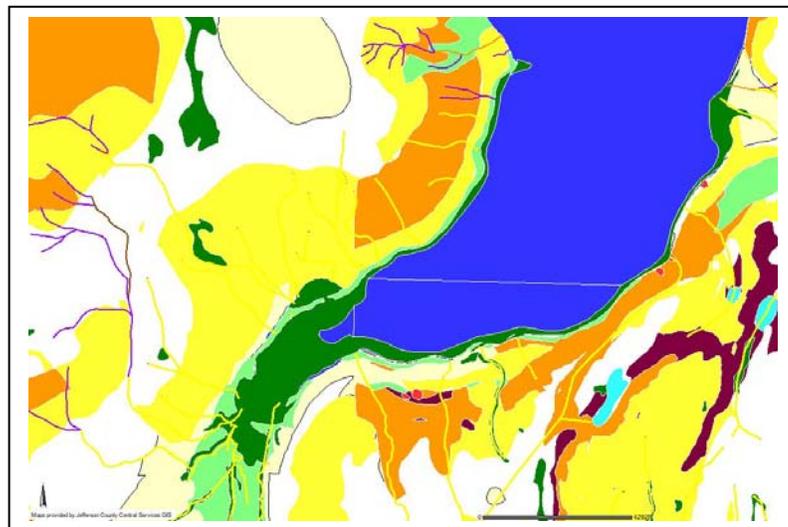




JEFFERSON COUNTY
DEPARTMENT OF COMMUNITY DEVELOPMENT

621 Sheridan Street • Port Townsend • Washington 98368
360/379-4450 • 360/379-4451 Fax
<http://www.co.jefferson.wa.us/commdevelopment/>

Proposed Critical Areas Ordinance Update
a New 18.22 JCC



Discovery Bay with highlighted critical areas

Staff Report

February 12, 2008

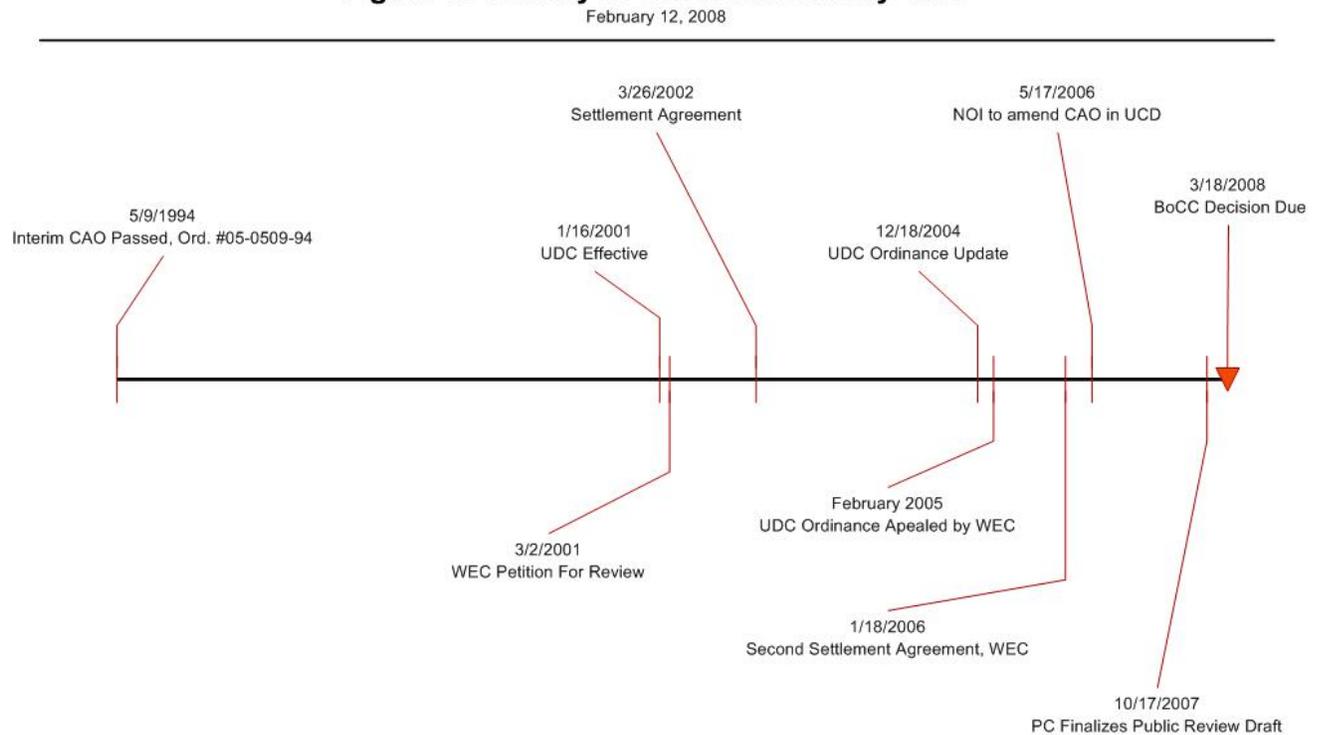
I. Department of Community Development Recommendations

Summary

The history of the Jefferson County Critical Areas Ordinance (CAO) begins with the passage of the Interim Ordinance in 1994. But much activity has centered around the ordinance since the adoption of the Jefferson County Code or Uniform Development Code in January, 2001. Updates to the County Comprehensive plan and the Implementing Regulations, open the legislation to petitions for review. In 2004, the Critical Areas ordinance was readopted along with the seven year update of the Comprehensive Plan. Previous petitions for review to the Growth Management Hearings Board were consolidated into the Second Settlement Agreement.

During the timeframe of this ordinance update, public agencies were developing a Best Available Science standard to be considered in review and development of CAO updates. Further, new Washington State legislation, Growth Management Hearings Board Cases and Supreme Court cases were debated in the CAO forum. This has made the goal of implementing an uncontested ordinance somewhat of a moving target (Figure 1).

