be based on a review of the report and a determination that there are no probable significant adverse impacts to wells, springs, surface water bodies, or off-site ground water quality.
3. All new development within the designated urban growth areas, except for single-family residences built prior to the opportunity to connect to a public sewer system, shall be required to connect to existing public sewer systems, or to proposed public sewer systems as soon as connection is available.

H. Well Head Protection Area - Notice

Within well head protection areas, in addition to any other notice requirements, notice shall be provided to the manager of said area for any applications for an Environmental Permit for the Critical Aquifer Recharge Area or for any long subdivisions.

I. Standards for an Environmental Permit for the Critical Aquifer Recharge Area

To receive an Environmental Permit to operate in the Critical Aquifer Recharge Area an applicant must;

1. Implement Best Management Practices (BMP), implement the Washington State

Department of Ecology's Storm Water, Water Quality, Hazardous Waste, Wetland, and Solid Waste Program BMP and BMP from the Departments of Health, Agriculture, Transportation, and State Conservation District Office, or

2. Demonstrate through a Best Management Practices Report pursuant to subsection M.1. below, how they will integrate other necessary and appropriate mitigating measures in the design, installation, and management of the proposed facility or use, and
3. Provide a written agreement to the County providing that all employees at the site will be notified that the operation lies above an aquifer recharge area and providing annual training regarding all measures set forth by the BMP established in subsection I. 1 or 2 above.

J. BMP Monitoring and Inspection.

To assure that Best Management Practices are implemented and maintained over time, the following procedures and requirements are hereby established:

1. The county will maintain a data-base identifying all pre-existing prohibited uses or uses requiring a permit under the provisions of this section. Information for this purpose will be gathered from applicants for development permits and by consultation with appropriate state agencies. During pre-application meetings or on application, the county will require applicants to identify if they are required to have a hazardous waste identification number by the Washington State Department of Ecology and whether they generate any hazardous waste as defined under WAC 173-303.
2. Inspection and monitoring procedures.
As a condition of approval, regular inspections for compliance will be required as appropriate to the activity, but not less than once in two years. The first inspection shall be made within 3 months of the issuance of the certificate of occupancy for the project.

K. Map Amendments

Applicants may seek to have the Aquifer Recharge Map amended as it pertains to the parcel or parcels for which they are applying. The application will be for a conditional environmental permit. This may be granted after the applicant demonstrates to the satisfaction of the county that site conditions meet the standards of classification per subsection C. for the Aquifer Area Class sought.

Such demonstration shall be accomplished by providing a Map Amendment Report per subsection M.2. to the county. The County shall evaluate the Report and make a written

determination as to whether the map will be amended. Approval of the map amendment requires that, based on the best available science, the site does not qualify as a critical aquifer recharge area, or qualifies as a different class designation from its current designation, as applied by the County pursuant to the Growth Management Act.

The report shall be reviewed by the County in conjunction with the underlying permit process, if any exists. The review process shall be a public review as specified in subsection 17.01.120 E. 2. b. The County may consult with the Mason County Health Department, State of Washington Department of Health, independent reviewer, or any other parties it sees fit. The County will review the report with consideration of the level of science that currently exists and was employed to make the map designation being challenged. The applicant will not be required to provide information and/or analysis in excess of that required to convince the County that a map change is warranted. In addition, the County will re-assess all Map Amendment Reports and all other pertinent information received on a periodic basis and consider other appropriate map amendments on the basis of this increased information.

L. Reclassification of Specific Land Use Activity

Applicants may seek to have the use for which they are applying able to receive a Aquifer Areas Protection Permit per subsection E. This may be granted after the applicant demonstrates to the satisfaction of the County, that the use proposed applies new technologies and/or procedures, not traditional to the industry, that reduce the threat to the aquifer beyond that posed by the traditional technologies and/or procedures to a degree that the County determines will justify the reclassification.

Such demonstration shall be accomplished by providing an Activity Reclassification Report per subsection M. 3. to the County. The County shall evaluate the Report and make a written determination as to whether the individual proposed land use will be recategorized. Review of the application shall be a public review as provided in section 17.01.120 2. b.

Reclassification of a land use shall apply only to the particular use for which the reclassification is sought and shall not be applied to all or any similar uses.

In addition, the County will re-assess all Reports received pursuant to this chapter and all other pertinent information received on a periodic basis and consider the other changes in the categorization of land uses in this chapter on the basis of this increased information.

