Department of Commerce

Critical Areas Handbook

Chapter 1

Introduction: Reviewing and Updating Critical Areas Programs

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Recognizing the Value of Critical Areas Protection

Critical areas perform key functions that enhance our environment and protect us from hazards. The beneficial functions and values that critical areas provide include, but are not limited to, water quality protection and enhancement; fish and wildlife habitat; food chain support; flood storage, conveyance, and attenuation (the slow release) of flood waters; groundwater recharge and discharge; drinking water quality and quantity; erosion control; wave attenuation; protection from natural hazards; historical, archaeological, and aesthetic value protection; and recreation. Identifying the functions and values of local critical areas is essential to define the purpose of a critical areas protection program.

Each critical area performs different functions and each community assesses the values of the critical areas in its environment differently. Therefore, the purpose of protecting critical areas is unique for each community. Critical areas protection is essential to protect the public's health and safety, and can be used to comply with state and federal laws. Additionally, there are economic reasons to protect critical areas. Protection of drinking water quality and quantity supports sustainable growth. Critical areas support resource industries, such as salmon and shellfish harvesting. If the functions of critical areas are not protected now, attempting to restore them in the future is likely to be costly, if not impossible. One example Is restoration of flood storage capacity. Failure to protect local populations of fish and wildlife can result in federal listings under the Endangered Species Act (ESA), which can bring significant constraints.

For every community, there are at least three reasons to protect critical areas:

- To protect the public from threats to human safety and to protect public and private property from natural hazards.
- To protect the environment and enhance the state's quality of life.
- To preserve those environmentally sensitive areas that are valuable to the public and provide ecological function.

Introduction

This handbook is designed to help Washington communities review and, if needed, revise locally adopted programs for designating and protecting critical areas under the Growth Management Act (GMA). The Legislature amended GMA in 1997 to require counties and cities to periodically take action to review and, if needed, revise their comprehensive land use plan and development regulations to ensure that the plan and regulations are consistent with changes to statute since the last update.[1] Meeting the Best Available Science (BAS) requirement was challenging for many jurisdictions in the initial round of periodic updates that were due

[1] RCW 36.70A.130.

between 2004 through 2008.[2] Identifying the "best available science" and "including" that science in updated regulations often presented logistical and political challenges.

Although not all counties and cities are fully planning under the GMA pursuant to RCW 36.70A.040, all counties and cities in the state are required to adopt development regulations to protect critical areas, and to periodically review those regulations. While local governments have broad discretion in developing and amending comprehensive plans and development regulations tailored to local circumstances (including critical areas regulations), that discretion is bounded by the goals and requirements of the Growth Management Act.[3]

Each city and county in Washington state initially had the responsibility to perform the complex task to classify, designate, and protect those critical areas found in its local environment. Counties and cities planning under RCW 36.70A.040 were required to adopt development regulations to protect critical areas by September 1, 1991. All other counties and cities were required to adopt regulations by March 1, 1992.[4] All counties and cities in the state have adopted critical areas regulations, and most have updated them at least once.

As local governments continue to work through periodic updates, the focus of this handbook is to help them identify any needed revisions to their critical areas regulations. This handbook, and guidance published by other state agencies, provide recommendations for local communities to consider when updating their critical areas regulations based on best available science. It provides additional recommendations for monitoring critical areas regulation implementation and effectiveness.

This handbook suggests multiple approaches to critical areas protection, including regulatory and non-regulatory methods. Protecting critical areas involves a variety of strategies, from the adoption of conservation policies in comprehensive plans, to the designation of appropriate land uses, zoning, and protection of open spaces. Subdivision codes are important in how communities plan for open space and plan for the retention of important natural landscape features. Critical areas regulations are important because they provide the administrative review and approval process for regulating land uses that may impact critical areas. Monitoring of the permit process for implementation and effectiveness can provide a feedback loop to assess and improve critical areas protection. While each local government uses unique approaches, all have a common interest in achieving no net loss of critical areas functions and values.

The suggestions in this handbook are not mandatory, for there is no single best approach to critical areas protection for all communities. Each city or county must decide which approaches

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[2] The original deadline of September 1, 2002, was extended in the 2002 session by the Legislature to a staggered schedule of every eight years. The Legislature amended the deadline again to reflect the current staggered schedule of 2015 – 2019, and every eight years thereafter.

[3] See *King County v. Central Puget Sound Growth Management Hearings Board*, 142 Wn.2d 543, 555-59 (2000) (King County II).

[4] RCW 36.70A.060(2)

to critical areas protection are appropriate to apply locally, consistent with the requirements of the GMA and the community's future vision. This handbook does not create any new standards or any new legal authority. The sole purpose is to provide a resource to local governments in reviewing and, if needed, revising their critical areas protection programs by discussing issues and presenting examples for consideration.

This handbook provides references to other resources and contacts to help jurisdictions identify potential sources of aid. Given the changing nature of regulations, natural resources, and scientific inquiry, the chapters of this handbook can be separately revised as needed to reflect new information and new requirements.

This handbook mostly addresses critical areas as defined by Washington's Growth Management Act. Information about other state and federal regulations that may have different requirements applicable to critical areas is provided in Chapter 4. Chapter 7 applies to critical areas both under the GMA and the Shoreline Management Act (SMA).

Handbook Organization

This handbook is organized for ease of use by counties and cities that are updating local critical areas protection programs. Handbook topics are organized sequentially following a process a city or county might use when updating a critical areas protection program, starting with a review of best available science and management recommendations, and other policy considerations.

This chapter provides an overview of the requirements of the Growth Management Act, and provisions in Commerce guidance under the Washington Administrative Code (WAC).

Subsequent chapters and sections provide:

- Information about and links to state resources for reviewing and updating critical areas protection measures;
- Structuring critical areas regulations;
- Critical areas protection and other local land use regulations, and state and federal regulatory programs and requirements;
- Critical areas protection in natural resource lands
- Non-regulatory incentive programs; and
- Monitoring and adaptive management for permit implementation.

Commerce Administrative Code Updates

A table of WAC updates, including effective dates for ease of reference in determining changes since a county or city's last update, is provided in Appendix 1.A. Commerce undertook a

significant update of its WACs in 2010 to reflect statutory changes, case law, and important Growth Management Hearings Board decisions.

Court and Growth Management Hearings Board Decisions

The GMA affords local government significant discretion in how they achieve compliance. While this provides a significant degree of flexibility, it also creates a lack of certainty. In reviewing critical area protection programs for compliance, local governments are encouraged to review decisions made by the Growth Management Hearings Board and Washington state courts. While Hearings Board decisions are not binding on jurisdictions not subject to a particular appeal, they provide guidance on how the Board may decide future appeals. Court of Appeals decisions are binding on jurisdictions within their district, and provide persuasive precedent for other jurisdictions. Supreme Court decisions are binding on all jurisdictions in the state. Local government consideration of court and hearings board decisions can help build defensible and effective critical area protection programs.

A summary of all court decisions, and a compilation of Growth Management Hearings Board digest summaries since 2005, that address critical areas protection are provided in Appendix 1.B. Full texts of court cases should be consulted.[5] Hearings Board decisions and the Hearings Board digests are available on the Hearings Board website at www.gmhb.wa.gov.

All of the court decisions relating to critical areas are summarized or referenced, as applicable, throughout the text of the Handbook. The Handbook includes several of the more important Growth Management Hearings Board case digest summaries are provided.

Critical Areas Protection Provision Examples

In addition to the information included in the handbook, examples of locally adopted ordinances and programs to designate and protect critical areas, including recently updated programs, [will be] posted on the Department of Commerce Growth Management Services Critical Areas and Best Available Science web site. While these local examples are valuable references, your community may have conditions that need to be addressed differently depending on local environmental conditions and community values.

[5] Recent decisions by the Court of Appeals and the Supreme Court can be obtained through their web site.