Figure 1. History of Jefferson County CAO

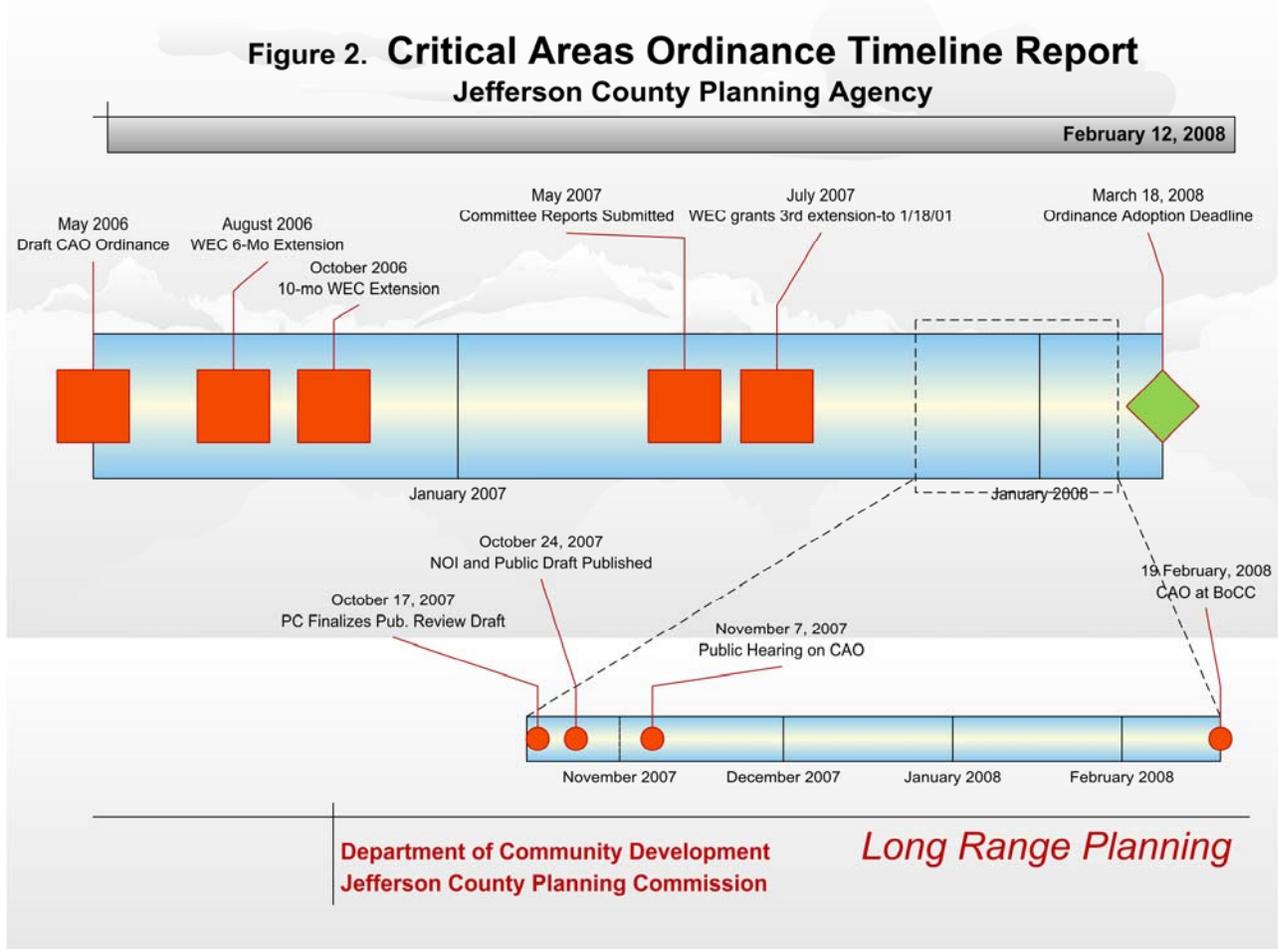


On May 17, 2006, Department of Community Development staff submitted a draft update to the Jefferson County's Critical Areas Ordinance in response to the requirements of the Growth Management Act. The draft was presented to the Planning Commission for public review as MLA06-242. The Planning Commission's response, in consideration of public comment, was to extend the public review process. Further, the Planning Commission was also prompted to draft its own ordinance.

The process of drafting a Critical Areas Ordinance was brought to the newly-created Planning Commission's Critical Areas Ordinance Review Committee (CAORC), consisting of Planning Commissioners and interested public participants. The CAORC met for over one year—until May, 2007, when a series of twenty Committee Reports were delivered to the Planning Commission for review and consideration during their task of drafting a Planning Commission Recommended Draft Ordinance.

The public process with the Jefferson County Planning Commission, the CAORC and public involvement was extensive (**Figure 2**). The code was developed iteratively through many drafts, each made available to the public. The Planning Commission met frequently, moving their schedule from bimonthly to weekly meetings through the summer and fall of 2007 and into 2008. Public comment was taken at each of these meetings. The Department of Community Development and the Planning Commission made every attempt to work cooperatively as Jefferson County’s Planning Agency, following the format outlined in RCW 36.70.040. Finally, an open record public hearing on the Planning Commission Draft CAO was held on November 7, 2007.

Between November, 2007 and January, 2008, the Planning Commission refined the ordinance and developed findings and conclusions. These are embodied in a final recommendation to the Board—transmitted along with this report—which considers growth management indicators as set forth in JCC 18.45.050 (4)(b)(i) through (4)(b)(vii), as well as general findings set forth in JCC 18.45.080 (b)(i) through (b)(iii).



Recommendation

The Planning Commission thoroughly reviewed the public’s concerns and attempted to strike a balance among several contentious issues. The process of developing the draft ordinance tested the Planning Commission organizationally, and challenged them to focus on creative solutions. The introduction of a Critical Area Stewardship Plan (CASP) is one example of finding creative solutions to the environmental issues raised in the CAO discussion.

With respect to this involved public process, Staff supports the Planning Commission Recommendations. In section IV of this document, however, we address several Areas of Staff Concern. We highlight the following areas of potential controversy that need to be considered by the Board in their deliberations and possibly addressed through further revision of the proposed code.

II. Relationship to Comprehensive Plan Goals and Policies

Several areas of the Jefferson County Comprehensive Plan give direct reference to the Critical Areas Ordinance and provide a framework for the ordinance *implementing regulation* through stated goals and policies. (See specific references in Attachment 1, Memorandum: *Framework of State goals and requirements for Critical Areas Ordinances*).

