Safe Drinking Water Act

The U.S. Environmental Protection Agency has broad authority, under Section 1421 of the Safe Drinking Water Act, 42 U.S.C. 300g-1(b)(1)(A), (B), to establish national primary drinking water standards, "if the Administrator determines that . . . the contaminant may have an adverse effect on the health of persons"; "is known to occur. . . in public water systems with a frequency and at levels of public health concern;" or there is "a meaningful opportunity for health risk reduction for persons served by public water systems. "

> For each contaminant that the Administrator determines to regulate under subparagraph (B), the Administrator shall publish maximum contaminant level goals and promulgate, by rule, national primary drinking water regulations under this subsection.
>
> 42 U.S.C. 300g-1(b)(1)(E)

The Environmental Protection Agency set the maximum contaminant level for nitrate, nitrite and total nitrate and nitrite in 40 CFR § 141.62

Contaminant	**MCL (mg/l)**
(7) Nitrate	10 (as Nitrogen)
(8) Nitrite	1 (as Nitrogen)
(9) Total Nitrate and Nitrite	10 (as Nitrogen)

EPA may delegate its enforcement authority under the Safe Drinking Water Act to states if they adopt drinking water regulations that are no less stringent than the federal standards. 42 U.S.C. 300g-2(a), 300h-1. "States are responsible for reviewing, establishing, and revising water quality standards." "States may develop water quality standards more stringent than required" by federal regulations. 40 CFR § 131.4 (a). Washington State's Department of Ecology has adopted Chapter 173-200 WAC, *Water quality standards for ground waters of the state of Washington.* Washington's drinking water quality standard for nitrate is 10 milligrams per liter (mg/L), or 10 parts per million (ppm). State law requires public water systems to sample for many contaminants, including nitrate, on a regular basis. Public water systems with nitrate levels over 10 ppm must notify the people who receive water from them.

The Department of Ecology's groundwater regulations, WAC 173-200, implement Washington's Water Pollution Control Act, ch. 90.48 RCW, and Water Resources Act of 1971, ch. 90.54 RCW. The goal of the regulations is to maintain the highest quality of the state's ground waters and protect existing and future beneficial uses of the groundwater through the reduction or elimination of the discharge of contaminants to the state's ground waters. To implement this goal, the regulations establish groundwater quality standards which, together with the state's technology-based treatment requirements, provide for the protection of the environment and

human health and protection of existing and future beneficial uses of ground waters. The regulations apply to all ground waters of the state that occur in a saturated zone or stratum beneath the surface of land or below a surface water body. They do not apply to: (a) contaminant concentrations found in saturated soils where those contaminants are chemicals or nutrients that have been applied at agronomic rates for agricultural purpose if those contaminants will not cause pollution of any ground waters below the root zone; (b) contaminant concentrations found in saturated soils where those contaminants are constituents that have been applied at approved rates and under approved methods of land treatment if those contaminants will not cause pollution of any ground waters below the root zone; or (c) clean up actions approved by the department under the Model Toxics Control Act, ch. 70.105D RCW, or approved by the United States Environmental Protection Agency under the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 et seq. WAC 173-200-010.

WAC 173-200-040 (2) establishes "groundwater concentrations" which groundwaters of the state may not exceed. Nitrate concentrations in groundwater may not exceed 10 mg/L. WAC 173-200-040 (2) (Table 1). "No person shall engage in any activity that violates or causes the violation of [ch. 173-200 WAC]." WAC 173-200-100 (2). Violations of maximum concentrations may be addressed by enforcement "through all legal, equitable, and other methods available to the department including, but not limited to: issuance of state waste discharge permits, other departmental permits, regulatory orders, court actions, review and approval of plans and specifications, evaluation of compliance with all known, available, and reasonable methods of prevention, control, and treatment of a waste prior to discharge, and pursuit of memoranda of understanding between the department and other regulatory agencies." WAC 173-200-100 (3).[1]

