



**RULE-MAKING ORDER**  
(RCW 34.05.360)

**CR-103** (10/1/89)

Agency: **Department of Community Development**

- Permanent Rule  
 Emergency Rule

(1) Date of adoption: **February 5, 1991**

(2) Purpose: **To adopt minimum guidelines to assist all counties and cities statewide in classifying and designating natural resource lands and critical areas.**

(3) Citation of existing rules affected by this order:

Repealed:

Amended: **Chapter 365-190 WAC**

Suspended:

(4) Authority for adoption:

Statute: **RCW 36.70A.050**

Other Authority:

**(5.1) PERMANENT RULE ONLY**

Pursuant to notice filed as WSR 91-01-129 on December 19, 1990 (date).

Describe any changes other than editing from proposed to adopted version: **None**

**(5.2) EMERGENCY RULE ONLY**

Pursuant to RCW 34.05.350 the agency for good cause finds:

- (a) That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.
- (b) That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.

Reasons for this finding:

(5.3) Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?

- Yes  No If yes, explain:

(6) Effective date of rule:

**Permanent Rules**

31 days after filing

Other (specify) \_\_\_\_\_ \*

\* (If less than 31 days after filing, specific finding in 5.3 under RCW 34.05.380(3) is required)

**Emergency Rules**

Immediately

Later (specify) \_\_\_\_\_

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*Chuck Clarke*

## Chapter 365-190 WAC

MINIMUM GUIDELINES TO CLASSIFY  
AGRICULTURE, FOREST, MINERAL LANDS AND CRITICAL AREASPART ONE  
PURPOSE/AUTHORITYNEW SECTION

WAC 365-190-010 AUTHORITY. This chapter is established pursuant to RCW 36.70A.050.

NEW SECTION

WAC 365-190-020 PURPOSE. The intent of this chapter is to establish minimum guidelines to assist all counties and cities statewide in classifying agricultural lands, forest lands, mineral resource lands, and critical areas. These guidelines shall be considered by counties and cities in designating these lands.

Growth management, natural resource land conservation, and critical areas protection share problems related to governmental costs and efficiency. Sprawl and the unwise development of natural resource lands or areas susceptible to natural hazards may lead to inefficient use of limited public resources, jeopardize environmental resource functions and values, subject persons and property to unsafe conditions, and affect the perceived quality of life. It is more costly to remedy the loss of natural resource lands or critical areas than to conserve and protect them from loss or degradation. The inherent economic, social, and cultural values of natural resource lands and critical areas should be considered in the development of strategies designed to conserve and protect lands.

In recognition of these common concerns, classification and designation of natural resource lands and critical areas is intended to assure the long-term conservation of natural resource lands and to preclude land uses and developments which are incompatible with critical areas. There are qualitative differences between and among natural resource lands and critical areas. Not all areas and ecosystems are critical for the same reasons. Some are critical because of the hazard they present to public health and safety, some because of the values they represent to the public welfare. In some cases, the risk posed to the public by use or development of a critical area can be mitigated or reduced by engineering or design; in other cases that risk cannot be effectively reduced except by avoidance of the critical area. Hence, classification and designation of critical areas is intended to lead counties and cities to recognize the differences among these areas, and to develop appropriate regulatory and nonregulatory actions in response.

Counties and cities required or opting to plan under the Growth Management Act of 1990 should consider the definitions and guidelines in this chapter when preparing development regulations which preclude uses and development incompatible with critical areas (see RCW 36.70A.060). Precluding incompatible uses and development does not mean a prohibition of all uses or development. Rather, it means governing changes in land uses, new activities, or development that could

adversely affect critical areas. Thus for each critical area, counties and cities planning under the act should define classification schemes and prepare development regulations that govern changes in land uses and new activities by prohibiting clearly inappropriate actions and restricting, allowing, or conditioning other activities as appropriate.