These areas include, but are not limited to:

- **Chapter 3, Land Use and Rural,**
- **Chapter 8, Environment,**
- **Appendix C, Community Involvement, and**
- **Appendix E, Background Information**

The amendments to the Critical Areas Ordinance are consistent with the Jefferson County Comprehensive Plan and land use map (Planning Commission Findings 12/12/07).

III. JCC 18.45.090: Amendments to GMA Implementing Regulations

Requirements of GMA

The Planning Commission approved the draft ordinance on December 12, 2007 with a motion to forward the draft CAO with findings and conclusions to the Board of County Commissioners, passing with an affirmative vote of the majority with six in favor, two opposed, no abstentions, and one excused absence.

On February 6th, 2008, the Planning Commission approved their Critical Areas Ordinance Official Report to the Board of County Commissioners with an affirmative vote of the majority with eight in favor, no opposed, and one excused absence.

A Stand-Alone Ordinance

The proposed ordinance will remove the Environmentally Sensitive Area (a.k.a. Critical Areas) portion of the existing JCC Chapter 18.15 and replace it with a stand-alone ordinance under a new Chapter 18.22. This was intended to improve a citizen's understanding of the ordinance and its requirements by making it largely complete, without overly-burdensome cross-references to other portions of the Uniform Development Code. However, for full comprehension of permit requirements, an applicant should read the full Uniform Development Code.

IV. Areas of Staff Concern

Implementation of Critical Area Stewardship Plans

Currently, a Reasonable Economic Use variance is a provision in the Jefferson County Code. The variance is factored on need, and the remedy is achieved through minimizing adverse impact. The Critical Area Steward Plan (CASP) is not based on need. Through the development of a set of performance standards, the landowner is involved in site design that meets the goals of the landowner, while at the same time provides equal or better protection of the functions and values of the critical area. This approach develops a stewardship plan for activities in the buffer and applies to two types of critical areas: Fish and Wildlife Habitat Conservation Areas and wetlands. There are obvious benefits to landowners and to the protection of critical areas with a successfully implemented program.

Concerns about the successful implementation of the CASP program include:

- A. The Development Review Division handles about two Reasonable Economic Use variances each year. The demand for a voluntary stewardship program is not yet known. Staff and budgetary impacts to Environmental Health and the Conservation District are also difficult to estimate.
- B. Determining success of the program and of the site-specific performance standards will require monitoring and adaptive management programs. It is yet to be specifically determined how these programs will be established, what the budget impact will be and how to measure and document the successes and failures within the program. A general program outline is now being developed.
- C. Public Interest Program (Education, Evaluation and Enforcement). Implementation of the CASP would necessitate a bolstered Public Interest Program to more assertively monitor the performance standards the CASP puts into place. Also, the program would need to include appropriate levels of public outreach. Enforcement is addressed in 18.50 JCC. It has not been determined how to successfully enforce compliance if a development is put in place and the performance standards (equal or better protection) cannot be achieved. How is the approved development handled? Will mitigation be required?

CAO enforcement generally

As stated above with regard to the CASP, enforcement of the CAO is addressed in 18.50 JCC and is by voluntary compliance and through public education and information. The complaint-driven enforcement could be bolstered with a Public Interest Program to more assertively engage the public in areas of their concern, with more education and awareness-building. This role may need additional staff resources for implementation

Multiple wetland ratings

The Department of Ecology's 2004 rating system is adopted and used by Jefferson County in the proposed ordinance, but is ultimately applied in a different way than the way the rating system was designed to be implemented. This creates a difficulty with the implementation of the ordinance because DCD will be requiring wetland professionals to follow the 2004 wetland rating system but the application of that standard is not followed.

The proposed CAO does not provide guidance on our divergence from the 2004 rating system, i.e. where the wetland units are going to be allowed to be broken for individual rating and what the scientific rationale is for making those decisions.

It is not workable to try to change the rating system in our code. If amendments to the rating system are warranted, this amendment would be done under the terms of Department of Ecology's science review and revision of the standard rating system or under a new scientific review effort by Jefferson County to create our own guidance.

As far as wetland delineation is concerned, RCW 36.70A.175 provides that "Wetlands regulated under development regulations adopted pursuant to this chapter [Growth Management] shall be delineated in accordance with the manual adopted by the department pursuant to RCW 90.58.380" (Department of Ecology, adoption of wetland manual consistent with US Army Corps of Engineers and US Environmental Protection Agency).

Wetland Categories, Rating Scores and Buffer Width Tables

- A. The intent of the rating scores (less than/more than) in tables 18.22.330 (1), (2) and (3) can be followed, however some revisions need to be made for clarity and proper application of buffer width based on the scoring elements.

- B. There is general disagreement between the Planning Commission Draft CAO and Washington Department of Ecology guidance on the level of intensity of various residential uses for five-acre parcels and parcels less than an acre. Also, there is disagreement with the level of intensity of certain forest practices in the tables. If our definitions of Low, Moderate and High intensity land uses differ, then they need to be defined and included in 18.10.
- C. There is concern that adequate protection for/from critical areas may not be achieved with the prescribed buffer distance, allowed buffer reductions or the distance added for waivers of special reports.

Wetland Mitigation

The Draft CAO Table 18.22.350 Required Replacement Ratios for Compensatory Wetland Mitigation combines some of the information from a similar table in the Department of Ecology guidance document. In so doing, the mitigation ratios do not match the guidance documents. This will potentially be a point of contention.

Channel Migration Zones as Geologic Hazards, Fish and Wildlife Habitat Conservation Areas, or in a new separate section

- A. Channel Migration Zones (CMZs) are not specifically spelled-out in the Growth Management Act as a critical area, though optional elements in GMA are allowed (36.70A.080) and innovative techniques are encouraged (36.70A.090). One may argue that the requirement to include Best Available Science in designation and protection of critical areas (36.70A.172) is supportive of addressing CMZs in the ordinance. The Planning Commission chose to view CMZs as a health and safety issue (e.g. flood zones, Flood Damage Prevention ordinance, Title 15, and a geohazard) and addresses these concerns in the CMZ High-Hazard zone delineation. CMZs commonly overlap with Fish and Wildlife Habitat Conservation Areas and intrinsically important for fish and wildlife.
- B. Under the CMZ, the high-hazard zone is buffered by a standard building setback of 30 feet. In some instances, this may leave an high amount of risk to proposed new development located there.