When to Update Your Critical Areas Program

The GMA requires that comprehensive land use plans and development regulations, including critical areas regulations, be subject to continuing review and evaluation by the county or city that adopted them. Counties and cities are required to take legislative action to review and, if needed, revise their comprehensive land use plans and development regulations to ensure the plans and regulations comply with the requirements of the GMA according to an eight-year cycle. However, changes are also recommended in response to changing local knowledge, advances in scientific or technical knowledge, and in response to findings from monitoring programs.

For the update schedule, and more detailed guidance on conducting a periodic review process, see Keeping Your Comprehensive Plan and Development Regulations Current (2016) on the Commerce website.

The Legislature provided an additional 12-month grace period for the completion of critical area ordinances for all jurisdictions. This means that if the periodic update was due in 2017, the review and any revisions to the plan and regulations must be complete by June 30 of that year for the jurisdiction to continue to be in compliance with the GMA. However, for the purposes of grants and loans, a jurisdiction would not be considered out of compliance until June 30 of 2018 if they had not completed the review and update of their critical areas ordinance.[6]

The level of review should depend on several common-sense factors. For example, if the jurisdiction contains significant, extensive, and/or inadequately protected critical areas, a more detailed review of its policies and development regulations may be necessary. If new sources of best available science are identified (including any management recommendations associated with the new science), the jurisdiction should review those updates for applicability to its critical areas regulations.

A well-documented record should support local governments' decision-making, including the facts relied upon, the analysis used, and the conclusions reached. The record should include a description of the review that was conducted, and the rationale for that review. Once adopted, the critical areas regulations should contain a "Findings of Fact" or other statement that documents this process. To assist local governments with this process, some examples of findings of fact are provided in Appendix 1.D. The examples provide different approaches to draft a good update process summary.

[6] RCW 36.70A.130 (7)(b)

Steps to Review and Update a Critical Areas Protection Program

In reviewing and updating a critical areas program, the following steps are recommended:

- Consult your requirements for public participation in the review and update process. Counties and cities should follow their adopted public participation program[7] that identifies procedures and schedules for the public to participate in the periodic update of their critical areas regulations.
- Consult the Commerce critical areas checklist[8], and links to other state agency resources posted on Commerce critical areas website, for any amendments to the GMA or Commerce WAC and any updates on best available science or agency management recommendations. **Commerce strongly recommends using the critical areas checklist in designing a work program to complete the periodic update.**
- After determining the scope of changes needed, counties and cities may elect to adopt an ordinance or resolution letting the public know early "what is on the table" as part of the update.
- Review any revisions for consistency with the comprehensive plan policies and land use designations, and for consistency with other development regulations. The land use element of comprehensive plans must include an assessment of stormwater pollution and provide approaches to reduce and mitigate such discharges. Managing stormwater discharges can be directly related to protecting critical areas.
- If the critical areas ordinance has been adopted by reference in the Shoreline Master Program (SMP), an update to the SMP will be required if your jurisdiction wants the critical area regulations to apply in shoreline jurisdiction. Jurisdictions may consider amending the SMP concurrently with critical area amendments. The joint review process under WAC 173-26-104 should help jurisdictions with a unified approach to amending the critical areas and shoreline master program.
- Consult with other jurisdictions in the watershed for consistency and any regional issues and approaches to consider.
- Consult with regional state agency staff while drafting decisions, including Washington Department of Fish and Wildlife (WDFW) regional habitat biologists; Washington Department of Ecology (Ecology) regional wetlands specialists, flood program managers, and groundwater protection specialists; Washington Department of Natural Resources (WDNR) geology staff and aquatic program regional managers; and Washington Department of Health Office of Drinking Water staff.[9] Consultation early in the process is recommended to identify and address issues, thus avoiding "surprises" that can cause delays in adoption or possible appeals.
- If substantial revisions are being considered, think about convening a technical advisory committee that includes local experts such as natural resource program managers,

[7] As required by RCW 36.70A.140.
[8] See the Commerce Growth Management Critical Areas web page.
[9] A complete list of state agencies with environmental expertise is provided in WAC 197-11-920.

tribes, Salmon Recovery Lead Entities[10], and Local Integrating Organizations for Puget Sound, water service suppliers, regional state agency technical staff, and any non-governmental entities working on habitat or species recovery or management.

- Take legislative action to adopt any revisions to the critical areas regulations and conclude that the periodic update of the critical areas regulations is complete. The ordinance or resolution:
    - Must be explicitly approved by the local government's legislative body as having been completed in accordance with GMA update requirements (citing specifically to RCW 36.70A.130), both to comply with the statute and to set time and subject matter limits;
    - Should include findings that refer to any previous legislative actions that were part of the periodic update (e.g., resolutions adopting a public participation plan), and a finding that the jurisdiction has completed its periodic update requirement under the GMA; and
    - Should include findings that reference any sources of best available science and how the science was considered substantively in the development of any revisions to the regulations.
- Submit notice of intent to adopt to Commerce at least 60 days prior to adoption.[11]
- Send a complete and accurate copy of the critical areas regulations to Commerce within 10 days after final adoption.[12]

Growth Management Hearings Board Decisions

Futurewise and Pilchuck Audubon Society challenged Snohomish County's update to its critical areas ordinance where there had been no new or recent GMA amendments, no substantive, relevant regulatory amendments, and no new best available science. The Central Puget Sound Growth Management Hearings Board rejected the petitioners' interpretation of a Supreme Court decision regarding standing to challenge a county's actions under GMA review and update requirements.[13] However, the Board found that the County had clearly articulated the applicable law: "…where a regulation is wholly unchanged or is amended in a manner unrelated to the substance of the legal issue…and petitioner cites no changed science or GMA mandate, the challenge is time barred." The Hearings Board went on to state:

> …even though the Board rejects Petitioners' interpretation of *Thurston County*, challenges to CAR amendments may be raised if the County failed to consider BAS in substantively amending the CARs. That is, if there has been "new", more recent, science

[10] The Governor's Salmon Recovery Office and Recreation and Conservation Office website provides links to the recovery plans, monitoring efforts, policies, and the lead entity staff that coordinate salmon recovery locally.
[11] RCW 36.70A.106(1). Some counties and cities combine this notice with their notice of determination under the State Environmental Policy Act.
[12] RCW 36.70A.106(2)
[13] *Thurston County v. Western Washington Growth Management Hearings Board*, 164 Wn.2d 329 (2008).

developed applicable to the protection of the functions and values of a particular critical area, an amended CAR would need to reflect consideration of same.[14]

In a previous case, the Central Board found that a specific restriction to the Board's scope of review arises when a party challenges a comprehensive plan or development regulation that has been "updated" in response to GMA planning cycles. The Supreme Court has ruled that the periodic updates required in the statute do not create an open season for challenges to previously-adopted provisions that are carried over into the new plan or code. Thus a party may challenge only new or amended plan and regulatory provisions in an update. Challenge to unchanged provisions is time-barred except where required by a recent GMA legislative amendment, new population forecast, or changed science concerning protection of critical area functions and values.[15]

However, the Central Board also previously found that the GMA requires that critical areas regulations be updated periodically, RCW 36.70A.130(3), and that cities "shall include" best available science in designating critical areas, RCW 36.70A.172(1). The Board noted that a city violated the GMA when it failed to include in its designation of geological hazard areas a great deal of new science it was aware of concerning the existence and location of surficial faults, and concerning the past occurrence and future risks of tsunamis and lahars.[16]

Growth Management Act Requirements to Protect Critical Areas

Local governments are required to do two things to comply with the GMA: designate critical areas and protect their functions and values. In doing so, they must include the best available science, and must give special consideration to anadromous fish.[17] And, they should consider critical areas protection broadly by using a landscape scale approach to protecting ecosystem functions and values.