It is the intent of these guidelines that critical areas designations overlay other land uses including designated natural resource lands. That is, if two or more land use designations apply to a given parcel or a portion of a parcel, both or all designations shall be made. Regarding natural resource lands, counties and cities should allow existing and ongoing resource management operations, that have long-term commercial significance, to continue. Counties and cities should encourage utilization of best management practices where existing and ongoing resource management operations that have long-term commercial significance include designated critical areas. Future operations or expansion of existing operations should be done in consideration of protecting critical areas.

## PART TWO GENERAL REQUIREMENTS

### NEW SECTION

WAC 365-190-030 DEFINITIONS. (1) Agricultural land is land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, or livestock, and that has long-term commercial significance for agricultural production.

(2) Areas with a critical recharging effect on aquifers used for potable water are areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water.

(3) City means any city or town, including a code city.

(4) 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.

(5) Erosion hazard areas are those areas containing soils which, according to the United States Department of Agriculture Soil Conservation Service Soil Classification System, may experience severe to very severe erosion.

(6) Forest land is land primarily useful for growing trees, including Christmas trees subject to the excise tax imposed under RCW 84.33.100 through 84.33.140, for commercial purposes, and that has long-term commercial significance for growing trees commercially.

(7) Frequently flooded areas are lands in the floodplain subject to a one percent or greater chance of flooding in any given year. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and the like.

(8) Geologically hazardous areas are areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting commercial, residential, or industrial development consistent with public health or safety concerns.

(9) Habitats of local importance include, a seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long-term. These might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alteration, such as cliffs, talus, and wetlands.

(10) Landslide hazard areas are areas potentially subject to risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.

(11) Long-term commercial significance includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of land.

(12) Minerals include gravel, sand, and valuable metallic substances.

(13) Mine hazard areas are those areas directly underlain by, adjacent to, or affected by mine workings such as adits, tunnels, drifts, or air shafts.

(14) Mineral resource lands means lands primarily devoted to the extraction of minerals or that have known or potential long-term commercial significance for the extraction of minerals.

(15) Natural resource lands means agricultural, forest and mineral resource lands which have long-term commercial significance.

(16) Public facilities include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

(17) Public services include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection, and other governmental services.

(18) Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, or soil liquefaction.

(19) Species of local importance are those species that are of local concern due to their population status or their sensitivity to habitat manipulation or that are game species.

(20) Urban growth refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth.

(21) Volcanic hazard areas shall include areas subject to pyroclastic flows, lava flows, and inundation by debris flows, mudflows, or related flooding resulting from volcanic activity.

(22) Wetland or wetlands means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities. However, wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands, if permitted by the county or city.

PART THREE  
GUIDELINESNEW SECTION

WAC 365-190-040 PROCESS. The classification and designation of natural resource lands and critical areas is an important step among several in the overall growth management process. Together these steps comprise a vision of the future, and that vision gives direction to the steps in the form of specific goals and objectives. Under the Growth Management Act, the timing of the first steps coincides with development of the larger vision through the comprehensive planning process. People are asked to take the first steps, designation and classification of natural resource lands and critical areas, before the goals, objectives, and implementing policies of the comprehensive plan are finalized. Jurisdictions planning under the Growth Management Act must also adopt interim regulations for the conservation of natural resource lands and protection of critical areas. In this way, the classification and designation help give shape to the content of the plan, and at the same time natural resource lands are conserved and critical areas are protected from incompatible development while the plan is in process.

Under the Growth Management Act, preliminary classifications and designations will be completed in 1991. Those planning under the act must also enact interim regulations to protect and conserve these lands by September 1, 1991. By July 1, 1992, counties and cities not planning under the act must bring their regulations into conformance with their comprehensive plans. By July 1, 1993, counties and cities planning under the act must adopt comprehensive plans, consistent with the goals of the act. Implementation of the plans will occur by the following year.

(1) Classification is the first step in implementing RCW 36.70A.050. It means defining categories to which natural resource lands and critical areas will be assigned.