75' buffers from Ns/Np streams

The 75 foot width of buffers for Ns and Np streams may be excessive in some circumstances and could be a contentious issue as the Board reviews the proposed ordinance.

Lack of administrative authority to increase buffers in special circumstances

DCD has only increased buffer width in response to special report recommendations and through an open record hearing before the Hearing Examiner. The Planning Commission's recommended CAO draft removes administrative authority for increasing buffer widths based on special site circumstances, with the exception of landslide hazard areas. Staff believes it is important to maintain this administrative authority in the interests of Jefferson County citizens.

The focus of the CAO discussion has been placed on buffers. During project review, the site plan evaluators, current planners in the Development Review Division, consider and weigh much more than the Critical Area buffers. Administrative flexibility will benefit the public.

Summary Table

| Areas of Staff Concern | Planning Agency Recommendation | Issue discussion |
|--|--|---|
| CASP | Develop stewardship program | Program specificity and funding certainty. |
| Multiple wetland ratings | Allow multiple rating of hydrologically-connected wetlands | Difficulty in administration, question of appropriate application of rating system. |
| Wetland Categories, Rating Scores & Buffer Widths | See tables 18.22.330 (1) through (3) | Tables need to be revised for clarity. Review land use intensity, define them clearly Review widths of buffers and waiver application |
| CMZs as GeoHazards, FWHCAs, or in separate section | CMZs are included for their geoHazard characteristics, not FWHCA characteristics | Review purpose and placement of CMZs, wildlife buffer Review level of protection from CMZ, setback |
| 75' buffers from Ns/Np streams | Buffer for intermittent streams is 75 feet | Consider applicability and protection requirements |
| Lack of administrative authority to increase buffers in special circumstances | Administrator does not require authority to increase buffer unless they are for landslide hazard areas | Administrative authority may be necessary in special circumstances. |
| CAO enforcement generally | County enforcement of CAO | Enforcement program (18.50) does not have resources to administer CAO compliance monitoring or CASP compliance monitoring |
| Enforcement of CASP performance standards | Enhance program | Details to be developed |
| Monitoring/adaptive management program: how to establish the program, budget impact, how to document the program | Enhance program | Details to be determined |



Memorandum

From: Al Scalf, Director
Department of Community Development
To: Jefferson County Planning Commission
Date: 6 June 2007
Re: Framework of State goals and requirements for Critical Areas Ordinances

The following findings of fact from Washington State law, Jefferson County Code and the Jefferson County Comprehensive Plan provide the framework within which we deliberate on Jefferson County's Critical Areas Ordinance

Specifically, we get policy direction from several sources, including the following:

- Planning Enabling Act, Chapter 36.70 RCW,*
- State Growth Management Act, Chapter 36.70A RCW,
- Washington Administrative Code (365-195-900)+
- Jefferson County Comprehensive Plan, as amended
- Jefferson County Code (JCC) Title 18.

Community Vision Embodied in Comprehensive Planning

Excerpted from: (<http://www.co.jefferson.wa.us/commdevelopment/vision.htm>)

“The Jefferson County Comprehensive Plan is a reflection of the wide variety of individual and community desires, needs, aspirations, short-comings, and accomplishments, all of which are tempered by the parameters established by the GMA. The Plan is a set of guidelines; goals, polices, and strategies to give growth and development both context and direction, aimed at promoting the best environmental, social and economic future for Jefferson County citizens.”

* **The Revised Code of Washington (RCW)** is the compilation of all permanent laws now in force. It is a collection of Session Laws (enacted by the Legislature, and signed by the Governor, or enacted via the initiative process), arranged by topic, with amendments added and repealed laws removed.

+**Washington Administrative Code (WAC)** — Regulations of executive branch agencies are issued by authority of statutes. Like legislation and the Constitution, regulations are a source of primary law in Washington State.

“While the Plan will impact the future delivery of services, its purposes go well beyond how public funds are to be spent and services delivered. The Plan, in a very real sense, is a statement about Jefferson County as a community, and how it will be in the future as a place to work and play, to raise a family or retire, to get an education or start a business. To this end, the Plan represents a statement of basic principles. And it is these principles by which its success will be judged:

- Maintain and preserve the natural beauty, rural character, and variety of life styles that make up the intrinsic character of this community.
- Support a healthy, diversified, and sustainable local and regional economy by recognizing existing local businesses, making prudent and appropriate infrastructure investments, and encouraging new business start-ups and recruitment which are compatible with and complementary to the community.
- Protect and conserve the local natural resource base, balancing both habitat and economic values.
- Reinforce and enhance the historic sense of "place" or "community" around traditional population centers.
- Prevent the inappropriate or premature conversion of undeveloped land in favor of infill and the strengthening of local communities.
- Provide a degree of flexibility and autonomy for local communities to address their own unique needs.
- Encourage yet unrealized opportunities in community education, technology, transportation alternatives, habitat restoration and economic diversification.

To accomplish the above principles, our decision-making must take into account the need for local communities to shape their own sense of the future within the guidelines contained in this Plan. We must work together, tapping the strengths and diversity of the citizens of the community. We must clearly understand the fiscal impacts of our decision making and create opportunities for those who have less or are just starting out to be able to participate fully in all aspects of the community. And finally, we must be consistent, coordinated, and flexible in the delivery of community services.”

1997 Change of Deferential Standard: more leniency given to counties and cities (RCW 36.70A.3201)

“The legislature intends that the boards apply a more deferential standard of review to actions of counties and cities than the preponderance of the evidence standard provided for under existing law. In recognition of the broad range of discretion that may be exercised by counties and cities consistent with the requirements of this chapter, the legislature intends for the boards to grant deference to counties and cities in how they plan for growth, consistent with the requirements and goals of this chapter. **Local comprehensive plans and development regulations require counties and cities to balance priorities and options for action in full consideration of local circumstances. The legislature finds that while this chapter requires local planning to take place within a framework of State goals and requirements,** the ultimate burden and responsibility for planning, harmonizing the planning goals of this chapter, and implementing a county’s or city’s future rests with that community.” (RCW 36.70A.3201), (Emphasis added).