If the Department of Ecology determines that a potential to pollute the groundwater exists, the Department may request a permit holder or responsible person to prepare and submit for its approval a groundwater quality evaluation program for the relevant activity. Each evaluation program must be based on soil and hydrogeologic characteristics and be capable of assessing impacts on groundwater at the "point of compliance." The evaluation program approved by the department may include (a) groundwater monitoring for a specific activity; (b) groundwater monitoring at selected sites for a group of activities; (c) monitoring of the vadose zone; (d) evaluation and monitoring of effluent quality; (e) evaluation within a treatment process; or (f) evaluation of management practices. WAC 173-200-080 (2). The "point of compliance" is the location where the "enforcement limit," is "measured and shall not be exceeded." WAC 173-200-060 (1). The "enforcement limit" is established in accordance with WAC 173-200-050.

The Washington State Department of Health is authorized to adopt rules as necessary for group B public water systems, as defined in RCW 70.119A.020, which rules "shall, at a minimum, establish requirements regarding the initial design and construction of a public water system" and "rules and standards for prevention, control, and abatement of health hazards and nuisances

[1] The Department of Ecology has elected to precede any civil or criminal penalty with a "compliance order" if the persons whose activity violates Ch. 173-200 is in compliance with best management practices adopted by rule in chapter 248-96 WAC, WAC 173-304-300(4), RCW 15.58.150 (2)(c), WAC 16-228-180(1), or 16-228-185. WAC 173-200-100 (8).

related to the disposal of human and animal excreta and animal remains." RCW 42.30.050 (2) (b), (c).

The Washington State Department of Health also requires that nitrate levels (concentrations) (as N) in Class A public water systems not exceed the maximum contaminant level ("MCL") of 10 mg/L, and that nitrite levels (concentrations) not exceed the MCL of 1 mg/L. WAC 246-290-310(3)(Table 4). The requirements for Class B public water systems are the same. WAC 246-291-170 (2)(b) Nitrate and nitrite are "primary inorganic contaminants" and the MCL for nitrate and nitrite are "primary MCLs". When primary MCL's are exceeded by a public water system the water purveyor must "determine the cause of the contamination" and "take action as directed by the Department of Health." WAC 246-290-320(1)(b)(iii).[2]

Where drinking water in private wells contains nitrate above the MCL, EPA may determine that such an imminent and substantial danger exists. EPA may then take action, including collecting samples to investigate the sources of the contamination. In addition, where appropriate, EPA may issue orders to require provision of alternative water supplies by persons who caused or contributed to such conditions. EPA may also judicially enforce its orders, through action seeking civil penalties of not more than $25,000 for each day of such violation. If violation of EPA's orders is "wilfull," EPA may seek criminal penalties of fines or imprisonment for not more than 3 years. 42 U.S.C. § 300g-2(b). Citizens may also seek protection of underground sources of drinking water, under 42 USC 300j-8, so as to mandate EPA regulatory or litigative action:.

> **(a)** Persons subject to civil action; jurisdiction of enforcement proceedings
> Except as provided in subsection (b) of this section, any person may commence a civil action on his own behalf—
> **(1)** against any person (including
> **(A)** the United States, and
> **(B)** any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of any requirement prescribed by or under this subchapter;
> **(2)** against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this subchapter which is not discretionary with the Administrator; or
> **(3)** for the collection of a penalty by the United States Government (and associated costs and interest) against any Federal agency that fails, by the date that is 18 months after the effective date of a final order to pay a penalty assessed by the Administrator under section 300h–2 (b) of this title, to pay the penalty.

The U.S. EPA may also designate sole source drinking water aquifers under Section 1427 of the Safe Drinking Water Act, 42 U.S.C. 300h.

[2] Inorganic chemical and physical follow-up monitoring shall be conducted in accordance with the following:
For nitrate, 40 C.F.R. 141.23 (a)(4), 141.23 (d)(2), 141.23 (d)(3), 141.23 (f)(2), 141.23(g), 141.23(m), 141.23(n), and 141.23(o);
For nitrite, 40 C.F.R. 141.23 (a)(4), 141.23 (e)(3), 141.23 (f)(2), and 141.23(g). WAC 246-290-320(3)(b), (c).