Pursuant to RCW 36.70A.170, natural resource lands and critical areas will be designated based on the defined classifications. Designation establishes, for planning purposes: The classification scheme; the general distribution, location, and extent of the uses of land, where appropriate, for agriculture, forestry, and mineral extraction; and the general distribution, location, and extent of critical areas. Inventories and maps can indicate designations of natural resource lands. In the circumstances where critical areas (e.g., aquifer recharge areas, wetlands, significant wildlife habitat, etc.) cannot be readily identified, these areas should be designated by performance standards or definitions, so they can be specifically identified during the processing of a permit or development authorization. Designation means, at least, formal adoption of a policy statement, and may include further legislative action. Designating inventoried lands for comprehensive planning and policy definition may be less precise than subsequent regulation of specific parcels for conservation and protection.

Classifying, inventorying, and designating lands or areas does not imply a change in a landowner's right to use his or her land under current law. Land uses are regulated on a parcel basis and innovative land use management techniques should be applied when counties and cities adopt regulations to conserve and protect designated natural resource lands and critical areas. The department of community development will provide technical assistance to counties and cities on a wide array of regulatory options and alternative land use management techniques.

These guidelines may result in critical area designations that overlay other critical area or natural resource land classifications. That is, if two or more critical area designations apply to a given

parcel, or portion of a given parcel, both or all designations apply. For counties and cities required or opting to plan under chapter 36.70A RCW, reconciling these multiple designations will be the subject of local development regulations adopted pursuant to RCW 36.70A.060.

(2) Counties and cities shall involve the public in classifying and designating natural resource lands and critical areas.

(a) Public participation:

(i) Public participation should include at a minimum: Landowners; representatives of agriculture, forestry, mining, business, environmental, and community groups; tribal governments; representatives of adjacent counties and cities; and state agencies. The public participation program should include early and timely public notice of pending designations and regulations.

(ii) Counties and cities should consider using: Technical and citizen advisory committees with broad representation, press releases, news conferences, neighborhood meetings, paid advertising (e.g., newspaper, radio, T.V., transit), newsletters, and other means beyond the required normal legal advertising and public notices. Plain, understandable language should be used. The department of community development will provide technical assistance in preparing public participation plans, including: A pamphlet series, workshops, and a list of agencies available to provide help.

(b) Adoption process. Statutory and local processes already in place governing land use decisions are the minimum processes required for designation and regulation pursuant to RCW 36.70A.060 and 36.70A.170. At least these steps should be included in the process:

(i) Accept the requirements of chapter 36.70A RCW, especially definitions of agricultural lands, forest lands, minerals, long-term commercial significance, critical areas, geologically hazardous areas, and wetlands as mandatory minimums.

(ii) Consider minimum guidelines developed by department of community development under RCW 36.70A.050.

(iii) Consider other definitions used by state and federal regulatory agencies.

(iv) Consider definitions used by the county and city and other counties and cities.

(v) Determine recommended definitions and check conformance with minimum definitions of chapter 36.70A RCW.

(vi) Adopt definitions, classifications, and standards.

(vii) Apply definitions to the land by mapping designated natural resource lands.

(viii) Establish designation amendment procedures.

(c) Intergovernmental coordination. The Growth Management Act requires coordination among communities and jurisdictions to reconcile conflicts and strive for consistent definitions, standards, and designations within regions. The minimum coordination process required under these guidelines may take one of two forms:

(i) Adjacent cities (or those with overlapping or adjacent planning areas); counties and the cities within them; and adjacent counties would provide each other and all adjacent special purpose districts and special purpose districts within them notice of their intent to classify and designate natural resource lands and critical areas within their jurisdiction. Counties or cities receiving notice may provide comments and input to the notifying jurisdiction. The notifying jurisdiction specifies a comment period prior to adoption. Within forty-five days of the jurisdiction's date of adoption of classifications or designations, affected jurisdictions are supplied a copy of the proposal. The department of community development may provide mediation services to counties and cities to help resolve disputed classifications or designations.

(ii) Adjacent jurisdictions; all the cities within a county; or all the cities and several counties may choose to cooperatively classify and designate natural resource lands and critical areas within their jurisdictions. Counties and cities by interlocal agreement would identify the definitions, classification, designation, and process that will be used to classify and designate lands within their

areas. State and federal agencies or tribes may participate in the interlocal agreement or be provided a method of commenting on designations and classifications prior to adoption by jurisdictions.