M. Reports

1. Best Management Practices (BMP) Report - criteria. The following criteria shall apply when preparing a Best Management Practices (BMP) report:

- a. The report shall be prepared by, or done under the direction of and designed by, a qualified person with demonstrated expertise in the industry or field as demonstrated by a statement of qualifications and at least three references from parties familiar with common business practices in the subject field or known expertise in the field.
 - b. The report will identify appropriate Best Management Practices by specifying all known and available reasonable technologies and how they will be employed to prevent degradation of groundwater. All necessary technical data, drawings, calculations, and other information to describe application of the BMP must be supplied.
 - c. The report will identify how the applicant will satisfy the requirements of the Dangerous Waste Regulations, chapter 173-303 WAC in the event that hazardous material is released into the ground or ground water.
 - d. The report will be reviewed by the Department of Community Development or a consultant hired by the County, at the applicant's expense, for this review. The County may consult with the Mason County Environmental Health Department; State of Washington Departments of Health or Ecology, independent reviewer, or any other parties it sees fit.
2. Map Amendment Report/ Site Evaluation Report - criteria. the following criteria shall apply when preparing a Map Amendment Report/ Site Evaluation Report:
- a. A qualified groundwater professional will make a determination whether the proposed map amendment or project application will have adverse impacts on groundwater based on the requirements of the Safe Drinking Water Act and the Wellhead Protection Program, pursuant to Public Water Supplies, Chapter 246-290 WAC; Water Quality Standards for ground waters of the state of Washington, Chapter 173-200 WAC; and Dangerous Waste regulations, Chapter 173-303 WAC. Those chapters of Washington Administrative Code are hereby adopted, as written or hereafter amended, as part of this chapter by reference. They are available at County offices.
 - b. Map Amendment Report/ Site Evaluation Reports shall include the following:
 - i. Identification of features of the proposed development plan (e.g., on-site septic systems and other on-site activities) that may adversely impact ground water quality underlying or down gradient of the project or project area.
 - ii. Drawing in an appropriate scale showing location of abandoned and active wells, springs, and surface water bodies within 1,000 feet of the project

limits.

- iii. A description of the geologic and hydrologic characteristics of the subject property sufficient to justify the map amendment sought. This information may include any or all of the following:
 - (a) Lithologic characteristics and stratigraphic relationships;
 - (b) Aquifer characteristics including recharge and discharge areas, depth to ground water, static water flow patterns, and estimated groundwater flow velocity;
 - (c) Contaminant rate and transport including probable migration pathways and travel time of a potential contaminant release from a site through the unsaturated zone to the aquifer(s) and through the aquifers(s), and how contaminant(s) may be attenuated within the unsaturated zone and the aquifer(s);
 - (d) Appropriate hydro geologic cross sections which depict lithology, stratigraphy, aquifer, units, potential or probable contaminant pathways from a chemical release, and rate of groundwater flow; and
 - (e) Existing groundwater quality, proposal for a groundwater monitoring plan to detect changes and indicate the corrective actions that will be taken if monitoring results indicate contaminants from the site have entered the underlying aquifer(s).
 - (f) Existing soils types and characteristics
 - (g) A discussion of the probable geologic history of the site and its impact on aquifer formation, soils conditions, and aquifer susceptibility.

- 3. Activity Reclassification Report - preparation and review criteria. The following criteria shall apply when preparing an Activity Reclassification Report:
 - a. The report shall be prepared by, or done under the direction of and signed by, a qualified person with demonstrated expertise in the industry or field as demonstrated by a statement of qualifications and at least three references from parties familiar with common business practices in the subject field or known expertise in the field.
 - b. The report shall contain a complete description of the activity for which reclassification is being sought. This description shall include all necessary technical data for the County to assess potential threat to the aquifer from an unmitigated operation, including chemicals and substances used, byproducts produced, etc.
 - c. The report shall present Best Management Practices and/or mitigation techniques adequate to insure, to the satisfaction of the County, that the activity or land use for which reclassification is sought will present no greater threat to groundwater

quality than other uses listed in this ordinance in the category being sought. The burden is on the applicant to make this showing sufficient in the eyes of the County to reclassify the use. The report will include all technical data necessary, design drawings, specifications for equipment used, performance data on equipment or structures, and any evidence or testimony of successful operation of same or similar facilities and practices in other locations.

