RULE-MAKING ORDER

(RCW 34.05.360)

CR-103 (7/10/97)

Agency: Washington Department of Community, Trade and Economic Development	☒ Permanent Rule ☐ Emergency Rule
(1) Date of adoption: July 27, 2000	☐ Expedited Adoption ☐ Expedited Repeal

(2) Purpose: The purposes are: (1) to provide guidance to counties and cities when developing policies and development regulations to protect the functions and values of critical areas and to give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries; (2) to assist counties and cities in demonstrating they have met their statutory obligations under RCW 36.70A. 172.

(3) Citation of existing rules affected by this order: WAC 365-195

Repealed:
Amended: ☒
Suspended:

(4) Statutory authority for adoption: RCW 36.70A.190(4)(b)
Other Authority:

PERMANENT RULE ONLY (Including EXPEDITED ADOPTION)

Adopted under notice filed as WSR ~~98.20.091~~ 00-03-066 on February 28, 2000 (date).

Describe any changes other than editing from proposed to adopted version:

See ATTACHMENT A

EMERGENCY RULE ONLY

Under 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:

EXPEDITED REPEAL ONLY

Under Preproposal Statement of Inquiry filed as WSR _____ on _____ (date)

(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 or Expedited Repeal	Emergency Rules
☒ 31 days after filing	☐ Immediately
☐ Other (specify) _____*	☐ Later (specify) . . . . .

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

Name (Type or Print)
Martha Choe

Signature
Martha Choe

Title
Director, CTED

Date
July 27, 2000

CODE REVISER USE ONLY

CODE REVISER'S OFFICE
STATE OF WASHINGTON

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TIME 3:01 AM PM

WSR 00-16-064

Note: If any category is left blank, it will be calculated as zero. No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note. A section may be counted in more than one category.

The number of sections adopted in order to comply with:

Federal statute:	New	.....	Amended	.....	Repealed	.....
Federal rules or standards:	New	.....	Amended	.....	Repealed	.....
Recently enacted state statutes:	New	.....	Amended	.....	Repealed	.....

The number of sections adopted at the request of non governmental entity:

New	.....	Amended	.....	Repealed	.....

The number of sections adopted in the agency's own initiative:

New	6	Amended	.....	Repealed	.....

The number of sections adopted in order to clarify, streamline, or reform agency procedures:

New	.....	Amended	.....	Repealed	.....

The number of sections adopted using:

Negotiated rule making:	New		Amended	.....	Repealed	.....
Pilot rule making:	New	.....	Amended	.....	Repealed	.....
Other alternative rule making:	New	.....	Amended	.....	Repealed	.....

ATTACHMENT A

Proposed Changes to the Best Available Science Rule
WAC 365-195-900 through WAC 365-195-925

None of the proposed changes below are substantially different from this rule as proposed in ~~January~~ February 2000.

Section	Changes to Text	Purpose/Effect
WAC 365-195-900 Background	Adding "newly adopted policies and in" this periodic review and evaluation…	Clarifies that the rules are intended to assist counties and cities in identifying and including the best available science both in newly adopted policies and regulations and in the periodic review and evaluation under RCW 36.70A.215.
WAC 365-195-905 Criteria for determining which information is the best available science	New Heading: Criteria for determining which information is the best available science	Responds to public comments indicating this heading format is easier to reference and understand.
Subsection (2)	Shifting *old subsection (4) to new subsection (2)*	Responds to public comments suggesting the rule would be better organized if it began with information about where cities and counties can locate and use a source list of BAS from local, state and federal natural resource agencies consistent with criteria set out in this rule.
Subsection (3)	Shifting *old subsection (2) to new subsection (3)* Changing: "the ultimate accountability for determining whether information obtained during development of critical areas policies and regulations constitutes the BAS rests with the legislative authority of the county or city."	Renumbering made necessary by having shifted subsection (4). Responds to comments pointing out that local governments have the responsibility for complying with the BAS requirement, but the ultimate determination whether BAS has been included resides with the GMHBs or the courts. The proposed change in this section clarifies the relationship

	To: "The responsibility for including the BAS in the development and implementation of critical area policies or regulations rests with the legislative authority of the county or city."	between the local governments' legislative authority and juridical review provided for in the GMA.
Subsection (5)	Addition of the word "the", deletion of the words "*consider the following*".	Grammatical change
Subsection (5) (a)	Deletion of the word "*must*" and inclusion of the word "should" in the second sentence.	The use of "should" rather than "must" in recommendations included in the procedural criteria complies with the mandate of RCW 36.70A.190 (4), that the procedural criteria are to assist counties and cities in meeting the goals and requirements of the GMA.
Subsection (5) (a) (1)	The addition of the words "qualified scientific" to the first sentence.	Provides clarity that the "experts" in the scientific discipline is qualified in the pertinent scientific discipline.
Subsection (5) (b)	Deletion of "*necessary to ensure the information is scientifically valid and reliable*" and inclusion of the words listed in Table 1.	Deletes of redundant language, no substantive changes.
Subsection (5) (c)	Revision of the sentence: Nonscientific information may provide valuable information to supplement scientific information, but it is not an adequate substituted for scientific information. Nonscientific information should not be used as a substitute for valid and available scientific information.	Clarifies that scientific information can be used to supplement, not substitute for science.
Subsection (6)	Addition of the words: to update critical area ordinances to include new scientific information as it becomes available.	Clarifies that local governments' monitoring and evaluation of their critical areas protections are not ends in themselves; RCW 36.70A.215 requires that critical areas ordinances be updated where necessary.