Planning Enabling Act, Chapter RCW 36.70.040

Department — Creation — Creation of commission to assist department.

“By ordinance a board may, as an alternative to and in lieu of the creation of a planning commission as provided in RCW 36.70.030, create a planning department which shall be organized and function as any other department of the county. When such department is created, the board shall also create a planning commission which shall assist the planning department in carrying out its duties, including assistance in the preparation and execution of the comprehensive plan and recommendations to the department for the adoption of official controls and/or amendments thereto. To this end, the planning commission shall conduct such hearings as are required by this chapter and shall make findings and conclusions therefrom which shall be transmitted to the department which shall transmit the same on to the board with such comments and recommendations it deems necessary.”

Growth Management Act, RCW 36.70A

Planning goals, RCW 36.70A.020

"The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:"

(Excerpted)

(6) Property rights. Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.

(10) Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

(11) Citizen participation and coordination. Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

RCW 36.70A.050

Guidelines to classify agriculture, forest, and mineral lands and critical areas.

(1) Subject to the definitions provided in RCW 36.70A.030, the department shall adopt guidelines, under chapter 34.05 RCW, no later than September 1, 1990, to guide the classification of: (a) Agricultural lands; (b) forest lands; (c) mineral resource lands; and (d) critical areas. The department shall consult with the department of agriculture regarding guidelines for agricultural lands, the department of natural resources regarding forest lands and mineral resource lands, and the department of ecology regarding critical areas.

(2) In carrying out its duties under this section, the department shall consult with interested parties, including but not limited to: (a) Representatives of cities; (b) representatives of counties; (c) representatives of developers; (d) representatives of builders; (e) representatives of owners of agricultural lands, forest lands, and mining lands; (f) representatives of local economic development officials; (g) representatives of environmental organizations; (h) representatives of special districts; (i) representatives of the governor's office and federal and state agencies; and (j) representatives of Indian tribes. In addition to the consultation required under this subsection, the department shall conduct public hearings in the various regions of the state. The department shall consider the public input obtained at such public hearings when adopting the guidelines.

(3) The guidelines under subsection (1) of this section shall be minimum guidelines that apply to all jurisdictions, but also shall allow for regional differences that exist in Washington State. The intent of these guidelines is to assist counties and cities in designating the classification of agricultural lands, forest lands, mineral resource lands, and critical areas under RCW 36.70A.170.

(4) The guidelines established by the department under this section regarding classification of forest lands shall not be inconsistent with guidelines adopted by the department of natural resources.

RCW 36.70A.060

Natural resource lands and critical areas — Development regulations.

(Excerpted)

(2) Each county and city shall adopt development regulations that protect critical areas that are required to be designated under RCW 36.70A.170. For counties and cities that are required or choose to plan under RCW 36.70A.040, such development regulations shall be adopted on or before September 1, 1991. For the remainder of the counties and cities, such development regulations shall be adopted on or before March 1, 1992.

(3) Such counties and cities shall review these designations and development regulations when adopting their comprehensive plans under RCW 36.70A.040 and implementing development regulations under RCW 36.70A.120 and may alter such designations and development regulations to insure consistency.

RCW 36.70A.120

Planning activities and capital budget decisions — Implementation in conformity with comprehensive plan.

Each county and city that is required or chooses to plan under RCW 36.70A.040 shall perform its activities and make capital budget decisions in conformity with its comprehensive plan.

RCW 36.70A.170

Natural resource lands and critical areas — Designations.

(1) On or before September 1, 1991, each county, and each city, shall designate where appropriate:

(a) Agricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products;

(b) Forest lands that are not already characterized by urban growth and that have long-term significance for the commercial production of timber;

(c) Mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals; and

(d) Critical areas.

(2) In making the designations required by this section, counties and cities shall consider the guidelines established pursuant to RCW 36.70A.050.

Implementation of BAS (RCW and WAC)

RCW 36.70A.172

Critical areas — Designation and protection — Best available science to be used.

(1) In designating and protecting critical areas under this chapter, counties and cities shall include the best available science in developing policies and development regulations to protect the functions and values of critical areas. In addition, counties and cities shall give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

(2) If it determines that advice from scientific or other experts is necessary or will be of substantial assistance in reaching its decision, a growth management hearings board may retain scientific or other expert advice to assist in reviewing a petition under RCW 36.70A.290 that involves critical areas.

WAC 197-11-080

Incomplete or unavailable information.

(1) If information on significant adverse impacts essential to a reasoned choice among alternatives is not known, and the costs of obtaining it are not exorbitant, agencies shall obtain and include the information in their environmental documents.

(2) When there are gaps in relevant information or scientific uncertainty concerning significant impacts, agencies shall make clear that such information is lacking or that substantial uncertainty exists.

(3) Agencies may proceed in the absence of vital information as follows:

(a) If information relevant to adverse impacts is essential to a reasoned choice among alternatives, but is not known, and the costs of obtaining it are exorbitant; or

(b) If information relevant to adverse impacts is important to the decision and the means to obtain it are speculative or not known;

Then the agency shall weigh the need for the action with the severity of possible adverse impacts which would occur if the agency were to decide to proceed in the face of uncertainty. If the agency proceeds, it shall generally indicate in the appropriate environmental documents its worst case analysis and the likelihood of occurrence, to the extent this information can reasonably be developed.

(4) Agencies may rely upon applicants to provide information as allowed in WAC 197-11-100.

WAC 365-195-900

Background and purpose.

(1) Counties and cities planning under RCW 36.70A.040 are subject to continuing review and evaluation of their comprehensive land use plan and development regulations. Every five years they must take action to review and revise their plans and regulations, if needed, to ensure they comply with the requirements of the Growth Management Act. RCW 36.70A.130.