Counties and/or cities may begin with the notification option ((c) (i) of this subsection) and choose to change to the interlocal agreement method ((c) (ii) of this subsection) prior to completion of the classification and designations within their jurisdictions. Approaches to intergovernmental coordination may vary between natural resource land and critical area designation. It is intended that state and federal agencies with land ownership or management responsibilities, special purpose districts, and Indian tribes with interests within the jurisdictions adopting classification and designation be consulted and their input considered in the development and adoption of designations and classifications. The department of community development may provide mediation services to help resolve disputes between counties and cities that are using either the notification or interlocal agreement method of coordinating between jurisdictions.

(d) Mapping. Mapping should be done to identify designated natural resource lands and to identify known critical areas. Counties and cities should clearly articulate that the maps are for information or illustrative purposes only unless the map is an integral component of a regulatory scheme.

Although there is no specific requirement for inventorying or mapping either natural resource lands or critical areas, chapter 36.70A RCW requires that counties and cities planning under chapter 36.70A RCW adopt development regulations for uses adjacent to natural resource lands. Logically, the only way to regulate adjacent lands is to know where the protected lands are. Therefore, mapping natural resource lands is a practical way to make regulation effective.

For critical areas, performance standards are preferred, as any attempt to map wetlands, for example, will be too inexact for regulatory purposes. Standards will be applied upon land use application. Even so, mapping critical areas for information but not regulatory purposes, is advisable.

(e) Reporting. Chapter 36.70A RCW requires that counties and cities annually report their progress to department of community development. Department of community development will maintain a central file including examples of successful public involvement programs, interjurisdictional coordination, definitions, maps, and other materials. This file will serve as an information source for counties and cities and a planning library for state agencies and citizens.

(f) Evaluation. When counties and cities adopt a comprehensive plan, chapter 36.70A RCW requires that they evaluate their designations and development regulations to assure they are consistent with and implement the comprehensive plan. When considering changes to the designations or development regulations, counties and cities should seek interjurisdictional coordination and public participation.

(g) Designation amendment process. Land use planning is a dynamic process. Procedures for designation should provide a rational and predictable basis for accommodating change.

Land use designations must provide landowners and public service providers with the information necessary to make decisions. This includes: Determining when and where growth will occur, what services are and will be available, how they might be financed, and what type and level of land use is reasonable and/or appropriate. Resource managers need to know where and when conversions of rural land might occur in response to growth pressures and how those changes will affect resource management.

Designation changes should be based on consistency with one or more of the following criteria:

- (i) Change in circumstances pertaining to the comprehensive plan or public policy.
- (ii) A change in circumstances beyond the control of the landowner pertaining to the subject property.
- (iii) An error in designation.
- (iv) New information on natural resource land or critical area status.

(h) Use of innovative land use management techniques. Resource uses have preferred and primary status in designated natural resource lands of long-term commercial significance. Counties and cities must determine if and to what extent other uses will be allowed. If other uses are allowed, counties and cities should consider using innovative land management techniques which minimize land use incompatibilities and most effectively maintain current and future natural resource lands.

Techniques to conserve and protect agricultural, forest lands, and mineral resource lands of long-term commercial significance include the purchase or transfer of development rights, fee simple purchase of the land, less than fee simple purchase, purchase with leaseback, buffering, land trades, conservation easements or other innovations which maintain current uses and assure the conservation of these natural resource lands.

Development in and adjacent to agricultural and forest lands of long-term commercial significance shall assure the continued management of these lands for their long-term commercial uses. Counties and cities should consider the adoption of right-to-farm provisions. Covenants or easements that recognize that farming and forest activities will occur should be imposed on new development in or adjacent to agricultural or forest lands. Where buffering is used it should be on land within the development unless an alternative is mutually agreed on by adjacent landowners.