There are five types of critical areas identified in the GMA.[18] They are:

- Wetlands
- Areas with a critical recharging effect on aquifers used for potable water
- Frequently flooded areas
- Geologically hazardous areas
- Fish and wildlife habitat conservation areas

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[14] *Futurewise, Pilchuck Audubon Society, and the Tulalip Tribes v. Snohomish County*, Case No. 15-3-0012c, FDO at 4 (February 17, 2017). Note: This summary is the author's as it provides more detail than the Growth Management Hearings Board digest. As of March 2018, the digest notes that an appeal of this decision is pending.

[15] *John Postema v. Snohomish County*, Case No. 15-3-0011, FDO at pp 5-6 (April 8, 2016). Note: An appeal of this decision is pending.

[16] *Seattle Audubon Society, et al v. City of Seattle*, 06-3-0024, FDO (12/11/06), at 19.

[17] RCW 36.70A.172

[18] See RCW 36.70A.030(5).

Designating Critical Areas

The Minimum Guidelines

The Legislature directed the Washington State Department of Community, Trade and Economic Development (now Commerce)[19] in 1990 to develop minimum guidelines to guide the classification of agricultural lands, forestlands, mineral resource lands and critical areas.[20] Chapter 365-190 WAC was adopted in 1991, and amended in 2010.[21]

The Minimum Guidelines are minimum requirements for critical areas classification and designation. The Guidelines reference the statutory requirement to include best available science, and recommend that counties and cities designate critical areas using maps and performance standards.[22] Designation is usually done with a map such as a zoning map. However, there is usually not enough on-the-ground information to do an effective job of designating critical areas using this method. Critical areas designation is typically done through performance standards. The term "performance standards" means the criteria or characteristics of the land that determine that it is a critical area.[23]

Adopting performance standards provides a way to designate critical areas without requiring a prohibitively expensive inventory and mapping before the requirements for protecting the critical area would apply. Instead, the legislative act of designation is the adoption of criteria, or performance standards, that are used to determine whether a particular area is a critical area by applying the criteria on the ground. This typically happens during local project review. For example, the criteria may identify characteristics such as the presence of certain plant communities or the presence of hydric soils as performance standards indicating a wetland. Determining the exact location of the boundary occurs only through a delineation process during the site investigation associated with development. The National Wetlands Inventory map shows some, but not all, wetlands. The duty to protect wetlands exists regardless of whether a particular wetland is in in the National Wetland Inventory.

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[19] For purposes of this handbook, references to Commerce include the former Department of Community, Trade and Economic Development.
[20] RCW 36.70A.050
[21] See Appendix 1.A for a table of amendments to Commerce WAC provisions related to critical areas with effective dates.
[22] WAC 365-190-080(3) and (4)
[23] WAC 365-190-040(5), WAC 365-190-080(4)

The Minimum Guidelines provide a process that local governments used when they first designated critical areas under the GMA.[24] Sources of best available science are included in the Guidelines, and in Chapter 2 of this Handbook.

The critical areas requirements in the GMA are closely related to many underlying public interests related to governmental costs and efficiency. The unwise development of critical areas, including lands or areas susceptible to natural hazards, may lead to inefficient use of limited public resources, jeopardize environmental resource functions and values, put species at risk of extinction and the regulatory burdens that listing triggers, subject persons and property to unsafe conditions, and affect the perceived quality of life. It is more costly to remedy the loss of critical areas functions and values than to conserve and protect them from loss or degradation. The inherent economic, ecological, social, and cultural values of critical areas should be considered in the development of strategies designed to protect these lands.[25]

In recognition of these common concerns, classification and designation of critical areas is intended to protect critical areas, and to preclude land uses and development which are incompatible with critical areas. When classifying, designating, and protecting critical areas, counties and cities should integrate regulatory and non-regulatory approaches together in a comprehensive program that relates to existing local, state, and federal efforts.[26] An integrated approach should also consider other applicable planning requirements, including the need to identify open space corridors in RCW 36.70A.160, and the need to include the best available science in policies and regulations protecting critical areas in RCW 36.70A.172.[27]

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. 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 non-regulatory actions in response.[28]

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. For each type of critical area, counties and cities planning under the act should review and, if necessary, update their classification schemes and development regulations that govern changes in land uses and new activities.

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[24] WAC 365-190-040
[25] WAC 365-190-020(2)
[26] Non-regulatory approaches are discussed in Chapter 6.
[27] WAC 365-190-020(3)
[28] WAC 365-190-020(4)

Critical areas designation is an overlay of other land uses, including designated natural resource lands.[29]
For example, if both critical area and natural resource land use designations apply to a given parcel or a portion of a parcel, both or all designations must be made.

Court and Growth Management Hearings Board Decisions

After Commerce adopted the Minimum Guidelines, there was some confusion as to whether the guidelines in Chapter 365-190 were mandatory. Subsequent court decisions have made it clear that the guidelines are, in fact, mandatory.

The Court of Appeals, Division 2, referred to the Minimum Guidelines as mandatory. "[T]he minimum guidelines require counties to map natural resource land", citing WAC 365-190-040(2)(b)(vii).[30] The GMA sets forth objectives and minimum guidelines that local government must follow when classifying land.[31]

The Supreme Court approved the Division 2 Court's approach of reliance on the Minimum Guidelines in 2006.[32] Subsequently, the Division 2 Court stated, "Our Supreme Court has held that a county may designate a minimum parcel size for certain land type designations so long as the limitation is consistent with GMA and with [Commerce] principles…."[33] Since 2012, in keeping with the Supreme and appellate courts' clarifications, the Growth Management Hearings Board has held that counties and cities must follow the Minimum Guidelines. [34]

In order to ensure a defensible critical areas protection program, the Commerce Minimum Guidelines should be considered mandatory and must be used to designate critical areas.

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[29] WAC 365-190-020(6)
[30] *Manke Lumber Company v. Diehl*, 91 Wn. App. 793, 807 (1998).
[31] Id. at 840.
[32] *Lewis County v. Western Washington Hearings Board*, 157 Wn.2d 488, 501 (2006).
[33] *Clark County v WWGMHB*,161 Wn.App. 204, 232, 254 P.3d 862 (2011): rev' granted 172 Wn.2d 1006, 259 P.3d 1108 (Sep. 6, 2011): "… the regulation actually *requires* counties to consider the 10 factors."
[34] See *Friends of Pierce County, et al. v. Pierce* County, GMHB No. 12-3-0002c, FDO at 31 (July 9, 2012); Futurewise, Pilchuck Audubon Society; and the Tulalip Tribes v. Snohomish County, Case No. 15-3-0012c, FDO at 17 (February 17, 2017).

Protecting Critical Areas

There are two primary forms of critical areas protection – protection of functions and values, and protection of health and safety. They often apply at the same time.

Protecting Functions and Values

RCW 36.70A.172(1) requires counties and cities to protect the functions and values of critical areas. Although counties and cities may protect critical areas in different ways, or may allow some localized impacts to critical areas, or even the potential loss of some critical areas, development regulations must preserve the existing functions and values of critical areas. The Supreme Court found that a "no harm" standard provision in a county ordinance protected critical areas by maintaining existing conditions. The county's decision to not require mandatory riparian buffers in agricultural lands was upheld because doing so would impose a requirement to restore habitat functions that no longer existed. The GMA requirement to protect critical areas does not impose a corresponding requirement to enhance.[35] However, the GMA requires that critical areas regulations protect all functions and values of the designated areas.[36]

The term "functions and values" refers to the core ecological processes performed by a particular critical area. Critical area functions contribute to the overall health of the ecosystem. Ecological functions of critical areas include flood attenuation, wildlife habitat, water quality, and groundwater recharge. Once a wetland has been identified, one must determine what functions need to be protected, and what is required to do protect them. For example, the width of the wetland buffer is determined by the habitat and water quality values associated with the wetland, or the amount of separation required to reduce pollution in stormwater runoff going into the wetland.