(2) Counties and cities must include the "best available science" when developing policies and development regulations to protect the functions and values of critical areas and must give "special consideration" to conservation or protection measures necessary to preserve or enhance anadromous fisheries. RCW 36.70A.172(1). The rules in WAC 365-195-900 through 365-195-925 are intended to assist counties and cities in identifying and including the best available science in newly adopted policies and regulations and in this periodic review and evaluation and in demonstrating they have met their statutory obligations under RCW 36.70A.172(1).

(3) The inclusion of the best available science in the development of critical areas policies and regulations is especially important to salmon recovery efforts, and to other decision-making affecting threatened or endangered species.

(4) These rules are adopted under the authority of RCW 36.70A.190 (4)(b) which requires the department of community, trade, and economic development (department) to adopt rules to assist counties and cities to comply with the goals and requirements of the Growth Management Act.

WAC 365-195-905 Criteria for determining which information is the "best available science." (1) This section provides assessment criteria to assist counties and cities in determining whether information obtained during development of critical areas policies and regulations constitutes the "best available science."

(2) Counties and cities may use information that local, state or federal natural resource agencies have determined represents the best available science consistent with criteria set out in WAC [365-195-900](#) through [365-195-925](#). The department will make available a list of resources that state agencies have identified as meeting the criteria for best available science pursuant to this chapter. Such information should be reviewed for local applicability.

(3) The responsibility for including the best available science in the development and implementation of critical areas policies or regulations rests with the legislative authority of the county or city. However, when feasible, counties and cities should consult with a qualified scientific expert or team of qualified scientific experts to identify scientific information, determine the best available science, and assess its applicability to the relevant critical areas. The scientific expert or experts may rely on their professional judgment based on experience and training, but they should use the criteria set out in WAC [365-195-900](#) through [365-195-925](#) and any technical guidance provided by the department. Use of these criteria also should guide counties and cities that lack the assistance of a qualified expert or experts, but these criteria are not intended to be a substitute for an assessment and recommendation by a qualified scientific expert or team of experts.

(4) Whether a person is a qualified scientific expert with expertise appropriate to the relevant critical areas is determined by the person's professional credentials and/or certification, any advanced degrees earned in the pertinent scientific discipline from a recognized university, the number of years of experience in the pertinent scientific discipline, recognized leadership in the discipline of interest, formal training in the specific area of expertise, and field and/or laboratory experience with evidence of the ability to produce peer-reviewed publications or other professional literature. No one factor is determinative in deciding whether a person is a qualified scientific expert. Where pertinent scientific information implicates multiple scientific disciplines, counties and cities are encouraged to consult a team of qualified scientific experts representing the various disciplines to ensure the identification and inclusion of the best available science.

(5) Scientific information can be produced only through a valid scientific process. To ensure that the best available science is being included, a county or city should consider the following:

(a) **Characteristics of a valid scientific process.** In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the public participation process is reliable scientific information, a county or city should determine whether the source of the information displays the characteristics of a valid scientific process. The characteristics generally to be expected in a valid scientific process are as follows:

1. **Peer review.** The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The criticism of the peer reviewers has been addressed by the proponents of the information. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed.

2. **Methods.** The methods that were used to obtain the information are clearly stated and able to be replicated. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to assure their reliability and validity.

3. **Logical conclusions and reasonable inferences.** The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained.

4. **Quantitative analysis.** The data have been analyzed using appropriate statistical or quantitative methods.

5. **Context.** The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.

6. **References.** The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

(b) **Common sources of scientific information.** Some sources of information routinely exhibit all or some of the characteristics listed in (a) of this subsection. Information derived from one of the following sources may be considered scientific information if the source possesses the characteristics in Table 1. A county or city may consider information to be scientifically valid if the source possesses the characteristics listed in (a) of this subsection. The information found in Table 1 provides a general indication of the characteristics of a valid scientific process typically associated with common sources of scientific information.

Table 1

| SOURCES OF SCIENTIFIC INFORMATION | CHARACTERISTICS | | | | | |
|---|-----------------|---------|---|-----------------------|---------|------------|
| | Peer review | Methods | Logical conclusions & reasonable inferences | Quantitative analysis | Context | References |
| A. Research. Research data collected and analyzed as part of a controlled experiment (or other appropriate methodology) to test a specific hypothesis. | X | X | X | X | X | X |
| B. Monitoring. Monitoring data collected periodically over time to determine a resource trend or evaluate a management program. | | X | X | Y | X | X |
| C. Inventory. Inventory data collected from an entire population or population segment (e.g., individuals in a plant or animal species) or an entire ecosystem or ecosystem segment (e.g., the species in a particular wetland). | | X | X | Y | X | X |
| D. Survey. Survey data collected from a statistical sample from a population or ecosystem. | | X | X | Y | X | X |
| E. Modeling. Mathematical or symbolic simulation or representation of a natural system. Models generally are used to understand and explain occurrences that cannot be directly observed. | X | X | X | X | X | X |
| F. Assessment. Inspection and evaluation | | | | | | |

of site-specific information by a qualified scientific expert. An assessment may or may not involve collection of new data.

X X X X

G. Synthesis. A comprehensive review and explanation of pertinent literature and other relevant existing knowledge by a qualified scientific expert.

X X X X X

H. Expert Opinion. Statement of a qualified scientific expert based on his or her best professional judgment and experience in the pertinent scientific discipline. The opinion may or may not be based on site-specific information.

X X X

X = characteristic must be present for information derived to be considered scientifically valid and reliable

Y = presence of characteristic strengthens scientific validity and reliability of information derived, but is not essential to ensure scientific validity and reliability

(c) **Common sources of nonscientific information.** Many sources of information usually do not produce scientific information because they do not exhibit the necessary characteristics for scientific validity and reliability. Information from these sources may provide valuable information to supplement scientific information, but it is not an adequate substitute for scientific information. Nonscientific information should not be used as a substitute for valid and available scientific information. Common sources of nonscientific information include the following:

(i) Anecdotal information. One or more observations which are not part of an organized scientific effort (for example, "I saw a grizzly bear in that area while I was hiking").

(ii) Nonexpert opinion. Opinion of a person who is not a qualified scientific expert in a pertinent scientific discipline (for example, "I do not believe there are grizzly bears in that area").

(iii) Hearsay. Information repeated from communication with others (for example, "At a lecture last week, Dr. Smith said there were no grizzly bears in that area").