Counties and cities planning under the act should define a strategy for conserving natural resource lands and for protecting critical areas, and this strategy should integrate the use of innovative regulatory and nonregulatory techniques.

#### NEW SECTION

WAC 365-190-050 AGRICULTURAL LANDS. (1) In classifying agricultural lands of long-term significance for the production of food or other agricultural products, counties and cities shall use the land-capability classification system of the United States Department of Agriculture Soil Conservation Service as defined in Agriculture Handbook No. 210. These eight classes are incorporated by the United States Department of Agriculture into map units described in published soil surveys. These categories incorporate consideration of the growing capacity, productivity and soil composition of the land. Counties and cities shall also consider the combined effects of proximity to population areas and the possibility of more intense uses of the land as indicated by:

- (a) The availability of public facilities;
- (b) Tax status;
- (c) The availability of public services;
- (d) Relationship or proximity to urban growth areas;
- (e) Predominant parcel size;
- (f) Land use settlement patterns and their compatibility with agricultural practices;
- (g) Intensity of nearby land uses;
- (h) History of land development permits issued nearby;
- (i) Land values under alternative uses; and
- (j) Proximity of markets.

(2) In defining categories of agricultural lands of long-term commercial significance for agricultural production, counties and cities should consider using the classification of prime and unique farmland soils as mapped by the Soil Conservation Service. If a county or city chooses to not use these categories, the rationale for that decision must be included in its next annual report to department of community development.

(3) Counties and cities may further classify additional agricultural lands of local importance. Classifying additional agricultural



lands of local importance should include consultation with the board of the local conservation district and the local agriculture stabilization and conservation service committee.

These additional lands may also include bogs used to grow cranberries. Where these lands are also designated critical areas, counties and cities planning under the act must weigh the compatibility of adjacent land uses and development with the continuing need to protect the functions and values of critical areas and ecosystems.

#### NEW SECTION

WAC 365-190-060 FOREST LAND RESOURCES. In classifying forest land, counties and cities should use the private forest land grades of the department of revenue (WAC 458-40-530). This system incorporates consideration of growing capacity, productivity and soil composition of the land. Forest land of long-term commercial significance will generally have a predominance of the higher private forest land grades. However, the presence of lower private forest land grades within the areas of predominantly higher grades need not preclude designation as forest land.

Each county and city shall determine which land grade constitutes forest land of long-term commercial significance, based on local and regional physical, biological, economic, and land use considerations.

Counties and cities shall also consider the effects of proximity to population areas and the possibility of more intense uses of the land as indicated by:

(1) The availability of public services and facilities conducive to the conversion of forest land.

(2) The proximity of forest land to urban and suburban areas and rural settlements: Forest lands of long-term commercial significance are located outside the urban and suburban areas and rural settlements.

(3) The size of the parcels: Forest lands consist of predominantly large parcels.

(4) The compatibility and intensity of adjacent and nearby land use and settlement patterns with forest lands of long-term commercial significance.

(5) Property tax classification: Property is assessed as open space or forest land pursuant to chapter 84.33 or 84.34 RCW.

(6) Local economic conditions which affect the ability to manage timberlands for long-term commercial production.

(7) History of land development permits issued nearby.

#### NEW SECTION

WAC 365-190-070 MINERAL RESOURCE LANDS. (1) Counties and cities shall identify and classify aggregate and mineral resource lands from which the extraction of minerals occurs or can be anticipated. Other proposed land uses within these areas may require special attention to ensure future supply of aggregate and mineral resource material, while maintaining a balance of land uses.

(2) Classification criteria. Areas shall be classified as mineral resource lands based on geologic, environmental, and economic factors, existing land uses, and land ownership. The areas to be studied and their order of study shall be specified by counties and cities.

(a) Counties and cities should classify lands with long-term commercial significance for extracting at least the following minerals:

Sand, gravel, and valuable metallic substances. Other minerals may be classified as appropriate.

(b) In classifying these areas, counties and cities should consider maps and information on location and extent of mineral deposits provided by the Washington state department of natural resources and the United States Bureau of Mines. Additionally, the department of natural resources has a detailed minerals classification system counties and cities may choose to use.