Clean Water Act

The Clean Water Act (CWA), 33 U.S.C. §1251 et seq., establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for industry. We have also set water quality standards for all contaminants in surface waters. The CWA makes it unlawful to discharge any pollutant from a point source into navigable waters, unless a National Pollutant Discharge Elimination System ("NPDES") permit is obtained (33 U.S.C. 1342) NPDES permitting authority has been delegated to Washington State Department of Ecology. (33 U.S.C. 1342 (b)).

The Department of Ecology is the primary agency in Washington State responsible for the protection of both ground and surface water quality. Ecology's Water Quality Program operates primarily pursuant to the Water Pollution Control Act, Chapter 90.48 RCW. The Act makes it "unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters." (RCW 90.48.080)

Ecology may implement measures to protect both ground and surface waters from pollutants, and has established regulations for the protection of ground and surface water quality, permitting of discharging activities, and financing of water quality protection activities. This regulation lists numerical limits for specific contaminants ("water quality criteria") that apply to all groundwaters in the state. These criteria are used when evaluating the performance of permitted discharge activities (such as sprayfields and holding ponds), implementation of best management practices implementation, or when conducting clean-up activities at historical or current waste sites.

Ecology's water quality standards incorporate an "antidegradation policy," an otherwise existing part of state water quality law (WAC 173-200-030). This policy forbids degradation which would harm existing or future beneficial uses of ground water (drinking water, irrigation and support of wildlife habitat). The standards provide numeric values which must not be exceeded to protect the beneficial use of drinking water. Washington's water quality standards are enforceable through actions of the State Department of Ecology. Washington's Water Pollution Control Act authorizes the Department of Ecology to "bring any appropriate action, in law or equity, including action for injunctive relief . . . as may be necessary to carry out the provisions of that Act (RCW 90.48.037), including its prohibition of the discharge of organic or inorganic matter that may cause pollution of ground or surface water. (RCW 90.48.080).

40 CFR 141

Ecology's water quality standards apply to both point source activities and nonpoint source activities. Point source activities are activities where a source of pollution can be readily distinguished, such as the industrial discharge of waste onto or into the ground. State law requires point sources to operate under permits that set conditions for discharges. These permits may be issued to a specific entity with conditions designed to protect water quality.

Nonpoint source activities are diffuse in nature, and often consist of many small sources of pollution that have a cumulative effect, like highway runoff, on-site septic systems in developed areas, and application of pesticides or nutrients in both agricultural and urban areas. Some nonpoint sources are managed through the development of siting and design standards.

Permits issued by Ecology describe penalty provisions which may be put into effect if discharge limitations (or other conditions specified in the permit) are not met. Repeated violations of the permit can result in closure of the discharging activity and fines for potential clean-up activities.

"General permits" may also be issued to a group of entities with common discharge characteristics and conditions. (WAC 273-226-020). Permits issued under chapter 273-226 WAC are designed to satisfy the requirements for discharge permits under sections 307 and 402(b) of the federal Water Pollution Control Act (33 U.S.C. §1251) and the state law governing water pollution control (chapter 90.48 RCW). (WAC 273-226-020). All point sources must apply for and obtain a general permit as a condition of operation. " 'Point source' means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture." (WAC 273-226-030 (21)). General permits have been issued to industries and municipalities for treated discharges into surface waters such as Sulphur Creek Wasteway or the Yakima River.

Operators of facilities that meet the definition of point source must make application to the Department of Ecology for coverage under a general permit. (WAC 227-226-200.) "If a permittee fails or refuses to comply with an interim or final requirement contained in a general permit, or as submitted as part of an application for coverage under a general permit, such noncompliance shall constitute a violation of the general permit for which the department may revoke coverage under the general permit or take direct enforcement action pursuant to chapter 90.48 RCW." (WAC 227-226-180(5)).