(6) Counties and cities are encouraged to monitor and evaluate their efforts in critical areas protection and incorporate new scientific information, as it becomes available.

WAC 365-195-910

Criteria for obtaining the best available science.

(1) Consultation with state and federal natural resources agencies and tribes can provide a quick and cost-effective way to develop scientific information and recommendations. State natural resource agencies provide numerous guidance documents and model ordinances that incorporate the agencies' assessments of the best available science. The department can provide technical assistance in obtaining such information from state natural resources agencies, developing model GMA-compliant critical areas policies and development regulations, and related subjects. The department will make available to interested parties a current list of the best available science determined to be consistent with criteria set out in WAC 365-195-905 as identified by state or federal natural resource agencies for critical areas.

(2) A county or city may compile scientific information through its own efforts, with or without the assistance of qualified experts, and through state agency review and the Growth Management Act's required public participation process. The county or city should assess whether the scientific information it compiles constitutes the best available science applicable to the critical areas to be protected, using the criteria set out in WAC 365-195-900 through 365-195-925 and any technical guidance provided by the department. If not, the county or city should identify and assemble additional scientific information to ensure it has included the best available science.

WAC 365-195-915

Criteria for including the best available science in developing policies and development regulations.

(1) To demonstrate that the best available science has been included in the development of critical areas policies and regulations, counties and cities should address each of the following on the record:

(a) The specific policies and development regulations adopted to protect the functions and values of the critical areas at issue.

(b) The relevant sources of best available scientific information included in the decision-making.

(c) Any nonscientific information -- including legal, social, cultural, economic, and political information -- used as a basis for critical area policies and regulations that depart from recommendations derived from the best available science. A county or city departing from science-based recommendations should:

(i) Identify the information in the record that supports its decision to depart from science-based recommendations;

(ii) Explain its rationale for departing from science-based recommendations; and

(iii) Identify potential risks to the functions and values of the critical area or areas at issue and any additional measures chosen to limit such risks. State Environmental Policy Act (SEPA) review often provides an opportunity to establish and publish the record of this assessment.

(2) Counties and cities should include the best available science in determining whether to grant applications for administrative variances and exemptions from generally applicable provisions in policies and development regulations adopted to protect the functions and values of critical areas. Counties and cities should adopt procedures and criteria to ensure that the best available science is included in every review of an application for an administrative variance or exemption.

WAC 365-195-920

Criteria for addressing inadequate scientific information.

Where there is an absence of valid scientific information or incomplete scientific information relating to a county's or city's critical areas, leading to uncertainty about which development and land uses could lead to harm of critical areas or uncertainty about the risk to critical area function of permitting development, counties and cities should use the following approach:

(1) A "precautionary or a no risk approach," in which development and land use activities are strictly limited until the uncertainty is sufficiently resolved; and

(2) As an interim approach, an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions achieve their objectives. Management, policy, and regulatory actions are treated as experiments that are purposefully monitored and evaluated to determine whether they are effective and, if not, how they should be improved to increase their effectiveness. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. To effectively implement an adaptive management program, counties and cities should be willing to:

(a) Address funding for the research component of the adaptive management program;

(b) Change course based on the results and interpretation of new information that resolves uncertainties; and

(c) Commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting critical areas protection and anadromous fisheries.

WAC 365-195-925

Criteria for demonstrating "special consideration" has been given to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

(1) RCW 36.70A.172(1) imposes two distinct but related requirements on counties and cities. Counties and cities must include the "best available science" when developing policies and development regulations to protect the functions and values of critical areas, and counties and cities must give "special consideration" to conservation or protection measures necessary to preserve or enhance anadromous fisheries. Local governments should address both requirements in RCW 36.70A.172(1) when developing their records to support their critical areas policies and development regulations.

(2) To demonstrate compliance with RCW 36.70A.172(1), a county or city adopting policies and development regulations to protect critical areas should include in the record evidence that it has given "special consideration" to conservation or protection measures necessary to preserve or enhance anadromous fisheries. The record should be

developed using the criteria set out in WAC 365-195-900 through 365-195-925 to ensure that conservation or protection measures necessary to preserve or enhance anadromous fisheries are grounded in the best available science.

(3) Conservation or protection measures necessary to preserve or enhance anadromous fisheries include measures that protect habitat important for all life stages of anadromous fish, including, but not limited to, spawning and incubation, juvenile rearing and adult residence, juvenile migration downstream to the sea, and adult migration upstream to spawning areas. Special consideration should be given to habitat protection measures based on the best available science relevant to stream flows, water quality and temperature, spawning substrates, instream structural diversity, migratory access, estuary and nearshore marine habitat quality, and the maintenance of salmon prey species. Conservation or protection measures can include the adoption of interim actions and long-term strategies to protect and enhance fisheries resources.

WAC 365-195-410

Critical areas.

(1) Requirements. Prior to the development of comprehensive plans, cities and counties ought to have designated critical areas and adopted regulations protective of them. Such areas are defined to include:

- (a) Wetlands;
- (b) Areas of 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.

The previous designations and regulations shall be reviewed in the comprehensive plan process to ensure consistency.

(2) Recommendations for meeting requirements. Much of the analysis which is the basis for the comprehensive plan will come later than the initial identification and regulation of critical areas. The result may be plan features which conflict with the previous critical area provisions.

(a) The department has issued guidelines for the classification of critical areas which are contained in chapter 365-190 WAC.

(b) Critical areas should be designated and protected wherever the applicable natural conditions exist, whether within or outside of urban growth areas.

(c) The review of existing designations should, in most cases, be limited to the question of consistency with the comprehensive plan, rather than a revisiting of the entire prior designation and regulation process. However, to the extent that new information is available or errors have been discovered, the review process should take this information into account.

(d) In connection with critical area protection, the department recommends that planning jurisdictions identify the policies by which decisions are made on when and how police powers will be used (regulation) and when and how other means will be employed (purchases, development rights, etc.).

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.”

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 flood plain 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.

(Additional definitions follow)

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. Flood plains 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 flood plain 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 flood plain, defined as the channel of the stream and that portion of the adjoining flood plain 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 tsunamis, 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; and

(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.