Subsection (6) (b)	The addition of the words "of a valid scientific process" to the last sentence.	Clarifies that the information found in Table 1 provides a general indication of the characteristics of "a valid scientific process" typically associated with the common sources of scientific information.
WAC 365-195-910 Criteria for obtaining the best available science	New heading: Criteria for obtaining the best available science	Responds to public comments indicating this heading format is easier to reference and understand.
Subsection (1)	Addition of the words: "and federal" and "and tribes"	Responds to public comments noting that federal resource agencies and some tribes and/or assemble scientific information pertinent to critical areas protection, which may be useful for local governments.
Subsection (1)	Addition of: determined to be consistent with criteria set out in WAC 365-195-905	Clarifies that the department will make available to interested parties a current list of the best available science that is developed consistent with criteria in this rule identified by state or federal natural resource agencies for critical areas.
Subsection (2)	Addition of : applicable to the critical areas to be protected	Clarifies that a local government's assessment of the best available science should reference its applicability to its critical areas.
Subsection (2)	Deletion of the word: "*must*" and inclusion of the word "should" in the second and third sentences.	The use of "should" rather than "must" in recommendations included in the procedural criteria complies with the mandate of RCW 36.70A.190 (4), that the procedural criteria are to assist counties and cities in meeting the goals and requirements of the GMA.
WAC 365-195-915 Criteria for including the best available science in developing policies and	New heading: Criteria for including the best available science in developing policies and development regulations	Responds to public comments indicating this heading format is easier to reference and understand.

development regulations		
Subsection (2)	Deletion of the word "*must*" and inclusion of the word "should" in the first sentence.	The use of "should" rather than "must" in recommendations included in the procedural criteria complies with the mandate of RCW 36.70A.190 (4), that the procedural criteria are to assist counties and cities in meeting the goals and requirements of the GMA.
Subsection (2)	Changing "*exceptions*" to the word "exemptions"	The appropriate planning term is "exemptions" not exceptions.
WAC 365-195-920 Criteria for addressing inadequate scientific information	New heading: Criteria for addressing inadequate scientific information	Responds to public comments indicating this heading format is easier to reference and understand.
Subsection (1)	Deletion of the word "*or*" substitute with "and".	Responds to public comment accurately pointing out that if inadequate scientific information is available, a low risk approach should be pursued while an interim adaptive management program is being implemented.
Subsection (2)	Deletion of the word "*must*" and inclusion of the word "should" in the fourth sentence.	The use of "should" rather than "must" in recommendations included in the procedural criteria complies with the mandate of RCW 36.70A.190 (4), that the procedural criteria are to assist counties and cities in meeting the goals and requirements of the GMA.
Subsection (2)	Deletion of the phrase "*pay for a research program*" and substitute with "address funding for the research component of the adaptive management program".	Grammatical change
WAC 365-195-925 Criteria for demonstrating	New heading, Criteria for demonstrating special consideration has been given to conservation or protection	Responds to public comments indicating this heading format is easier to reference and understand.

"special consideration " has been given to conservation or protection measures necessary to preserve or enhance anadromous fisheries.	measures necessary to preserve or enhance anadromous fisheries	
Subsection (2) and Subsection (3)	Deletion of the word "*must*" and inclusion of the word "should" in the first sentence in subsection (2) and the third sentence in subsection (3).	The use of "should" rather than "must" in recommendations included in the procedural criteria complies with the mandate of RCW 36.70A.190 (4), that the procedural criteria are to assist counties and cities in meeting the goals and requirements of the GMA.

		regulations on the public or private sector are a consideration that could be considered and addressed on the public record. See WAC 365-195-905 (2) (c).
#55	17. The rule is strictly procedural by allowing jurisdictions too much discretion in using BAS. Substantive outcome consistent with RCW 36.70A. 172 should be required.	17. CTED agrees that the application of the BAS rule should substantively influence the adopted critical areas policies and regulations, consistent with the opinion in *Honesty in Envtl. Analysis and Legislation (HEAL) v. Cent. Puget Sound Growth Mgt. Hrgs. Bd.*, 96 Wn. App. 522, 979 P.2d 864 (1999). The procedural criteria in WAC-365 are recommendations for satisfying the requirements in RCW 36.70A.172(1).
#56	18. Need to see clarification about "economics" as a scientific factor.	18. How cities and counties provide consideration of "economics" as a factor (identified as a non-scientific factor) in decision making is identified in WAC 365-195-915 (1) (c). If economics is used as a reason for departing from recommendations derived from the best available science, CTED recommends that they (a) identify the information in the record that supports its decision, (b) explain its rationale, and (c) identify potential risks to the functions and values of the critical area or areas at issue, and any additional measures chosen to limit such risk.
#39	19. The rule should change many of the words "must" to the word "should".	19. CTED agrees that the when providing criteria for cities and counties consideration, that it is appropriate to use the word "should" and not "must". CTED has revised the rule to reflect this concept in the appropriate areas. See comment #1 in WAC 365-195-915.

PART NINE
BEST AVAILABLE SCIENCE

NEW SECTION

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.215.

(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.

NEW SECTION

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	CHARACTERISTICS					
SOURCES OF SCIENTIFIC INFORMATION	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

Table 1	CHARACTERISTICS					
SOURCES OF SCIENTIFIC INFORMATION	Peer review	Methods	Logical conclusions & reasonable inferences	Quantitative analysis	Context	References
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.

NEW SECTION

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.

NEW SECTION

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.

NEW SECTION

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 timeframe and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting critical areas protection and anadromous fisheries.

NEW SECTION

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.