General permits are issued for fixed terms not exceeding five years from the effective date. All permitees covered under a general permit must submit a new application for coverage under a general permit or an application for an individual permit at least 90 days prior to the expiration date of the general permit under which the permittee is covered. When a permittee has made timely and sufficient application for the renewal of coverage under a general permit, an expiring general permit remains in effect and enforceable until the application has been denied, a replacement permit has been issued by the department, or the expired general permit has been canceled by the department. Coverage under an expired general permit for permittees who fail to

submit a timely and sufficient application shall expire on the expiration date of the general permit. (WAC 173-226-200).

A general permit may be modified, revoked and reissued, or terminated, during its term if information is obtained by the Department of Ecology which indicates that cumulative effects on the environment from dischargers covered under the general permit are unacceptable. (WAC 173-226-230 (1)(d)). The Department may require any discharger to apply for and obtain an individual permit, or to apply for and obtain coverage under another more specific general permit. Also, Any interested person may petition the Department to require a discharger authorized by a general permit to apply for and obtain an individual permit. (WAC 173-226-240 (2), (3)).

The Department of Ecology may revoke, or "terminate coverage under" a general permit where terms or conditions of the general permit are violated, conditions change such that either temporary or permanent reduction or elimination of permitted discharges is required, or the Department determines that the permitted activity endangers human health, safety, or the environment, or contributes to water or sediment quality standards violations. (WAC 173-226-240 (1) (a), (c), (d)).

Currently, the permit framework is reactive, a permit is not required unless there is or was a documented discharge to surface waters. The permitting process now requires a facility to submit a complete nutrient management plan with the permit application. The nutrient management plan is approved by the Department and becomes the facility's effluent limitation. After a facility is permitted, it must submit an updated nutrient management plan if it wants to make changes to its operation.

Total Maximum Daily Loads (TMDLs)

Under §303(d) of the Clean Water Act, states are required to develop lists of impaired waters. These are waters for which technology-based regulations and other required controls are not stringent enough to meet the water quality standards set by the state. The law requires that states establish priority rankings for waters on the lists and develop Total Maximum Daily Loads for these waters. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. A TMDL is generally administered by establishing limits on the discharge of pollutant materials otherwise permitted under the NPDES program—a program that relates to discharges to surface water only.

Ecology issues permits for large on-site systems and these systems are required to monitor. In other cases, general permits establish standards for management. The standards apply to all underground waters in the saturated zone (generally at or below the water table), but do not apply in the root zone of saturated soils where agricultural pesticides and nutrients have been applied at agronomic rates for agricultural purposes and pollution does not occur below the root zone. (WAC 173.200.010(3)(a)).

The Washington State Department of Health is authorized to adopt regulations "to protect public health" (RCW 43.20.050(2)) These may include rules for group A public water systems, as necessary to assure safe and reliable public drinking water and to protect the public health.

Those rules shall establish requirements regarding: (i) The design and construction of public water system facilities, including proper sizing of pipes and storage for the number and type of customers; (ii) Drinking water quality standards, monitoring requirements, and laboratory certification requirements; (iii) Public water system management and reporting requirements; (iv) Public water system planning and emergency response requirements; (v) Public water system operation and maintenance requirements; (vi) Water quality, reliability, and management of existing but inadequate public water systems; and (vii) Quality standards for the source or supply, or both source and supply, of water for bottled water plants. Rules for group B public water systems, as defined in RCW 70.119A.020, including rules that establish requirements regarding the initial design and construction of a public water system. The Department of Health is also authorized to "adopt rules and standards for prevention, control, and abatement of health hazards and nuisances related to the disposal of human and animal excreta and animal remains." (RCW 43.20.050(2)(c)).