Countywide Planning Policies, A policy Framework to Guide the Development of Comprehensive Plans (CWPP)

“Relationship of Countywide Planning Policies to Interim Resource Land and Critical Area Ordinance: The GMA envisions a process whereby resource lands and critical areas are identified, designated, classified, conserved and protected as a [sic] initial first step in the growth management process. Following the adoption of these interim measures, comprehensive land use plans will be updated to meet the goals and provisions of the act. It is intended that these interim protective measures will be reevaluated during the Comprehensive Plan amendment process and revised to comply with the plan as required by the GMA. The principles encompassed by the planning policies will serve as a policy guide in the process of adjusting the interim protective measures (p. 3)”.

“The Comprehensive Plan, Appendix B, p. 7, refers to Policy #8 of the CWPP, “Land Use and Rural Element of the Plan shall recognize and maintain rural character without degrading the environment or creating the need for urban level of services.” In the Environment Element table (p. B-7), the Comprehensive Plan provides an analysis of Policy #8: “Policies contained in the Land Use and Rural Element of the Plan shall be in accord with environmental policies proposed by the Plan. Environmental policies shall aim at preserving environmental quality of the County’s lands.”

Jefferson County Comprehensive Plan

Originally, Jefferson County adopted an Interim Critical Areas Ordinance in 1994. Later, Jefferson County adopted the Unified Development Code on December 18, 2000.

Critical Areas Protection Strategy

From the Comprehensive Plan, page 8-4: ““Critical areas” is a term of art from the Growth Management Act to describe environmentally sensitive natural features, such as streams and wetlands. The following are identified as environmentally critical areas through RCW 36.70A.030(5):

- Wetlands;
- Aquifer recharge areas;
- Frequently flooded areas;
- Geologically hazardous areas; and,
- Fish and wildlife habitat conservation areas.

The Critical Areas Protection Strategy describes the regulations and methodologies used to protect the environmentally critical areas found throughout Jefferson County. Protection and enhancement of critical areas were determined by the state legislature to be essential to the maintenance of public health and safety.

The designation of Critical Areas in Jefferson County was guided by GMA requirements, state guidelines, and a extensive local review process. Jefferson County adopted an Interim Critical Areas Ordinance in 1994. Jefferson County adopted the Unified Development Code (UDC) on December 18, 2000. The UDC incorporated the Interim Critical Areas Ordinance protection standards, modifying the standards for consistency with the Best Available Science, as required by law.”

Environment (Land Use and Rural p. 3-59)

Goal: LNG 14.0: “Preserve the functions and vales of critical environmental areas and protect development from the risks of environmental hazards.”

Policy: LNP 14.1: “Ensure that land use decisions are based on land use ordinances which are in compliance with the Critical Areas Ordinance and all applicable state and federal environmental laws.”

Goal: LNG 21.0: “Encourage residential land use and development intensities that protect the character of rural areas, avoid interference with resource land uses and minimize impacts upon environmentally sensitive areas.”
LNP 21.0

History of the Critical Areas Ordinance and the local process appears in Appendix E, pp. 26-29.

Appendix E further states: “The identification and characterization of Jefferson County critical areas is an ongoing process. The data available on the various critical areas is not comprehensive, and in all areas there is a need for additional information based on the best available science. Critical areas maps will be updated with new information as funding of inventory studies allows. The goals, policies, and strategies for critical areas include both protection of the environment and protection of development from environmental hazards” (p. E-35, Critical Areas).

Comprehensive Plan, p. 8-26

CRITICAL AREAS REGULATED UNDER THE CRITICAL AREAS ORDINANCE

Geologic Hazard Areas

GOAL:

ENG 9.0 Ensure that landslide and erosion hazard areas are appropriately designated and that measures to protect public health and safety are implemented for hazardous areas.

GOAL:

ENG 10.0 Minimize seismic risk to life and property on new and existing structures.

Flood Hazard Areas

GOAL:

ENG 11.0 Protect flood hazard areas from development and uses that compromise the flow, storage and buffering of flood waters, normal channel functions, and fish and wildlife habitat and to minimize flood and river process risk to life and property.

Fish and Wildlife Habitat

GOAL:

ENG 12.0 Protect and enhance fish and wildlife habitat throughout Jefferson County.

Aquifer Recharge Areas

GOAL:

ENG 13.0 Protect aquifer recharge areas from depletion of aquifer quantity or degradation of aquifer quality.

Wetlands

GOAL:

ENG 14.0 Protect and enhance wetlands in all their functions.

Jefferson County Code

18.05.40 Department of Community Development—duties and responsibilities.

Article VI-D. Environmentally Sensitive Areas District (ESA)

18.15.185 Environmentally sensitive areas

- a) Critical aquifer recharge areas [Article VI-E]
- b) Frequently flooded areas [Article VI-F]; see also Chapter 15.15 JCC
- c) Geologically hazardous areas [Article VI-G]
- d) Fish and wildlife habitat areas [Article VI-H]
- e) Wetlands [Article VI-I]

Each Article is subheaded with Classification, Regulated activities, Exempt activities & Protection Standards.

18.45.050 Compilation of preliminary docket (JCC p.18-260)

4) Planning Commission Periodic Assessment--Recommendations

b) Criteria Governing Planning Commission Assessment.

The planning commission's periodic assessment and recommendation shall be based upon, but shall not be limited to , an inquiry into the following growth management indicators:

- (i) Whether growth and development as envisioned in the Comprehensive Plan is occurring faster or slower than anticipated, or is failing to materialize,
- (ii) Whether the capacity of the county to provide adequate services has diminished or increased;
- (iii) Whether sufficient urban land is designated and zoned to meet projected demand and need;
- (iv) Whether any of the assumptions upon which the plan is based are no longer found to be valid'
- (v) Whether changes in county-wide attitudes necessitate amendments to the goals of the plan and the basic values embodied within the Comprehensive Plan Vision Statement
- (vi) Whether changes in circumstances dictate a need for amendments;

- (vii) Whether inconsistencies exist between the Comprehensive Plan and the GMA or the Comprehensive Plan and the County-wide Planning Policy for Jefferson County. [Ord. 2-06, sec. 1]