(c) Counties and cities should consider classifying known and potential mineral deposits so that access to mineral resources of long-term commercial significance is not knowingly precluded.

(d) In classifying mineral resource lands, counties and cities shall also consider the effects of proximity to population areas and the possibility of more intense uses of the land as indicated by:

- (i) General land use patterns in the area;
- (ii) Availability of utilities;
- (iii) Availability and adequacy of water supply;
- (iv) Surrounding parcel sizes and surrounding uses;
- (v) Availability of public roads and other public services;
- (vi) Subdivision or zoning for urban or small lots;
- (vii) Accessibility and proximity to the point of use or market;
- (viii) Physical and topographic characteristics of the mineral resource site;
- (ix) Depth of the resource;
- (x) Depth of the overburden;
- (xi) Physical properties of the resource including quality and type;
- (xii) Life of the resource; and
- (xiii) Resource availability in the region.

#### NEW SECTION

WAC 365-190-080 CRITICAL AREAS. (1) Wetlands. The wetlands of Washington state are fragile ecosystems which serve a number of important beneficial functions. Wetlands assist in the reduction of erosion, siltation, flooding, ground and surface water pollution, and provide wildlife, plant, and fisheries habitats. Wetlands destruction or impairment may result in increased public and private costs or property losses.

In designating wetlands for regulatory purposes, counties and cities shall use the definition of wetlands in RCW 36.70A.030(22). Counties and cities are requested and encouraged to make their actions consistent with the intent and goals of "protection of wetlands," Executive Orders 89-10 and 90-04 as they exist on September 1, 1990. Additionally, counties and cities should consider wetlands protection guidance provided by the department of ecology including the model wetlands protection ordinance.

(a) Counties and cities that do not now rate wetlands shall consider a wetlands rating system to reflect the relative function, value and uniqueness of wetlands in their jurisdictions. In developing wetlands rating systems, counties and cities should consider the following:

- (i) The Washington state four-tier wetlands rating system;
- (ii) Wetlands functions and values;
- (iii) Degree of sensitivity to disturbance;
- (iv) Rarity; and
- (v) Ability to compensate for destruction or degradation.

If a county or city chooses to not use the state four-tier wetlands rating system, the rationale for that decision must be included in its next annual report to department of community development.

(b) Counties and cities may use the National Wetlands Inventory as an information source for determining the approximate distribution and extent of wetlands. This inventory provides maps of wetland areas

according to the definition of wetlands issued by the United States Department of Interior - Fish and Wildlife Service, and its wetland boundaries should be delineated for regulation consistent with the wetlands definition in RCW 36.70A.030(22).

(c) Counties and cities should consider using the methodology in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, cooperatively produced by the United States Army Corps of Engineers, United States Environmental Protection Agency, United States Department of Agriculture Soil Conservation Service, and United States Fish and Wildlife Service, that was issued in January 1989, and regulatory guidance letter 90-7 issued by the United States Corps of Engineers on November 29, 1990, for regulatory delineations.

(2) Aquifer recharge areas. Potable water is an essential life sustaining element. Much of Washington's drinking water comes from ground water supplies. Once ground water is contaminated it is difficult, costly, and sometimes impossible to clean up. Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people.

The quality of ground water in an aquifer is inextricably linked to its recharge area. Few studies have been done on aquifers and their recharge areas in Washington state. In the cases in which aquifers and their recharge areas have been studied, affected counties and cities should use this information as the base 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 are. To determine the threat to ground water quality, existing land use activities and their potential to lead to contamination should be evaluated.

Counties and cities shall classify recharge areas for aquifers according to the vulnerability of the aquifer. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute contamination that may degrade ground water, and hydrogeologic conditions that facilitate degradation. Low vulnerability is indicated by land uses that do not contribute contaminants that will degrade ground water, and by hydrogeologic conditions that do not facilitate degradation.