Protecting Health and Safety

"Protection" in the context of critical areas under the GMA means preservation of the functions and values of the natural environment, or to safeguard the public from hazards to health and safety.[37] Approaches to protection of the functions and values of critical areas will vary with the type of critical area. Functions and values of wetlands and fish and wildlife habitat conservation areas usually involve some sort of vegetative buffer to protect water quality, manage flow during storm events, and protect habitat. Protection of critical aquifer recharge areas typically

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[35] *Swinomish Indian Tribal Community v. Western Washington Growth Management Hearings Board*, 161 Wn.2d 415 (2007).

[36] *Yakima County v. Eastern Washington Growth Management Hearings Board* , 168 Wn. App. 680 (2012); and *Whidbey Environmental Action Network v. Island County*, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), review denied, 153 Wn.2d 1025 (2005).

[37] WAC 365-196-830(3)

requires protection from spills and polluting runoff. Protection of geologically hazardous areas is about reducing risk to life and property from events such as landslides, tsunamis, and volcanic eruptions. While protecting frequently flooded areas involves protecting both floodplain and habitat function, it also protects life and property from flood events.

Growth Management Hearings Board Decisions

The Western Washington Growth Management Hearings Board views the GMA as effectively establishing two categories of critical areas – those areas whose functions and values are protected for the beneficial services they provide (i.e. Wetlands, FWHCAs, Aquifer Recharge Areas) and those areas for which protection is needed due to the threat these areas pose to persons and property (i.e. Frequently Flooded Areas, Geologically Hazardous Areas).[38]

The Central Puget Sound Growth Management Hearings Board addressed the question of what land use regulations are required, once a hazard is acknowledged. The Board agreed with Pierce County that land use policy and responsibility with respect to Mount Rainier Case II lahars – "low probability, high consequence" events – is within the discretion of the elected officials; they bear the burden of deciding "How many people is it okay to sacrifice."[39]

Mitigation Sequencing and Compensatory Mitigation

If a project proponent is proposing to impact a critical area, the critical areas regulations should require them to show that they have first avoided and minimized impacts wherever practicable. The Washington State Environmental Policy Act (SEPA) rules[40] and Section 404 of the federal Clean Water Act both require that a sequence of actions be taken for proposals that will impact wetlands.

Mitigation sequencing should be applied to show avoidance and minimization of impacts. The following are the steps in the mitigation sequence according to SEPA:

1. **Avoiding the impact** altogether by not taking a certain action or parts of an action;
2. **Minimizing impacts** by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
3. **Rectifying the impact** by repairing, rehabilitating, or restoring the affected environment;

[38] *OSF/CPCA v. Jefferson County*, Case No. 08-2-0029c, FDO, at 27 (Nov. 19, 2008).
[39] *Tahoma Audubon Society, et al v. Pierce County*, 05-3-0004c, Final Decision and Order, July 12, 2005, at 23 – 25.
[40] WAC 197-11-768

4. **Reducing or eliminating the impact over time** by preservation and maintenance operations during the life of the action;
5. **Compensating for the impact** by replacing, enhancing, or providing substitute resources or environments; and/or
6. **Monitoring the impact** and taking appropriate corrective measures.

Mitigation sequencing should be applied first (starting with avoidance through minimization, rectification, reduction or elimination over time) before determining whether compensatory mitigation is appropriate. Commerce's Procedural Criteria provide that, if development regulations allow harm to critical areas (step 5 above), they must require compensatory mitigation of the harm. Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas.[41]

Given the requirement to protect the functions and values of critical areas, compensatory mitigation should only be used after mitigation sequencing and it should be allowed with caution. Before allowing compensatory mitigation, a local government will need to determine that there is the ability to replace the functions and values through compensatory mitigation. Compensatory mitigation is specifically called out in the Minimum Guidelines as it applies to wetlands[42], and to geologically hazardous areas[43]. The WAC is silent with respect to the three other types of critical areas. For some types of critical areas or for some types of impacts, compensation may not be possible. When compensatory mitigation is not possible, harm to the critical area from development activity must be avoided.

Compensatory mitigation is used to offset the unavoidable impacts to critical areas by replacing the functions and values lost when a critical area is impacted. Examples of compensatory mitigation include mitigation ratios, debit-credit tools, mitigation banks, in-lieu fee programs, and off-site mitigation. For more information on examples of compensatory mitigation for wetlands impacts, see Ecology's Wetlands Guidance for CAO Updates, Eastern and Western Washington Versions (2016), pp. 13 – 16.

The Western Washington Growth Management Hearings Board clarified the difference between mitigation sequencing and compensatory mitigation:

> "Mitigation" and "mitigation sequencing" are not always clearly understood. Those terms are easily confused with "compensatory mitigation". The latter is the step in the mitigation sequence that occurs after avoidance and minimization. It involves restoring (re-establishing, rehabilitating), creating (establishing), enhancing, or preserving wetlands to replace those lost or degraded through permitted activities. "Mitigation" and "mitigation sequencing" have a broader meaning: they include as the first option, avoidance of any impact. If avoidance is not possible, the second step in mitigation

[41] WAC 365-196-830
[42] WAC 365-190-090(2)(d)(v)
[43] WAC 365-190-120(2)

> sequencing is minimization. Only after those first steps does one then consider compensatory mitigation.[44]

No Net Loss

With protection of critical areas, it is important to understand that protection does not mean that critical areas will not be impacted. Rather, impacts to high-quality critical areas should be prohibited except in limited circumstances. Impacts to other critical areas must be avoided and minimized under the mitigation sequence. When impacts cannot be avoided, new development must replace the lost functions and values through compensatory mitigation.

WAC 365-196-830(4) provides:

> Although counties and cities may protect critical areas in different ways or may allow some localized impacts to critical areas, or even the potential loss of some critical areas, development regulations must preserve the existing functions and values of critical areas. If development regulations allow harm to critical areas, they must require compensatory mitigation of the harm. Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas.

For critical areas regulated under the Shoreline Management Act (RCW 90.58.020), local shoreline master programs must include policies and regulations designed to achieve no net loss of ecological functions.[45]

An Ecosystem Approach

The Western Washington and Central Puget Sound Growth Management Hearings Boards have found that, under the statutory definition of "critical areas"[46], counties and cities must protect "areas and ecosystems". In these decisions, the Boards found that development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas.[47]

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[44] *Friends of the San Juans, P.J. Taggares Company, Common Sense Alliance, William H. Wright, and San Juan Builders Association v. San Juan County*, 13-2-0012c, Order Finding Compliance, p. 1, May 14, 2015.
[45] WAC 173-26-186(8)(b) and 201(2)(e)(i)
[46] RCW 36.70A.020(5).
[47] *Whidbey Environmental Action Network v. Island County*, 14-2-0009, Final Decision and Order, June 26, 2015; *Ann Aagaard, Judy Fisher, Bob Fisher, Glen Conley, and Save a Valuable Environment (SAVE) v. City of Bothell*, 15-3-0001, Final Decision and Order, July 21, 2015.

Functions and values must be evaluated at a scale appropriate to the function being evaluated. Commerce's Procedural Criteria recommends protection at the ecosystem scale. Functions are the conditions and processes that support an ecosystem. Conditions and processes operate on varying geographic scales ranging from site-specific to watershed and even regional scales. Some critical areas, such as wetlands and fish and wildlife habitat conservation areas, may constitute ecosystems or parts of ecosystems that transcend the boundaries of individual parcels and jurisdictions, so that protection of their function, and values should be considered on a larger scale.[48] This is often true for salmon habitat.

Best Available Science

In 1995, the Washington State Legislature added a new section to the GMA to ensure that counties and cities include reliable scientific information when adopting policies and development regulations to designate and protect critical areas. RCW 36.70A.172 requires all counties and cities in Washington to "include the best available science in developing policies and development regulations to protect the functions and values of critical areas."