- d. The report will demonstrate to the satisfaction of the County that reclassification of a land use will have no adverse impacts on groundwater based on the requirements of the Safe Drinking Water Act and the Wellhead Protection Program, pursuant to Public Water Supplies, Chapter 246-290 WAC; Water Quality Standards for Ground Waters of the State of Washington, Chapter 173-200 WAC; and Dangerous Waste Regulations, Chapter 173-303 WAC. Those chapters of Washington Administrative Code are hereby adopted, as written or hereafter amended, as part of this chapter by reference. They are available at Department of Community Development offices.
- e. The report will be reviewed by the Department of Community Development. The County may consult with the Mason County Health Department; State of Washington Departments of Health or Ecology, independent reviewer, or any other parties it sees fit.

N. Public Education/Notice

1. The household or commercial use of herbicides, pesticides, and fertilizers not in conformance with the manufacturers instructions/label directions is a violation of state and/or federal regulation. Improper disposal of oil based paints, paint thinners and other hazardous materials is a violation of the Mason County Solid Waste Regulation and of state and/or federal regulation. The county encourages proper use of such materials and shall provide educational information to the public through its sponsorship of the Washington State Cooperative Extension Service, the Mason Conservation District, or through the provision of informational materials in its offices.
2. Notification:
 - a. Title Notification

The owner of any site within a designated Critical Aquifer Recharge Area as identified in the Mason County Critical Aquifer Recharge Areas Map, on which a development proposal is submitted, shall record a notice with the Mason County Auditor. The notice shall indicate in the public record the presence of a critical

aquifer recharge area, the application of this Chapter to the site, and that limitations on regulated activities may exist. Only one such notice is required to be made on any individual property or lot. The notice shall be as set forth below.

"Notice: This site lies within a critical aquifer recharge area as defined by Chapter 8, Mason County Code. The site was the subject of a development proposal for

application number _____ filed on _____ (date). Restrictions on use or alteration of the site may exist due to natural conditions of the site and resulting regulation. Review of such application provides information on the location of a critical aquifer recharge area and the restrictions on the site. A copy of the plan showing the aquifer recharge area is attached hereto.

b. Plat Notification

For all proposed short subdivision and subdivision proposals within Critical Aquifer Recharge Areas, the applicant shall include a note on the face of the plat. The note shall be as set forth below:

"Notice: This site lies within a critical aquifer recharge area as defined by Chapter 8, Mason County Code. The site was the subject of a development proposal for

application number _____ Filed on _____ (date). Restrictions on use or alteration of the site may exist due to natural conditions of the site and resulting regulation.

The note shall be recorded as part of final plat approval of any short subdivision or subdivision.

c. Evidence of recording of these notices must be provided to the County.

O. Protection of Private Wells

Generators of hazardous materials are hereby defined as a known or suspected source of contamination per state law. No small, medium, or large quantity generators of hazardous materials shall be permitted to locate within 100 feet of any water well per the provisions of WAC 173-160-171 or its successors. This requirement applies to all portions of the County.

P. Secondary Containment of Recycling of Hazardous Materials

The following practices and procedures shall be observed throughout the County:

1. Moderate risk waste and petroleum products, including but not limited to oil and grease, shall be disposed of by recycling or use of a hazardous waste management

facility operating under interim status or with a permit issued by EPA or an authorized state. No person shall intentionally or negligently dump or deposit or permit the dumping or depositing of any such waste in any other manner, including onto the surface of the ground, into surface water, or into ground water.

2. Moderate risk waste, petroleum products, and hazardous materials shall be kept in containers and shall be stored in such a manner and location that if a container is ruptured, the contents will not discharge, flow, be washed or fall into surface water or ground water. This is not intended to supersede any regulations as stated in the Fire Code.

The following are proposed amendments to Section 17.01.240 Definitions:

(revised definition)

Aquifer: a groundwater-bearing geologic formation or formations that contain enough saturated permeable material to yield significant quantities of water to wells or springs (*source: Chapter 173-100 WAC*).

(revised definition)

Best Management Practices: those physical, structural, and managerial practices, and prohibitions of practices, that when used singly, or in combination, can prevent pollution to groundwater and surface water. (*source: Stormwater Program Guidance Manual for the Puget Sound Basin, Volumes I and 2, #92-32 and 92-33, WDEO, 1992*).