(a) To characterize hydrogeologic susceptibility of the recharge area to contamination, counties and cities may consider the following physical characteristics:

- (i) Depth to ground water;
- (ii) Aquifer properties such as hydraulic conductivity and gradients;
- (iii) Soil (texture, permeability, and contaminant attenuation properties);
- (iv) Characteristics of the vadose zone including permeability and attenuation properties; and
- (v) Other relevant factors.

(b) The following may be considered to evaluate the contaminant loading potential:

- (i) General land use;
- (ii) Waste disposal sites;
- (iii) Agriculture activities;
- (iv) Well logs and water quality test results; and
- (v) Other information about the potential for contamination.

(c) Classification strategy for recharge areas should be to maintain the quality of the ground water, with particular attention to recharge areas of high susceptibility. In recharge areas that are highly vulnerable, studies should be initiated to determine if ground water contamination has occurred. Classification of these areas should include consideration of the degree to which the aquifer is used as a potable water source, feasibility of protective measures to preclude further degradation, availability of treatment measures to maintain potability, and availability of alternative potable water sources.

(d) Examples of areas with a critical recharging effect on aquifers used for potable water, may include:

(i) Sole source aquifer recharge areas designated pursuant to the Federal Safe Drinking Water Act.

(ii) Areas established for special protection pursuant to a ground water management program, chapters 90.44, 90.48, and 90.54 RCW, and chapters 173-100 and 173-200 WAC.

(iii) Areas designated for wellhead protection pursuant to the Federal Safe Drinking Water Act.

(iv) Other areas meeting the definition of "areas with a critical recharging effect on aquifers used for potable water" in these guidelines.

(3) Frequently flooded areas. Floodplains and other areas subject to flooding perform important hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas should include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

Counties and cities should consider the following when designating and classifying frequently flooded areas:

(a) Effects of flooding on human health and safety, and to public facilities and services;

(b) Available documentation including federal, state, and local laws, regulations, and programs, local studies and maps, and federal flood insurance programs;

(c) The future flow floodplain, defined as the channel of the stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow at build out without any measurable increase in flood heights;

(d) The potential effects of tsunami, high tides with strong winds, sea level rise resulting from global climate change, and greater surface runoff caused by increasing impervious surfaces.

(4) Geologically hazardous areas.

(a) Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided. This distinction should be considered by counties and cities that do not now classify geological hazards as they develop their classification scheme.

(a) Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area:

(i) Erosion hazard;

(ii) Landslide hazard;

(iii) Seismic hazard; or

(iv) Areas subject to other geological events such as coal mine hazards and volcanic hazards including: Mass wasting, debris flows, rockfalls, and differential settlement.

(b) Counties and cities should classify geologically hazardous area as either:

(i) Known or suspected risk;

(ii) No risk;

(iii) Risk unknown - data are not available to determine the presence or absence of a geological hazard.

(c) Erosion hazard areas are at least those areas identified by the United States Department of Agriculture Soil Conservation Service as having a "severe" rill and inter-rill erosion hazard.

(d) Landslide hazard areas shall include areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Example of these may include, but are not limited to the following:

(i) Areas of historic failures, such as:

(A) Those areas delineated by the United States Department of Agriculture Soil Conservation Service as having a "severe" limitation for building site development;

(B) Those areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the department of ecology coastal zone atlas; or

(C) Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published as the United States Geological Survey or department of natural resources division of geology and earth resources.

(ii) Areas with all three of the following characteristics:

(A) Slopes steeper than fifteen percent; and

(B) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(C) Springs or ground water seepage;

(iii) Areas that have shown movement during the holocene epoch (from ten thousand years ago to the present) or which are underlain or covered by mass wastage debris of that epoch;

(iv) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

(v) Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;

(vi) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action;

(vii) Areas that show evidence of, or are at risk from snow avalanches;

(viii) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding;

(ix) Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.

(e) Seismic hazard areas shall include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:

(i) The magnitude of an earthquake;

(ii) The distance from the source of an earthquake;

(iii) The type of thickness of geologic materials at the surface;

(iv) The type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow ground water table.

(f) Other geological events:

(i) Volcanic hazard areas shall include areas subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, mudflows, or related flooding resulting from volcanic activity.