The Legislature considered this requirement an important step towards regulatory reform and making timely project permitting decisions. Local governments' understanding of where on the landscape critical areas occur, how they naturally function, and how best to regulate land uses that may impact them is important in ensuring that zoning and project permit decisions are being made without the need to complete expensive environmental review and new studies at the permit level. Good upfront planning and the adoption of scientifically defensible development standards should lead to quicker permit decisions.

While science is not the sole criterion to be used in developing critical areas policies and regulations, the Legislature singled out science for special mention. Rather than imposing any particular statewide standard, the Legislature opted to defer to local decision making when determining how to "include" the best available science.

The objective of including science is "to protect the functions and values of critical areas." Science plays a central role in delineating critical areas, identifying functions and values, and recommending strategies to protect their functions and values. Scientifically valid information should help with an evaluation and discussion of the applicability, relevance, and limitation, if any, of the science that is contained in the record. Following enactment of RCW 36.70A.172, science-based recommendations cannot simply be disregarded in favor of competing considerations. Informed decision making requires that decision makers receive scientific information that has not been filtered through screens of competing interests.

[48] WAC 365-196-830(6)

For hazard-related critical areas, such as geologically hazardous or frequently flooded areas, the purpose of including best available science is to ensure that planning and decision-making (public and private) is informed by and consistent with the most complete understanding available of the extent and magnitude of natural hazards. This information changes frequently as data improves, and updates that increase or decrease the risk to an area should in turn trigger consideration of updates in the appropriate regulations, codes, and plans.

What Constitutes the Best Available Science?

Local governments must identify, collect, and assess the available scientific information relating to the protection of critical areas within their jurisdiction, and then determine which of that science constitutes the "best available science." Local governments may accept or solicit scientific information from state and federal agencies, universities, tribes, subject matter experts, Salmon Recovery lead entities and Puget Sound Local Integrating Organization technical committees, and others. But the burden ultimately is on the local government to determine whether the scientific information assembled in fact constitutes the best available science.

With respect to the availability of science, the Western Washington Growth Management Hearings Board found that the best available science is science that is presently available as well as practically and economically feasible.[49] The Central Puget Sound Growth Management Hearings Board reasoned "that the "best available science" requirement includes the word "available" as an indicator that a jurisdiction is not required to sponsor independent research but may rely on competent science that is provided from other sources. . . ."[50]

In September 1998, Commerce convened a technical team comprised of planners and scientists from state agencies and local governments to address the uncertainties regarding the inclusion of the "best available science" for critical areas designation and protection. Building on the work of the technical team, and following an extensive public dialog, Commerce adopted six new sections to the Procedural Criteria, Part Nine, WAC 365-195. The best available science rules are codified at WAC 365-195-900 through 925 and took effect August 27, 2000.

What Does It Mean to "Include" the Best Available Science?

In order to demonstrate that the best available science has been "included" in the development of critical areas policies and regulations, a local government's record should provide a rationale connecting the criteria in the ordinance used for designation and protection to the documented functions and values of critical areas known or potentially existing within the jurisdiction. The

[49] *WEAN/CARE v. Island County*, 08-2-0026c, Order on Reconsideration, December 22, 2008.
[50] *Hood Canal Environmental Council*, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06), at 30.

local government's record supporting adoption of those policies and regulations should include the following:

- The specific policies and regulations adopted to protect the functions and values of critical areas.
- Copies of (or references to) the best available science used in the decision making.
- The nonscientific information used as a basis for departing from science-based recommendations.
- The rationale supporting the local government's reliance on the identified nonscientific information.
- Actions taken to address potential risks to the functions and values of the critical areas the policies and regulations are intended to protect.[51]

Court and Growth Management Hearings Board Decisions

Local governments must substantively consider the best available science when adopting policies and development regulations to designate or protect critical areas. Several court decisions have addressed this. The Division II Court of Appeals held that evidence of the best available science must be included in the record and must be considered substantively in the development of critical areas policies and regulations.[52]

The Division III Court of Appeals held in 2014 that a county must indicate in the record that best available science was included or analyzed with a reasoned process. Mere inclusion of best available science in the record is not sufficient. The written record must "show the work" of the county or city, and explain how best available science was considered substantively in the development of the critical areas regulations.[53]

In a 2005 decision[54], the Supreme Court found that the record must demonstrate that the County used scientific information and analyzed that information using a reasoned process. The Court appeared to have used a two-part test to assess a county's compliance with the best available science requirement:

> (1) The County must rely on scientific information—the BAS requirement does not mandate the use of a particular methodology, but it requires at a minimum the use of a scientific methodology; and
> (2) The steps taken in analyzing the scientific information must constitute a reasoned process, with the process evident in the record.

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[51] WAC 365-195-915

[52] *Whidbey Environmental Action Network v. Island County*, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), review denied, 153 Wn.2d 1025 (2005).

[53] *Ferry County v. Growth Management Hearings Board*, 184 Wn. App. 685, 339 P.3d 478 (2014).

[54] *Ferry County v. Concerned Friends of Ferry County*, 155 Wn.2d 824, 123 P.3d 102 (Nov. 17, 2005).

Quoting from a 2000 Western Washington Growth Management Hearings Board decision, the Supreme Court suggested it is not a reasoned process for a county to "choose its own science over all other science" or "use outdated science to support its choice."

However, in 2012 the Division II Court of Appeals held that "including" BAS does not impose a duty on local governments to describe each step of their deliberative process but rather the local government is required to address on the record the relevant sources of BAS included in their decision-making.[55]

The Division III Court of Appeals held that a county had failed to include the best available science in designating critical habitats, as required by RCW 36.70A.172(1). The county only designated as critical wildlife habitat areas that had been designated by a state or federal agency process as habitat for endangered, threatened, or sensitive species. The court ruled that, by tying the classification of critical habitat to lands designated by another state or federal agency, the county had avoided consideration of any scientific information. Instead, counties must use some kind of scientific methodology in a reasoned process of analysis to designate the critical habitats.[56]

Departing from the Best Available Science

In general, local governments must take actions to protect critical areas based on best available science. In departing from actions supported by best available science, caution should be exercised. Local governments should only depart from best available science if it is necessary to balance competing goals of the GMA. Even then, the adopted policies and regulations must still protect the functions and values of critical areas.

- If you are considering an approach to protecting critical areas that is not supported by best available science, you must demonstrate how the alternative approach will protect the functions and values of critical areas. Specifically, in departing from BAS a local government should:Identify the information in the record that supports its decision to depart from science-based recommendations;
- Explain its rationale for departing from science-based recommendations; and
- 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.[57]

[55] *Olympic Stewardship Foundation v. Western Washington Growth Management Hearings Board*, 166 Wn. App. 172 (2012), review denied, 174 Wn.2d 1007 (2012).
[56] *Stevens County v. Futurewise*, 146 Wn. App. 493 (2008), review denied, 165 Wn.2d 1038 (2009).
[57] WAC 365-195-915(1)(c)

Court and Growth Management Hearings Board Decisions

The Division II Court of Appeals held that if a city or county adopts a critical areas requirement that is outside the range supported by the best available science, it must provide findings explaining the reasons for its departure from the best available science and identifying the other GMA goals being implemented by that departure.[58]

Regarding the availability of science, the Division II Court of Appeals found the GMA requires local governments to use best *available* science. The court recognized that the best science that is available may include science that is "immature" or not fully developed. The court upheld the Growth Management Hearings Board finding that the GMA required including the best science that was available. The proper remedy for addressing the problem of science that was not fully developed was the requirement in the GMA for periodic updates, rather than rejection of the available but not fully developed science.[59]