(new definition)

Class V Injection Well: a drywell used for collection of stormwater (*source: Federal register, Monday, August 28, 1995, Volume 60, No. 166, Part IV, Environmental Protection Agency -40 CFR, Part 144 and 146, Table 1, Categories of Class V Injection Wells, page 44653*). A Class I injection well is a well used for injection of industrial, commercial, or municipal waste fluids. A Class II injection well is a well used in natural gas and oil exploration or production. A Class III injection well is a well used for extraction of minerals. A Class IV injection well is a well used for injection of dangerous waste or radioactive waste fluids. Class V wells are commonly known as drywells.

(new definition)

Dangerous Waste: solid waste designated in Chapter 173-303-070 through 130 WAC as dangerous or extremely hazardous waste... the word "dangerous waste" will refer to the full universe of wastes regulated by Chapter 173-303 (including dangerous and extremely hazardous waste).

(revised definition)

Feedlot: an outdoor enclosure where livestock is confined or fed for the purpose of fattening for market for more than 45 days a year and where no crops, forage, or post-harvest residues are

sustained during the normal growth season. This definition is not intended to apply where fewer than five (5) livestock are kept on the site.

(new definition)

Groundwater: water in a saturated zone or stratum beneath the surface of the land or below a surface water body *(source: Chapter 173-200-020 WAC)*.

(revised definition)

Hazardous Materials or hazardous substance(s): such materials as flammable solids; corrosive liquids; radioactive material; oxidizing material; highly toxic material; poisonous gases; reactive material; unstable material; hyperbolic material; pyrophoric material as defined in Article 2 of the Uniform Fire Code; and substances, or mixtures of substances, that are an irritant or strong sensitizer or which generate pressure through exposure to heat, decomposition, or other means. Hazardous substances shall also mean **Hazardous waste** as designated in Chapter 173-303 WAC as dangerous or extremely hazardous waste. Hazardous substances also means any dangerous waste or extremely dangerous waste as defined in chapter 70.105.010(5) and (6) RCW, or any dangerous or extremely dangerous waste as designated by rule under 70.105 RCW; and hazardous substance as defined in Chapter 70.105.010(14) RCW or any hazardous substance as defined by rules under chapter 70.105 RCW; and substance that, on the effective date of this ordinance, is a hazardous substance under section 101(14) of the Federal Cleanup Law, 42 U.S.C., Section 9601(14); petroleum products; and any substance or category of substances including solid waste decomposition products, determined by WDOE's director to present a threat to human health or the environment if released into the environment. The term hazardous substances does not include crude oil or any fraction thereof or petroleum provided that such are contained in an underground storage tank from which there is no release of material and provided that the tank is in compliance with all applicable Federal, State, and local law.

(revised definition)

Landfill: a disposal facility or part of a disposal facility at which solid and demolition waste is permanently placed in or on the land that is not a land spreading disposal facility *(source: Chapter 173-304 WAC)*. In addition, landfills means all continuous land and structures and other improvements on the land used for the disposal of solid waste, pursuant to Chapter 173-351 WAC.

(new definition)

Large Quantity Generators: those businesses which generate more than 2,200 pounds of dangerous waste per month. They accumulate more than 2,200 pounds of dangerous waste at any time. They generate and accumulate more than 2.2 pounds of acutely hazardous waste or toxic extremely hazardous waste.

(new definition)

Medium Quantity Generators: those businesses that generate more than 220 pounds, but less than 2,200 pounds of dangerous waste per month. They are limited to the accumulation of less

than 2,200 pounds of waste at any time. They are limited to the generation of, and accumulation of, less than 2.2 pounds of acutely hazardous waste or toxic extremely hazardous waste.

(new definition)

Moderate Risk Waste: means those two types of hazardous wastes: 1) Hazardous waste generated by households, called household hazardous waste; and 2) hazardous waste generated by businesses in amounts less than the quantity exclusion limit established in chapter 173-303-071 through 173-303-103 WAC, which is most commonly 220 pounds per month or batch, called small quantity generator waste.

(new definition)

Qualified Groundwater Professional: a hydrologist, geologist, engineer, or other scientist whom meets all of the following criteria:

- A. Has received a baccalaureate degree or post graduate degree in the natural sciences or engineering; and
- B. Has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgements regarding groundwater vulnerability.