Growth Management Act

The Washington State Growth Management Act, primarily codified in Ch. 36.70A RCW, requires counties and cities planning under the act to adopt comprehensive plans and development regulations consistent with the GMA. The GMA establishes goals to guide the development and adoption of comprehensive plans and development regulations of those counties, like Yakima, that are required or choose to plan under RCW 36.70A.040. Relevant goals include:

> Encourage economic development . . . that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.
>
> Maintain and enhance natural resource-based industries, including . . . agricultural . . . industries. Encourage the conservation of . . . productive agricultural lands, and discourage incompatible uses.
>
> Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
>
> RCW 36.70A.020
>
> The GMA requires that:
>
> "Each comprehensive plan shall include a plan, scheme, or design for each of the following:

> A land use element designating the proposed general distribution and general location and extent of the uses of land, where appropriate, for agriculture, timber production, housing, commerce, industry, recreation, open spaces, general aviation airports, public utilities, public facilities, and other land uses. The land use element shall include population densities, building intensities, and estimates of future population growth. The land use element shall provide for protection of the quality and quantity of groundwater used for public water supplies." (RCW 36.70A.070(1), Emphasis supplied.)

The Growth Management Act identifies both agriculture and groundwater quality as protectable resources. GMA recognizes the importance of rural lands and rural character to Washington's economy, its people, and its environment. Rural lands and rural-based economies enhance the economic desirability of the state, help to preserve traditional economic activities, and contribute to the state's overall quality of life. (RCW 36.70A.011). The statute also recognizes that, in order to retain and enhance the job base in rural areas, rural counties must have flexibility to create opportunities for business development. Rural counties must have the flexibility to retain existing businesses and allow them to expand. Not all business developments in rural counties require an urban level of services. Many businesses in rural areas fit within the definition of rural character.

When defining the county's rural element, a county should foster land use patterns and develop a local vision of rural character that will: help preserve rural-based economies and traditional rural lifestyles; encourage the economic prosperity of rural residents; foster opportunities for small-scale, rural-based employment and self-employment; permit the operation of rural-based agricultural, commercial, recreational, and tourist businesses that are consistent with existing and planned land use patterns; be compatible with the use of the land by wildlife and for fish and wildlife habitat; foster the private stewardship of the land and preservation of open space; and enhance the rural sense of community and quality of life. (RCW 36.70A.070(5)).

RCW 36.70A.030 (15) defines "Rural character" as the "patterns of land use and development established by a county in the rural element of its comprehensive plan:

> (a) In which open space, the natural landscape, and vegetation predominate over the built environment;
> (b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;
> (c) That provide visual landscapes that are traditionally found in rural areas and communities;
> (d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;
> (e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;
> (f) That generally do not require the extension of urban governmental services; and
> (g) That are consistent with the protection of natural surface water flows and groundwater and surface water recharge and discharge areas.

"Rural development" means "development outside the urban growth area and outside agricultural, forest, and mineral resource lands designated pursuant to RCW 36.70A.170. Rural development can consist of a variety of uses and residential densities, including clustered residential development, at levels that are consistent with the preservation of rural character and the requirements of the rural element. Rural development does not refer to agriculture or forestry activities that may be conducted in rural areas." (RCW 36.70A.030 (16))

"Rural governmental services" includes "those public services and public facilities historically and typically delivered at an intensity usually found in rural areas, and may include domestic water systems, fire and police protection services, transportation and public transit services, and other public utilities associated with rural development and normally not associated with urban areas." (RCW 36.70A.030 (17))

Yakima County enacted its comprehensive plan (Plan 2015) in 1997. Three Plan Elements, Natural Setting, Land Use and Utilities, include goals and policies related to water quality. Plan 2015's goals and policies are implemented through various titles of Yakima County Code. Yakima County's zoning code, YCC Title 19[3], applies to all of unincorporated Yakima County. Table 19.10.020-1 lists the zoning classifications applicable throughout the unincorporated areas. Table 19.14-1 lists which specific land uses are allowed within particular zoning districts.. Each permitted use is subject to a particular level of review: Type 1 - permitted; Type 2 - administrative review; Type 3 - conditional; Type 4 - quasi-judicial review. YCC 19.30.030.

The Growth Management Act requires counties to designate critical areas (RCW 36.70A.060(2), .170(d)).. Critical areas" include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company. RCW 36.70A.030(5). "Development regulations" may be established for critical areas so as to prohibit or refine permitted uses under existing zoning requirements. RCW 36.70A.172(1)).

As amended by Yakima County Ordinance 13-2007, the Yakima County Code now addresses regulation of land use within critical areas in Ch. 16C. Application of that chapter to agricultural activities defined in YCC 16C.01.050(3)(a) is limited due to the provisions of RCW 36.70A 700-760.[4] Regulation of agricultural activities on designated agricultural and rural lands is retained in Ch. 16A. Critical areas subject to the Shoreline Management Program are addressed in YCC Ch. 16D.

RCW 36-70A.700 through .760 establish a "Voluntary Stewardship Program" under which counties may choose to adopt a voluntary practices approach in lieu of protecting critical areas in

[3] YCC Title 19 became effective October 1, 2015, replacing YCC Titles 15 and 15A, pursuant to Yakima County Ordinance 7-2013.

[4] Referred to in the Yakima County Code as "Senate Bill 5428." See also, Laws of 2011, c. 360.

areas used for agricultural activities through development regulations adopted under RCW 36.70A.060. Yakima County adopted the voluntary practices approach by ordinance [citation] This approach involves the establishment of a "watershed group" to develop a "work plan to protect critical areas while maintaining the viability of agriculture in the watershed." RCW 36.70A.720 (1).

The Growth Management Act requires local jurisdictions to designate and protect areas with a critical recharging effect on aquifers used for potable water, or areas where a drinking aquifer is vulnerable to contamination that would affect the potability of the water. RCW 36.70A. YCC 16C.09.01 (1).

A "critical aquifer recharge area" is an area "with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge." WAC 365-190-030 (3).[5]

Yakima County has prohibited certain uses in critical aquifer recharge areas. YCC. 16C.09.07. Currently, those limitations include:

> (1)Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste and inert and demolition waste landfills;
>
> (2)Underground Injection Wells. Class I, III and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells;
>
> (3)Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
>
> (4)Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances;

[5] WAC 365-190-100 "(2) The quality and quantity of groundwater in an aquifer is inextricably linked to its recharge area. Where aquifers and their recharge areas have been studied, affected counties and cities should use this information as the basis for classifying and designating these areas. Where no specific studies have been done, counties and cities may use existing soil and surficial geologic information to determine where recharge areas exist. To determine the threat to groundwater quality, existing land use activities and their potential to lead to contamination should be evaluated.

(3) Counties and cities must classify recharge areas for aquifers according to the aquifer vulnerability. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute directly or indirectly to contamination that may degrade groundwater, and hydrogeologic conditions that facilitate degradation. Low vulnerability is indicated by land uses that do not contribute contaminants that will degrade groundwater, and by hydrogeologic conditions that do not facilitate degradation. Hydrological conditions may include those induced by limited recharge of an aquifer. Reduced aquifer recharge from effective impervious surfaces may result in higher concentrations of contaminants than would otherwise occur."

See also, www.ecy.wa.gov/biblio/05120028.html. (document number 05-10-028)

(5)Mining. Hard rock; and sand and gravel mining, unless located within the mineral resource designation; and

(6)Other Prohibited Uses or Activities. (a)Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source; (b)Activities that would significantly reduce the recharge to aquifers that are a source of significant base flow to a regulated stream.

"Susceptible Groundwater Management Areas," defined as "areas that have been designated as moderately or highly vulnerable or susceptible in an adopted groundwater management program developed pursuant to Chapter 173-100," are among those designated CARAs. YCC 16C.09.02(3). The Lower Yakima Groundwater Management Area is currently developing such a program, but it has not yet been "adopted."