The Division II Court also found that, to the extent a county or city relies on a previously-adopted ordinance to protect critical areas, that prior ordinance may be challenged for compliance with the GMA's best available science requirements. The County relied partly on a six-year-old wetlands ordinance to protect fish and wildlife habitat conservation areas. The Court agreed that the BAS requirement does not operate retroactively, but it explained that critical areas regulations adopted before the BAS requirement was enacted were subject to challenge to the extent the County relied on them to fulfill the obligations imposed by the BAS requirement. "Otherwise, a county could use myriad preexisting regulations in an attempt to satisfy GMA critical areas requirements without actually having to include BAS analysis. This would contravene RCW 36.70A.172."[60] However, in this case, the Court found the County did not rely substantively on the earlier wetlands buffers to protect fish and wildlife habitat, and it reversed the Board's invalidation of the wetlands buffers.[61]

In the same decision, the Division II Court found that, if a city or county adopts a critical areas requirement that is outside the range supported by the best available science, it must provide findings explaining the reasons for its departure from the best available science and identifying the other GMA goals being implemented by that departure.[62]

The Division III Court of Appeals found that a county failed to comply with the GMA when it departed from or ignored the recommendation of WDFW to designate habitat for endangered,

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[58] *Whidbey Environmental Action Network v. Island County*, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), review denied, 153 Wn.2d 1025 (2005).
[59] *Kitsap Alliance of Property Owners v. Central Puget Sound Growth Management Hearings Board*, 160 Wash. App. 250 (2011)
[60] *Id.* at 180. The language and holding in this portion of the decision was modified from the previous decision withdrawn by the Court.
[61] Note, this was not a challenge to an update under RCW 36.70A.130 of the county's critical areas ordinance.
[62] *Whidbey Environmental Action Network v. Island County*, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), review denied, 153 Wn.2d 1025 (2005).

threatened and sensitive species or designate species of local importance. The court also found that the county failed to provide a reasoned justification for departing from best available science. When departing from best available science, the county must "show its work" and include the analysis in the record. In the absence of scientific information, the county should adopt a precautionary or no risk approach.[63]

The Supreme Court held that a county did not include best available science when it adopted standard buffers and adjusted minimum stream and wetland buffers. The Court found that the adopted buffers did not protect all functions for either streams or wetlands because almost all of the scientific studies reviewed by the county recommended buffers greater than those that were adopted. However, the court also found that the County had provided reasoned justification for not regulating ephemeral streams as critical areas. [64]

The Supreme Court also held that the GMA doesn't require local governments to always follow best available science. Here the court stated that the county was required to "include" best available science in the record and departures from best available science would be permitted where the county provided a reasoned justification for the departure. A tribe challenged the county's critical areas ordinance for failing to require mandatory riparian buffers. The court concluded the county is not required to enhance critical areas but could protect critical areas by maintaining existing conditions. The county's decision to not require mandatory riparian buffers was a justified departure from best available science because doing so would impose a requirement to restore habitat functions that no longer existed. The GMA requirement to protect critical areas does not impose a corresponding requirement to enhance.[65]

Addressing Inadequate Scientific Information

In developing critical area protection programs, local governments are likely to encounter situations where no applicable scientific information exists, or where the existing scientific information does not provides insufficient certainty or direction on how to protect critical areas. In such situations, local government should consider a precautionary or no risk approach. The basic concept behind a no risk approach is that actions that cannot later be "undone", and which may harm critical area, are prohibited until the uncertainty is resolved through scientific or technological advances[66]. A no risk approach may require that limits be placed on development and land use activities.

An adaptive management program is another approach to addressing a lack of adequate scientific information. Adaptive management programs rely on scientific methods to evaluate

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[63] *Ferry County v. Growth Management Hearings Board*, 184 Wn. App. 685, 339 P.3d 478 (2014)
[64] *Yakima County v. Eastern Washington Growth Management Hearings Board*, 168 Wn. App. 680 (2012).
[65] *Swinomish Indian Tribal Community. v. Western Washington Growth Management Hearings Board*, 161 Wn.2d 415 (2007).
[66] WAC 365-195-920(1).

how well regulatory and non-regulatory actions are achieving their objectives. Under an adaptive management program management, policy, and regulatory actions are experimental. These actions are then purposefully monitored to evaluate their effectiveness. Based on the results of the monitoring program, changes may be necessary to ensure effective critical areas protection.[67]

An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. To implement an adaptive management program effectively, 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 non-regulatory actions affecting critical areas protection and anadromous fisheries.[68]

Court and Growth Management Hearings Board Decisions

The Western Washington Hearings Board found that, when a less than cautionary approach is chosen for protection, that approach requires monitoring and adaptive management. In one case, that approach was found to require an effective monitoring and adaptive management program that relies on scientific methods to evaluate how well regulatory and non- regulatory actions adopted by the county achieve their objectives.[69]

In another case, a county which had considered the best available science and adopted less stringent protection standards that balance the need for protection of potable water supplies against the chilling effect of regulation against development, was found by the Western Board to have complied with the GMA only if the county also adopted a monitoring strategy that includes stricter development regulations that will be implemented at once if the less stringent protection standards prove to be inadequate to protect against seawater intrusion.[70]

The Western Board also held that because the City has adopted precautionary measures based on best available science to protect wetlands, the Board did not need to reach the issue of whether its adaptive management problem complied with RCW 36.70A.172.[71]

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[67] WAC 365-195-920(2)
[68] WAC 365-195-920(2)(a) – (c)
[69] *Swinomish Indian Tribal Community et al. v. Skagit County*, 2-2-0012c (Compliance Order, 12-8-03)
[70] *Olympic Environmental Council, et al. v. Jefferson County*, 01-2-0015 (Compliance Order, 12-4-02).
[71] *Evergreen Islands/Futurewise, et al v. Anacortes*, Case No. 05-2-0016, (Compliance Order, at 5, 4-09-07).

Updates to Include New Science

As previously noted, the Central Puget Sound Growth Management Hearings Board found that the GMA requires that critical areas regulations be updated periodically, RCW 36.70A.130(3), and that cities "shall include" best available science in designating critical areas, RCW 36.70A.172(1). The Board noted that a city violated the GMA when it failed to include in its designation of geologically hazardous areas a great deal of new science.[72]

Providing a Constitutional Nexus

Compliance with the best available science requirement may be necessary to satisfy constitutional nexus and proportionality requirements per the earliest court decision regarding best available science. The Division II Court of Appeals suggested in dictum[73] that the best available science requirement may have constitutional ramifications with respect to the nexus and rough proportionality limits the United States Supreme Court has placed on governmental authority to impose conditions on development applications.[74]

Special Consideration for Anadromous Fish

When developing policies and regulations to designate and protect critical areas, local governments must give special consideration to measures necessary to preserve or enhance anadromous fisheries. WDFW defines "anadromous fish" as a fish that is born in fresh water, spends much of its life in the sea, and returns to fresh water to spawn. While most Pacific salmonids die after their first spawning, adult char (e.g., bull trout), cutthroat trout and steelhead can live for many years, moving in and out of saltwater and spawning each year. The life history of Pacific salmonids contains critical periods of time when these fish are more susceptible to environmental and physical damage than at other times.[75]

The requirement to focus on protection measures for anadromous fish is in addition to the requirement to include the best available science. WAC 365-195-925 explains what it means to give "special consideration" to the protection of anadromous fisheries:

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[72] *Seattle Audubon Society, et al v. City of Seattle*, 06-3-0024, FDO (12/11/06), at 19.

[73] "Dictum", or "dicta" in the plural form, is a legal term for opinions of a judge that do not embody the determination of the court. Because they go beyond the facts before the court, they are the individual views of the opinion's author and are not binding as legal precedent.

[74] *Honesty in Environmental Analysis & Legislation (HEAL) v. Central Puget Sound Growth Management Hearings Board*, 96 Wn. App. 522, 979 P.2d 864 (June 21, 1999) (amended Aug. 25, 1999).