(new definition)

Small Quantity Generators: means those businesses that generate less than 220 pounds of dangerous waste per month. They are limited to the accumulation of less than 2,200 pounds of waste at any time. They are limited to that accumulation of less than 2.2 pounds of acutely hazardous waste or toxic extremely hazardous waste. (see WAC 173-303-070(8))

(new definition)

Solid waste: all putrescible and non-putrescible solid or semi-solid wastes including, but not limited to, garbage, rubbish, ashes, industrial waste, swill, demolition and construction waste, abandoned vehicles or parts thereof, and discarded commodities. This includes all liquid, solid, and semi-solid, materials that are not the primary products of public, private, industrial, commercial, mining, and agricultural operations. Solid waste includes, but is not limited to, sludge from waste water treatment plants and seepage, septic tanks, wood waste, dangerous waste, and problem wastes (*source: Chapter 173-304-100 WAC*).

(revision of "Surface Mining")

Surface Mining Operations: the mining of rock, stone, gravel, sand, earth and minerals, as regulated by the Washington Department of Natural Resources pursuant to Chapter 78.44, RCW.

(new definition)

Underground storage tanks (UST): or "Below ground storage tanks" are underground storage tanks and connecting underground piping as defined in the rules adopted under Chapter 90.76 RCW; or any one or combination of tanks (including underground pipes connected thereto) that is

used to contain an accumulation of regulated substances, the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground. This term does not include any exempt UST systems specified in WAC 173-360-110(2).

(b) Exemptions. The following UST systems, including any piping connected thereto, are exempt from the definition:

(i) Any UST system holding hazardous waste subject to Subtitle c of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances.

(ii) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act,

(iii) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks, and electrical equipment tanks.

(iv) Any UST system whose capacity is one hundred gallons or less.

(v) Any UST system that contains a de minimus concentration of regulated substances.

(vi) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

(vii) Farm or residential UST systems of one thousand one hundred (1,100) gallons or less capacity used for storing motor fuel for noncommercial purposes (i.e. not for resale).

(viii) UST systems used for storage of heating oil for consumptive use on the premises where stored; except that such systems which store in excess of one thousand one hundred (1,100) gallons are subject to release reporting requirements of WAC 173-360-372.

(ix) Septic tanks.

(x) Any pipeline facility (including gathering lines) regulated under:

(A) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.); or

(B) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App 2001, et Seq.); or

(C) Which is an intrastate pipeline facility regulated under state laws comparable to the provision of the law referred to in (x)(A) or (B) of this subsection.

(xi) Surface impoundments, pits, ponds, and lagoons.

(xii) Storm water or wastewater collection systems.

(xiii) Flow-through processing tanks.

(xiv) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations.

(xv) Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

MASON COUNTY RESOURCE ORDINANCE
CRITICAL AQUIFER RECHARGE AREAS, SECTION 17.10.080

TABLE 1

TYPE OF FACILITY	DESIGN UNITS	FLOW (GPD)
Airports	per employee, add per passenger	10 4.0
Banquet rooms	per seat	5
Barber and beauty shops	per chair	100
Bowling alleys (bar and food)	per lane	125
Bowling alleys (bar only)	per lane	75
Campgrounds with no laundry, no wet sewer hookups or dump station	per camp site	50
Campgrounds/RV park, with toilets	per camp site	75
Campgrounds/RV park, showers, toilets, laundry, sewer hookup	per camp site	100
Church - food service, 4-hour	per person	5
Church - no food, 4-hour	per person	3
Community College	per student & faculty, 12-hours	15
Country club - includes food, showers, lounge	per member, add per non-member	50 25
Day Care Centers, 12-hour	per person	20
Dentist office	per dentist, add per wet chair	250 200
Doctor office	per doctor	250
Doctor office, in medical center	per 1000 sq ft, 12-hours	500
Food Service and Bars		

TYPE OF FACILITY	DESIGN UNITS	FLOW (GPD)
a. Ordinary restaurant	per seat	50
b. 24-hour restaurant	per seat	75
c. Bar and cocktail lounge	per seat	30
d. Drive-in restaurant	per car space	75
e. Bar only, no food	per seat	10
f. Coffee shop, 6 hour operation	per seat	6
Hospital	per bed	300
Hospital - mental	per bed and per employee	172 11
Hotels and motels, rooms only	per room	130
Industrial building, excluding cafeteria and process waste	per employee/ 8 hour shift	17
Industrial, add for Cafeteria	per employee	13
Laundries, self serve, 16-hour	per machine	400
Meeting rooms	per seat	3
Mobile home parks	per space	300
Nursing home/rest home	per bed	200
Office building	per worker	20
Parks - toilets	per person	10
Parks - toilets & showers	per person	20
Prison	per resident, add per employee	159 16
Resort camps, cottages	per room	100
Rooming house	per resident	50
Schools, no food or showers	per student	10
Schools, add for cafeterias	per student	5
Schools, add for showers	per student	5

TYPE OF FACILITY	DESIGN UNITS	FLOW (GPD)
Schools, boarding	per student	75
Service station - pumps	per island, add per employee	500 25
Service stations - repair	for first bay, add each additional bay	1000 500
Shopping centers, 12-hour	per 1000 sq ft floor space	300
Stadiums, race tracks, ball parks	per seat	3
Stores, without food service		
a. Private toilets, for employees only	per employee	20
b. Public toilets	per toilet room	400
Theaters		
a. Indoor, auditoriums, 12-hour	per seat	5
b. Outdoor, drive-ins, 4-hour	per space	5

Sources: WA DOE, Criteria for Sewage Works Design; State of Florida, Dept. of Environmental Regulation, Technical Information Memorandum 6.2.1; WA DOE, Large On-Site Sewage Guidelines; US EPA, Design Manual, Onsite Wastewater Treatment and Disposal Systems.

ORDINANCE NUMBER 62-99
ATTACHMENT B

Mason County Board of County Commissioners
June 22, 1999
FINDINGS OF FACT

1.

Under consideration is a proposal to amend the critical aquifer recharge area protections of the Mason County Resource Ordinance.

2.

The proposal is modeled after the City of Shelton aquifer protection ordinance and the Washington Department of Ecology Model Ordinance, and based on the analysis of the Mason County Department of Community as contained in the *Issue Paper - Mason County Interim Resource Ordinance Review - Critical Aquifer Recharge Areas*, and the work of the Aquifer Recharge Ordinance Study Group. The revisions were intended to bring the regulations into compliance with the Growth Management Act and provide consistency with the City of Shelton's regulations.

3.

During the review process of the county draft, the Western Washington Growth Management Hearings Board review the City of Shelton's regulations and found it in compliance with the Growth Management Act, except for three issues. These issues were:

- that a moderately critical recharge area was discussed in the record, but was not designated or protected,
- that existing uses were grand fathered and not required to comply with the ordinance, and
- that on-going monitoring and enforcement of compliance with the conditions of approval were not required.

4.

Subsequent to the order of the Hearings Board, amendments were developed to respond to the issues identified in the order.

5.

Critical Aquifer Area Designations: Discussion

Since the original mapping of critical areas in 1993, research had continued on this issue, and new information had been gathered. The areas currently shown on reference maps as the aquifer recharge critical areas were mapped by Gordon Adams in consultation with the Department of Natural Resources and the Department of Ecology. Documentation is provided in the letter from Mr. Adams, dated March 29,

1999. In addition to the Class I and Class II areas which had be previously identified, new information has allowed for the mapping of a Class III area for areas of moderate susceptibility, and a Class IV for areas of low susceptibility, but still needing some protection. Other parts of the county were reviewed and found to be non-critical areas (NC on the maps). Mr. Adams is a geologist. In making his recommendations, he applied best available science, all information available, the CTED minimum guidelines to classify critical areas (Chapter 365-190 WAC), and the guidance document from DOE. Those consulted included Kirk Cook, the principal author of the DOE guidance document. The recommendations of Mr. Adams were incorporated unchanged into the proposed ordinance and maps.

Critical Aquifer Area Designations: Finding

The proposed maps of critical aquifer areas identify those areas in Mason County which should be designated and protected as critical aquifer recharge areas, using available information and best available science.

6.

Grand-fathered Uses: Discussion

Recent court decisions have confirmed the authority of local governments to regulate existing business, uses, or activities when the continuation of such activities pose a specific threat to public health and safety. The previous county and city ordinances allowed existing activities to continue in operation without review and the Hearings Board identified this as a failure to adequately protect the critical area. In place of this exemption, the proposal regulates these "pre-existing" uses and activities and requires a review of the activity and upgrading of the activity as necessary and reasonable to protect the public and the critical area. The county will work with the pre-existing uses to apply best management practices and the county will monitor compliance.