(ii) Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material.

(5) Fish and wildlife habitat conservation areas. Fish and wildlife habitat conservation means land management for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean cooperative and coordinated land use planning is critically

important among counties and cities in a region. In some cases, intergovernmental cooperation and coordination may show that it is sufficient to assure that a species will usually be found in certain regions across the state.

(a) Fish and wildlife habitat conservation areas include:

- (i) Areas with which endangered, threatened, and sensitive species have a primary association;
- (ii) Habitats and species of local importance;
- (iii) Commercial and recreational shellfish areas;
- (iv) Kelp and eelgrass beds; herring and smelt spawning areas;
- (v) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;
- (vi) Waters of the state;
- (vii) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; or
- (viii) State natural area preserves and natural resource conservation areas.

(b) Counties and cities may consider the following when classifying and designating these areas:

- (i) Creating a system of fish and wildlife habitat with connections between larger habitat blocks and open spaces;
- (ii) Level of human activity in such areas including presence of roads and level of recreation type (passive or active recreation may be appropriate for certain areas and habitats);
- (iii) Protecting riparian ecosystems;
- (iv) Evaluating land uses surrounding ponds and fish and wildlife habitat areas that may negatively impact these areas;
- (v) Establishing buffer zones around these areas to separate incompatible uses from the habitat areas; and
- (vi) Restoring of lost salmonid habitat.

(c) Sources and methods

(i) Counties and cities should classify seasonal ranges and habitat elements with which federal and state listed endangered, threatened and sensitive species have a primary association and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

(ii) Counties and cities should determine which habitats and species are of local importance. Habitats and species may be further classified in terms of their relative importance.

Counties and cities may use information prepared by the Washington department of wildlife to classify and designate locally important habitats and species. Priority habitats and priority species are being identified by the department of wildlife for all lands in Washington state. While these priorities are those of the department, they and the data on which they are based may be considered by counties and cities.

(iii) Shellfish areas. All public and private tidelands or bedlands suitable for shellfish harvest shall be classified as critical areas. Counties and cities should consider both commercial and recreational shellfish areas. Counties and cities should at least consider the Washington department of health classification of commercial and recreational shellfish growing areas to determine the existing condition of these areas. Further consideration should be given to the vulnerability of these areas to contamination. Shellfish protection districts established pursuant to chapter 90.72 RCW shall be included in the classification of critical shellfish areas.

(iv) Kelp and eelgrass beds; herring and smelt spawning areas. Counties and cities shall classify kelp and eelgrass beds, identified by department of natural resources aquatic lands division and the department of ecology. Though not an inclusive inventory, locations of kelp and eelgrass beds are compiled in the Puget Sound Environmental Atlas, Volumes 1 and 2. Herring and smelt spawning times and locations are outlined in WAC 220-110-240 through 220-110-260 and the Puget Sound Environmental Atlas.

(v) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat.

Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farmponds, temporary construction ponds (of less than three years duration) and landscape amenities. However, naturally occurring ponds may include those artificial ponds intentionally created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority.

(vi) Waters of the state. Waters of the state are defined in Title 222 WAC, the forest practices rules and regulations. Counties and cities should use the classification system established in WAC 222-16-030 to classify waters of the state.

Counties and cities may consider the following factors when classifying waters of the state as fish and wildlife habitats:

(A) Species present which are endangered, threatened or sensitive, and other species of concern;

(B) Species present which are sensitive to habitat manipulation;

(C) Historic presence of species of local concern;

(D) Existing surrounding land uses that are incompatible with salmonid habitat;

(E) Presence and size of riparian ecosystems;

(F) Existing water rights; and

(G) The intermittent nature of some of the higher classes of waters of the state.

(vii) Lakes, ponds, streams, and rivers planted with game fish.

This includes game fish planted in these water bodies under the auspices of a federal, state, local, or tribal program or which supports priority fish species as identified by the department of wildlife.

(viii) State natural area preserves and natural resource conservation areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by department of natural resources.