[75] Land Use Planning for Salmon, Steelhead and Trout: A Land Use Planner's Guide to Salmonid Habitat Protection and Recovery, WDFW, October 2009.

- The county or city should take the same steps it takes to demonstrate it has included the best available science. It should make a record showing that its critical areas policies and regulations identify and address "conservation or protection measures necessary to preserve or enhance anadromous fisheries" that are grounded in the best available science.
- The "conservation or protection measures" for anadromous fisheries should include measures that preserve or enhance habitat for all life stages of anadromous fish.
- The life stages of anadromous fish can be tied to the following general habitat requirements:
    - Adequate but not excessive stream flows.
    - Cool, well-oxygenated, unpolluted water.
    - Streambed gravels that are relatively free of fine sediments.
    - Instream structural diversity (interposed pools, riffles, hiding and resting cover).
    - Unimpeded migratory access to and from spawning and rearing areas.
    - Complex estuarine and nearshore habitats that support food production, migratory cover, and physiological transition between fresh and salt water.

These habitat requirements and life cycle needs should be given special consideration when developing critical area protection programs. This can be done many different ways, including ensuring riparian corridors and vegetation management along shorelines are preserved to help provide large woody debris for structural diversity, lower water temperature, nutrient input, pollutant inputs and shoreline stabilization. Flood hazard mitigation is important, as well as groundwater discharge, to ensure adequate but not excessive stream flows for anadromous fish.

Methods to protect water quality and ensure that there is cool, well-oxygenated, unpolluted water should be taken into consideration. This can include development strategies that minimize soil compaction and impervious cover, and retain native vegetation. Erosion control and stormwater management are needed to keep fine sediments and other pollutants from entering the stream and reducing spawning gravel quality or harming aquatic invertebrates utilized as food sources. Maintenance and protection of wetlands is important for preserving adequate water recharge to streams during low flow periods, as well as important habitat for amphibious species and insects that are potential food sources for fish.

Commerce notes in the Procedural Criteria that a regional approach is especially important when giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.[76] A regional approach recognizes that ecosystems and the fish that rely on them cross jurisdictional boundaries.

[76] WAC 365-196-830(7)

Court and Growth Management Hearings Board Decisions

The Supreme Court addressed the question of whether enhancement of natural conditions under the GMA is required. The Court stated:

> The legislature has also recognized that "protect" has a different meaning than "enhance." In several sections of the GMA, the legislature allows enhancement of natural conditions under the GMA without requiring enhancement. For example, RCW 36.70A.172(1) requires counties to "give special consideration to protection measures necessary to preserve or enhance anadromous fisheries." This statute clearly gives counties a choice between preserving "or" enhancing. Furthermore, the requirement is to give "special consideration to" such measures, not necessarily to adopt them. See WAC 365-195-925(2) (a county must include "in the record" evidence of special consideration to comply with RCW 36.70A.172(1)). Another statute, RCW 36.70A.020(10), lists as a goal of the GMA to "enhance the state's high quality of life, including air and water quality." However, the GMA allows counties to decide how to achieve the goal of enhancing water quality without specifically requiring enhancement of a damaged fish habitat. In our judgment, water quality and fish habitat are related, but they are not the same. A duty to enhance the quality of water is not a duty to enhance fish habitat. A third example is RCW 36.70A.460. It recognizes that under chapter 77.55 RCW, fish habitat enhancement projects that meet certain criteria are entitled to a streamlined permitting process. Nothing in that chapter, however, requires a county to undertake such projects. See RCW 77.55.181.
>
> As the foregoing illustrates, the legislature has not imposed a duty on local governments to enhance critical areas, although it does permit it. Without firm instruction from the legislature to require enhancement of critical areas, we will not impose such a duty. Therefore, to the extent that the Tribe argues that the GMA places a higher burden upon the county than the duty to prevent new harm to critical areas, we disagree. The "no harm" standard, in short, protects critical areas by maintaining existing conditions.[77]

The Central Puget Sound Growth Management Hearings Board reviewed Pierce County's detailed scientific evidence in the record regarding salmon habitat along marine shorelines to determine whether the County gave "special consideration to anadromous fish." The Hearings Board found that:

> Despite the detailed information about the function and values of salmonids habitat specific to each shoreline reach, Pierce County eliminated "marine shorelines" from the fish and wildlife habitat conservation areas listed in its critical areas ordinance without

[77] *Swinomish Indian Tribal Community v. Western Washington Growth Management Hearings Board*, 161 Wn.2d 415 (2007).

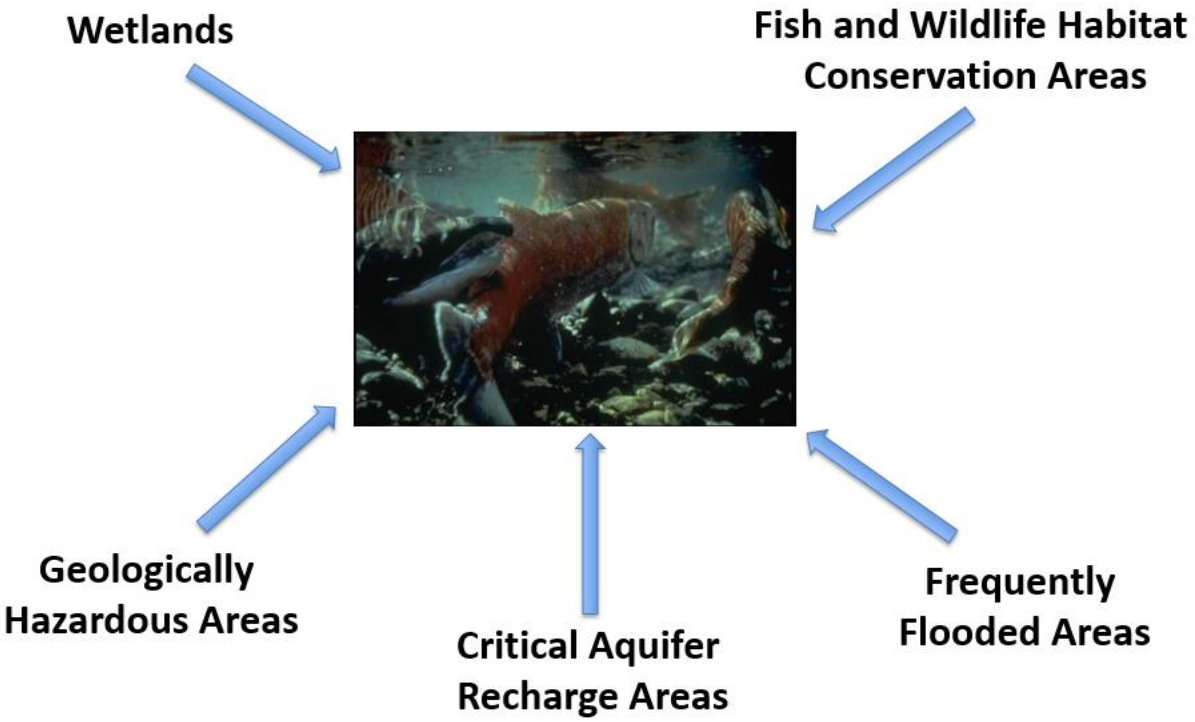
determining whether the remaining designated critical areas adequately met the needs of salmon.[78]

Deferring salmon habitat protection to a site-by-site analysis based on disaggregated factors is inconsistent with Pierce County's best available science. Nothing in the science amassed by the County supports disaggregating the values and functions of marine shorelines.[79]

The Board finds that Pierce County's site-by-site assessment of marine shorelines during the permit application process, as established in (the CAO), does not meet the requirement of using best available science to devise regulations protective of the integrated functions and values of marine shorelines as critical salmon habitat.[80]

[78] *Tahoma Audubon Society, et al v. Pierce County*, 05-3-0004c, FDO July 12, 2005, at 38-40.
[79] Id, at 40.
[80] Id, at 40 – 41.