Grand-fathered Uses: Finding

The new section in the ordinance, C. Pre-existing Uses, and related changes adequately protect the critical area and public health from the potential threat of existing uses and activities.

7.

Monitoring and Enforcement: Discussion

In the Hearings Board decision on the City of Shelton's CARA ordinance, two related problems were identified when using best management practices to allow potentially harmful activities in a critical area: monitoring and enforcement. Although the City of Shelton's CARA regulations apparently did not include an enforcement provision, the county's CARA regulations are a part of its Resource Ordinance and does have enforcement provisions in Section 17.01.200. The current draft has added provisions in Section 17.01.080 J. BMP Monitoring and Inspection, for the monitoring of a permit

holder's implementation of the best management practices. In the advisory committee work leading up to this draft, it was determined that the state does have an educational and inspection program that assists and periodically inspects users of hazardous materials, as regulated by the state. However, it was also determined that the state inspectors could not be relied upon to inspect and correct issues that might be unique to the permit issued by the city or county. Inspection by the county as provided in the proposal is intended to address this issue.

Monitoring and Enforcement: Finding

The addition of requirements for monitoring of best management practices (BMP) and the existing enforcement mechanisms address in a reasonable and effective way the problems that might result from a reliance on the implementation of BMP for protection of the CARA.

8.

Special County Provisions: Discussion

Some proposed county regulations are different than those contained in the City of Shelton ordinance. This was found necessary to address rural uses, development in the urban area where sewer services are not yet available, and development which is not expected to be served by urban services. To address these cases the following subsections are included: F. Subdivision Standards and Evaluation Requirements, G. On-site Septic System Standards, and H. Well Head Protection Area - Notice.

Subsection H provides for notices to be provided to the managers of larger water systems so that they are informed of proposals for uses that potentially might impact their systems. The intention of this provision is to involve interested parties to ensure that proper safeguards are in place.

Subsections F. a. and b. are intended to provide that the density of development reliant on on-site septic is kept to a density that will not cause cumulative impacts to the aquifer. A density limit of one residential unit per acre was identified by the DOE and in other information as acceptable for the development of the CARA. Subsections F. b and c provide that subdivisions do not have significant local impacts. This is intended to address site specific impacts that may occur before the effluent has time to mix with the aquifer, rather than any cumulative impact on the aquifer. This provision will address impact on a nearby well or stream.

Subsection G. 1. provides for proper operation and maintenance of septic systems.

Subsection B. 2. limits the density and intensity of use in urban areas as well as elsewhere in the county to prevent a cumulative impact to the aquifer from septic systems. While it does allow existing lots to develop one dwelling even if the lot is less

than one acre, such development must meet all other health department standards. Because of the large size of the aquifers and the relative few lots under an acre in the CARA, it was judged that there would not be a significant cumulative impact on the aquifer from this exception. The intensity of non-residential uses is controlled by establishing a unit volume of waste water flow that would provide the same level of protection to the aquifer as the residential density limit.

Special County Provisions: Finding

The proposal contains appropriate regulations to control development which relies on individual on-site drainfields or small systems and will prevent significant cumulative impacts to the CARA.

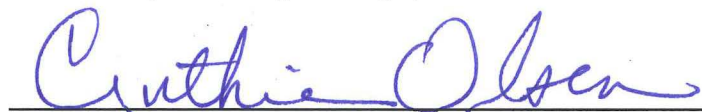
9.

The Planning Commission held a public hearing on July 14, 1998, and considered the testimony given along with the record before it. The Commission then adopted findings of fact and approved a recommendation for adoption of the proposal to be sent forward to the Board of County Commissioners.

10.

The proposal is consistent with and balances the goals of the Growth Management Act. The proposal is consistent with and implements the Mason County Comprehensive Plan. This is shown by regulations which should be adequate to protect the critical aquifer recharge area and the environment. Yet the regulations are crafted to be predictable and flexible, to not restrict the use of property more than necessary, and to not impact economic development more than necessary.

From the preceding findings, it is concluded that the amendments should be adopted.



Chair, Mason County Board of Commissioners



Date