Unless the work plan to protect critical areas contemplated by RCW 36.70A.720 (1) were first put in place, and adopted within the groundwater management program, those provisions of the Growth Management Act requiring establishment of development regulations within CARAs would not apply to agricultural activities within the CARA. Again, application of the critical areas aspects of the Growth Management Act to agricultural activities defined in YCC 16C.01.050(3)(a) is limited due to the provisions of RCW 36.70A 700-760.

The county commission may also "create one or more aquifer protection areas for the purpose of funding the protection, preservation, and rehabilitation of subterranean water." (RCW 36.36.020). Fees imposed within a designated critical aquifer recharge area[6] may be used to address:

(1) The preparation of a comprehensive plan to protect, preserve, and rehabilitate subterranean water, including groundwater management programs adopted under chapter 90.44 RCW. This plan may be prepared as a portion of a county sewerage and/or water general plan pursuant to RCW 36.94.030;

(2) The construction of facilities for: (a) The removal of waterborne pollution; (b) water quality improvement; (c) sanitary sewage collection, disposal, and treatment; (d) storm water or surface water drainage collection, disposal, and treatment; and (e) the construction of public water systems;

(3) The proportionate reduction of special assessments imposed by a county, city, town, or special district in the aquifer protection area for any of the facilities described in subsection (2) of this section;

(4) The costs of monitoring and inspecting on-site sewage disposal systems or

[6] The creation of an aquifer protection area, and the imposition of fees within the area, is subject to the vote of residents within a proposed area. RCW 36.36.020.

community sewage disposal systems for compliance with applicable standards and rules, and for enforcing compliance with these applicable standards and rules in aquifer protection areas created after June 9, 1988; and

(5) The costs of: (a) Monitoring the quality and quantity of subterranean water and analyzing data that is collected; (b) ongoing implementation of the comprehensive plan developed under subsection (1) of this section; (c) enforcing compliance with standards and rules relating to the quality and quantity of subterranean waters; and (d) public education relating to protecting, preserving, and enhancing subterranean waters.

RCW 36.36.040

The Agriculture (AG) Zoning District is by far the most prevalent use district in the Lower Yakima Valley, followed by the Remote/Extremely Limited Development Potential (R/ELDP) district on the ridges and along the Yakima River, and some Rural Transitional (RT) Zoning Districts near the cities and towns. The AG zone allows a broad array of agricultural uses under Type 1 review, including: Animal Feeding Operations, land application of soil amendments or agricultural waste at agronomic rates. CAFOs are allowed in the AG and R/ELDP zones under Type 2 review.[7] New or expanding CAFOs, feedlots and other agricultural uses may be subject to environmental review under the State Environmental Policy Act (SEPA) depending upon the size of the proposal and whether the project falls below SEPA's flexible exemption thresholds.

Yakima County's Zoning Ordinance also implements a number of Plan 2015 policies intended to reduce the number of individual wells approved in the higher density RT zone.

Washington State Environmental Policy Act

Similar in substance to the National Environmental Policy Act, enacted by Congress in 1970, Washington State's Environmental Policy Act, Ch 43. 21C RCW, requires state agencies and local governments to consider the environmental implications of potential actions. Utilizing a check list of environmental factors, governmental officials must consider the threshold question whether a potential action has "a probable significant, adverse environmental impact." RCW 43.21C.031 (a). If not, an environmental assessment or determination of non-significance may be published. If so, then an environmental impact statement is required. The environmental impact disclosure process imposed by these requirements is utilized by local governments exercising their police power in zoning, subdivision or other permitting actions to identify factors militating toward denial of specific development proposals or conditions that may be attached to the approval of those proposals. As for example, upon receipt of an application for approval of particular activities under the Yakima County Code, the Yakima County Planning Department circulates completed checklist for environmental factors to other governmental agencies with jurisdiction of the potential activities in order to solicit their expertise with respect to the anticipated action. Whenever such

[7] The definition of Concentrated Animal Feeding Operations can be found at YCC 19.01.070 (1) under the "A definitions" as "animal feeding operations, Concentrated."

agencies suggest concerns, those concerns may be incorporated as basis for denial or imposition of conditions upon approval of proposed actions.