Special Consideration of Anadromous Fisheries in the Context of the Five Types of Critical Areas



Each type of critical area defined under the GMA either provides critical habitat or has the potential for contributing to habitat conditions needed to conserve or protect of anadromous fisheries. For example:

- **Wetlands** and their buffers store floodwater, recharge groundwater, remove pollutants and excess nutrients, and provide habitat for a large number of plants and animals.
- **Fish and wildlife habitat conservation areas**, including wetland buffers and riparian management zones, provide continuous vegetated riparian areas that are key to functioning salmonid habitat.
- **Frequently flooded areas** protection addresses flooding that can directly impact salmonid habitat quality and availability. Restoring floodplain connectivity improves off-channel rearing habitat vital for young salmonids (smolts). Flood control levees often channelize flood flows that can lead to channel erosion and high turbidity from high velocity flows. Floodplains are also hydrologically connected to adjacent streams, rivers, and wetlands. Impervious surface coverage, vegetation removal, and other alterations can affect water quality, stream flows, and other ecosystem functions vital to salmon habitat.

- **Geologically hazardous areas** may affect salmonids in a variety of ways. Steep slopes along shorelines can include feeder bluffs that benefit salmon habitat. While erosion and mass wasting slide events that occur naturally can block streams or overload them with sediment in the short term, the focus should be on maintaining natural sediment loads and ecosystem functions. Seismic events can cause built objects to fall into streams, including pollutants such as chemicals and spilled fuels.
- **Critical aquifer recharge areas** contribute to groundwater quality and in-stream flow. While critical aquifer recharge areas are designated and protected to ensure availability of potable water, the groundwater resource also interacts with streams. Both discharge and recharge areas help to cool summer daytime temperatures and provide year round habitat for invertebrates, and important salmonid food source. Protecting aquifer recharge areas from stormwater pollution helps protect water quality for salmonids.

It should be noted that groundwater falls within the definition of "waters of the state" and must therefore be considered in designating fish and wildlife habitat conservation areas (WAC 365-190-130(2)(f). Also, the GMA requires that actions be taken to prevent contamination of waters of the state and water flowing into the Puget sound (RCW 36.70A.070(1). Water quality, water quantity, and water temperature are all related and all vital to supporting anadromous fish habitat.

More detail on how critical area protection can contribute to salmon habitat and opportunities for restoration is addressed under each type of critical area in Chapter 2: Resources for Designating and Protecting Critical Areas and in Chapter 4: Critical Areas Protection and Other Laws and Regulations.

Sources of Best Available Science

Other Washington state natural resource agencies provide sources of best available science, and some provide management recommendations, for protecting critical areas. For links to state agency sources of best available science, see Chapter 2: Resources for Designating and Protecting Critical Areas. Consulting with the local salmon recovery lead entity technical team can provide further guidance on how to address salmon habitat in critical area protection.[81]

A Comprehensive Approach to Critical Areas Protection

Each community is encouraged to design a comprehensive program to protect critical areas. More than just a regulatory ordinance, a local program should include land use policies, critical areas regulations, and zoning standards, and may include non-regulatory programs.

[81] See Governor's Salmon Recovery Office web site.

Recognizing unique environments and the local values of each community, each local program should be specific to the individual community's needs.

Setting Program Goals and Policies

Consistent with environmental policies adopted in comprehensive plans and county-wide planning policies, a critical areas protection program should establish goals that seek to:

- Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, volcanic eruptions, or flooding.
- Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species.
- Direct activities not dependent on the use of critical areas resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas.
- Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of the ecological functions of wetlands, frequently flooded areas, and habitat conservation areas.
- Promote the enhancement of ecological processes through conservation and restoration measures.[82]

These goals may be used both to establish policy support for critical areas regulations and to define the purpose of a critical areas ordinance. Integrating both the environmental policies and regulations within the critical areas regulations will help to maintain consistency between the comprehensive plan and other critical areas program elements.

Environmental Policies

Counties and cities should consider using innovative land management techniques that minimize land use incompatibilities and most effectively maintain critical areas. Techniques to conserve and protect critical areas include the purchase or transfer of development rights, fee simple purchase of the land, less than fee simple purchase, purchase with leaseback, buffering, land trades, conservation easements, or other innovations that maintain current uses and ensure the conservation of these lands.

When considering a community's growth strategy, and when reviewing proposals to change the zoning in an area, cities and counties should use their land use plans to direct growth away

[82] WAC 365-195-925

from areas that contain large amounts or complex collections of critical areas.[83] Areas that are likely to contain large amounts or complex collections of critical areas are expensive and difficult to develop. Counties and cities can use existing data sources to identify areas with a high probability of critical area conflicts.
They are not likely to achieve the densities specified in the underlying zoning. Avoiding increased densities in these areas will keep a community from setting expectations of development that will be difficult and expensive to meet during local project review. In the case of frequently flooded areas, expansion of the urban growth area into the floodplain is prohibited for some jurisdictions.[84]

Regional Planning and Collaboration

Considering that neighboring jurisdictions may be faced with similar circumstances, it may be beneficial for communities to work together to address critical areas protection. Ecosystems do not stop at city and county borders, or tribal trust lands. Most critical areas are part of larger geographical networks, such as rivers, shorelines, and fault lines that extend through multiple jurisdictions. As jurisdictions consider comprehensive approaches and innovative techniques in planning for critical areas, regional collaboration may provide an opportunity to better address and protect critical areas.

Cities are encouraged to coordinate with each other and with their county to share costs and resources to identify and map critical areas, to review the best science that is available and locally applicable, and to draft regulations. Regional agencies or councils of government may help coordinate development of critical area regulations. Including neighboring tribes in technical advisory committees convened for critical areas ordinance updates can be very helpful.

Multiple jurisdictions may also pool resources in non-regulatory programs. For example, purchasing or management of critical areas easements may be infeasible for an individual jurisdiction, but could be accomplished through a consortium of agencies and non-governmental organizations (such as land trusts) combining resources. Partnerships with local land trust organizations has proven helpful in overseeing the successful implementation of landowner conservation easement agreements and other land conservation strategies. An example of this approach is the regional transfer of development rights from counties to cities to conserve natural resources lands.[85]

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[83] WAC 365-196-485
[84] RCW 36.70A.110(8)
[85] Regional Transfer of Development Rights, http://www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics/development-rights/

Regional Planning Efforts

Many state and federal laws require planning for particular purposes for areas related by physical features, such as watersheds, rather than by political boundaries. For example, instream resource protection regulations for water resource inventory areas (WRIAs) under the state Water Resources Act, and recovery plans under the federal Endangered Species Act. The environmental and ecological systems addressed in resource management, fish and wildlife management, and pollution control are generally not circumscribed by county and city jurisdictional lines.[86] Aquifer recharge and geologically hazardous areas are connected to geographic features, and are very likely to extend over jurisdictional boundaries (or even if not, certainly over specific development sites). Counties and cities should attempt to identify these geographic areas that require a regional planning approach and, if needed, work toward creating collaborative processes involving all agencies with jurisdiction in the relevant geographical area.[87]

The Watershed Planning Act[88] was established by the State Legislature in 1997 to set a framework for developing local solutions to watershed issues in Washington. Between 1998 and 2012, 44 watershed-based planning groups developed plans and 33 groups adopted their plans. As planning was completed, the effort switched to watershed management. A few of these watershed groups continue to implement priority actions in their plans. Ecology maintains a Watershed Plan Archive[89] and Watershed planning/management document links for purposes of compliance with Engrossed Substitute Senate Bill 6091[90] regarding water availability, passed by the Legislature and signed into law by the Governor with an effective date of January 19, 2018.

As previously noted, salmon recovery plans have been adopted by regions around the state.[91] And, WDFW's *Land Use Planning for Salmon, