DRAFT REVISIONS TO CRITICAL AREAS ORDINANCE
Article IV(D). Critical Aquifer Recharge Areas

Please note: This document is a draft of potential changes to the Lewis County Critical Areas Ordinance. The document presents one small section of the larger ordinance, and the Lewis County Planning Commission will review the remaining sections of the draft over the course of 2017. A version of the draft with the proposed additions and deletions is available at: http://lewiscountywa.gov/calendar/community-development-calendar. Details about the draft revisions will be presented at the meeting on April 11, 2017.

17.35A.840 Purpose.
The purpose of this article is to:

(1) Prevent the significant degradation of the quality and quantity of groundwater resources.

(2) Recognize the potential connection between surface and ground waters.

(3) Comply with Chapter 90.48 RCW, the Water Pollution Control Act of the state of Washington. [Ord. 1204 Exh. A § 2, 2008]

_____ Administration

(1) Administration of this chapter shall occur in accordance with Article ___ of this code.

(a) Applicability. Development activities listed in 17.35A.860(2) that are located in a critical aquifer recharge area shall require the submittal of a critical aquifer recharge area report; provided, that the regulations shall not apply to land uses and/or activities that exist as of the date of the regulation. Expansion of the scale or intensity of an existing use listed in 17.35A.860(2) shall require the submittal of a critical aquifer recharge area report.

(b) Report requirements. The requirements for a critical aquifer recharge area report are included in _____ (Appendix B).

17.35A.850 Designation.
(1) Critical aquifer recharge areas are categorized as follows in Lewis County:

(a) Category I – Category I critical aquifer recharge areas are those areas that are within a mapped 10-year time of travel area for a public water system or within a known area of susceptible groundwater supplies.

(b) Category II – Category II critical aquifer recharge areas are those areas with highly permeable soils that provide rapid recharge with little groundwater protection. Predominant soil series and types are those listed as Category II soils in Appendix A.

(c) Category III – Category III, moderate aquifer sensitivity areas, are those locations with aquifers present, but which have a surface soil material that encourages run-off and slows water entry into the ground. Predominant soil series and types are those listed as Category III soils in Appendix A.

(2) If an applicant can demonstrate through a valid hydrogeological assessment that a property does not meet the criteria for a Category I, II or III critical aquifer recharge area, the administrator may waive the requirements of this section.

17.35A.860 Standards

(1) Prohibited activities. The following activities are prohibited in Category I and II areas due to the probability or potential magnitude of adverse effects on groundwater:

(a) Landfills, including, but not limited to, hazardous or dangerous waste disposal facilities as defined in Chapter 173-303 WAC, municipal solid waste landfills as defined in Chapter 173-351 WAC, and limited purpose landfills as defined in Chapter 173-350 WAC.

(b) Underground injection wells, such as:

(i) Agricultural drainage wells.

(ii) Untreated sewage waste disposal wells.

(iii) Cesspools.

(iv) Industrial process water and disposal wells.

(c) Wood product preserving or treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade).

(d) Facilities that store, process, or dispose of radioactive substances.

(e) Dry cleaners or other facilities that store, process, or dispose of chemicals containing perchloroethylene (PCE)

(f) Gas stations or other facilities that utilize methyl tertiary butyl ether (MTBE).

(g) Electroplating facilities.

(h) Other activities that the administrator or health officer determines would:

(i) Significantly degrade groundwater quality;

(ii) Significantly reduce the recharge of aquifers that are currently used or potentially usable as a potable water source; or

(iii) Significantly reduce the recharge of an aquifer that acts as a significant source of in-stream river or stream flows.

The determination of these potential impacts must be made based on credible scientific information.

(2) Permitted Activities. The following activities are allowed subject to the submittal of an approved critical aquifer recharge area report; provided, that the proposed use is not prohibited in the critical aquifer recharge area in 17.35A.860(1) and the use is allowed within the underlying zoning designation:

(a) Above- and below-ground storage tanks (tanks and pipes used to contain an accumulation of regulated substances).

(b) Animal feedlots, animal feeding operations/concentrated animal feeding operations (new or expanded uses).

(c) Below-ground transformers and capacitors.

(d) Chemical manufacturing, storage, reprocessing and/or research.

(e) Creosote and asphalt manufacture and treatment.

(f) Dry cleaning.

(g) Electroplating.

(h) Facilities that conduct biological research.

(i) Funeral services.

(j) Furniture stripping.

(k) Golf courses.

(l) Injection wells.

(m) Landfills.

(n) Medium and large quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste).

(o) Motor vehicle service garages, repair shops, gasoline service stations, auto-washing facilities and/or auto recycling facilities (both private and governmental).

(p) Petroleum and petroleum product refining, including reprocessing.

(q) Pipelines.

(r) Printing and publishing shops (that use printing liquids) and/or photographic processing.

(s) Regulated waste treatment, storage, disposal facilities that handle hazardous material.

(t) Sawmills (producing over ten thousand (10,000) board feet per day).

(u) Solid waste handling and processing.

(v) Surface mining.

(w) Wood treatment facilities.

(x) Other uses deemed necessary by the administrator.

_____ Conditions

(1) Required conditions. Proposed uses and/or activities shall be constructed in accordance with applicable local, state and federal regulations, best management practices, and the guidance and recommendations from the approved critical aquifer recharge area report. A partial list of standards and best management practices for regulated activities are shown in Appendix C.

(2) If the administrator determines that an additional level of protection for a critical aquifer recharge area is necessary, beyond the best management practices and standards listed in Appendix C, the administrator may impose additional conditions that ensure that the specific use or activity will not significantly degrade groundwater quality or quantity. Such conditions may include, but are not limited to, the following:

(a) The use of site design or other approaches that limit the amount of impervious surfaces on a project site.

(b) A written management plan for wastewater, hazardous products and hazardous waste, petroleum products and petroleum waste, and/or other materials judged by the administrator to be potentially detrimental to groundwater quality.

(c) The provision of or required upgrade to on-site spill response equipment.

(d) Employee spill response training.

(e) Emergency service coordination measures.

(f) Groundwater monitoring.

APPENDIX A
Aquifer Sensitivity Rating for Lewis County Soil Types

Soil Survey Map No. and Soil Series/Name	Category II Severe	Category III Moderate
4. Aquic Xerofluvents		X
11-15. Bellicum		X
16-20. Benham		X
23-25. Bromo		X
31-41. Cattcreek		X
47-48. Chehalis		X
49-56. Cinebar		X
57-60. Cispus		X
61. Cloquato	X	
62-69. Colter		X
70-74. Cotteral		X
75. Cryaquepts		X
84. Doty		X
88. Fluvaquentic Humaquepts	X	
89-90. Galvin		X
91. Glenoma	X	
92. Greenwater	X	
104. Indianola	X	
116-117. Klaber		X
123. Ledow	X	
130-132. Melbourne		X
133. Mossyrock		X
135. National	X	
136-137. Nesika	X	

Soil Survey Map No. and Soil Series/Name	Category II Severe	Category III Moderate
138-139. Netrac	X	
140-144. Nevat		X
145-147. Newaukum		X
148. Newberg	X	
149. Nisqually	X	
152-154. Olequa		X
155-158. Olympic		X
166. Pits	X	
167-169. Prather		X
170. Puget		X
171. Puyallup	X	
172-173. Reed		X
180. Riverwash	X	
193-195. Scamman		X
204. Schooley		X
206-207. Siler	X	
208-211. Skate	X	
212. Spanaway	X	
213. Squally		X
225-227. Tradedollar		X
242-246. Winston	X	
248. Xerorthents, Steep		X

APPENDIX B
Critical Aquifer Recharge Area Report Requirements

17.35A._____ Critical Aquifer Recharge Area Report Requirements

Critical aquifer recharge area reports shall include the following site- and proposal-related information unless the administrator determines that any portion of the requirements is unnecessary given the scope and/or scale of the proposed development:

(1) A site plan that shows:

(a) Existing physical features of the site including buildings, fences, and other structures, roads, parking lots, utilities, water bodies, etc.

(b) A detailed depiction of the proposed development including features such as utility location (well, septic, drainfield, etc.); parking and access location; the limits of grading and vegetation removal; and the location of any proposed building(s).

(c) An identification of sensitive areas and buffers within 300 feet of the site and an estimate of the existing approximate acreages for each. Assessment of off-site sensitive areas shall be based on available information and shall not require access to off-site properties.

(2) The following additional information:

(a) Available information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all critical aquifer recharge areas on-site and immediately adjacent to the site, the permeability of the unsaturated zone, and the presence of any confining layers.

(b) Groundwater depth, flow direction and gradient based on available information.

(c) Currently available data on wells and springs within 1,320 feet of the project area.

(d) Existing and available historic water quality data for the area to be affected by the proposed activity.

(e) The effects of the proposed project on groundwater quality and quantity, including:

(i) Potential effects on stream flow, wetlands and/or other resources, and on ecosystem processes.

(ii) A predictive evaluation of groundwater withdrawal effects on nearby wells and surface water features.

(iii) A predictive evaluation of the transport of contaminants to ground waters in the event of a spill based on existing confining layers, the availability of centralized wastewater treatment, the nature of the chemicals and/or processes utilized in the proposed activity, and other features.

(f) Proposed best management practices, including how the proposal meets any local, state or federal guidance or standards.

(g) A spill plan that identifies equipment and/or structures that could fail and result in an impact to groundwater. Spill plans shall include emergency response provisions as well as items that address regular inspection, and the repair and replacement of structures and equipment that could fail.

APPENDIX C:

Regulated Activities and Best Management Practices in Critical Aquifer Recharge Areas

Activity	Statute - Regulation - Guidance
Above Ground Storage Tanks	Chapter 173-303-640 WAC
Animal Feedlots, Animal Feeding Operations/Concentrated animal feeding operations	Chapter 173-216 WAC, Chapter 173-220 WAC, Final Rule 40 CFR Parts 9, 122, 123, and 412
Automobile Washing facilities	Chapter 173-200 WAC, Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (Washington Department of Ecology WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC, Chapter 90.76 RCW, RCW 43.131.394
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303 WAC
Dangerous waste	Chapter 70.105 RCW, chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (Washington State Department of Ecology 94-146)
On-Site Sewage Systems (Large Scale > 3,500 gal/day)	Chapter 173-240 WAC, Chapter 246-272 WAC, Chapter 246-272B WAC, Lewis County Code
A single or multiple small on-site sewage systems with a combined design volume of greater than 3,500 gal/day	Chapter 246-272 WAC, Chapter 246-272A WAC, Lewis County Code
Pesticide and Fertilizer Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Reclaimed water for groundwater recharge	Chapter 90.46 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (Washington State Department of Ecology, 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 78.44 RCW, Chapter 332-18 WAC

Activity	Statute - Regulation - Guidance
Wastewater Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, Washington State Department of Ecology Land Application Guidelines, Best Management Practices for Irrigated Agriculture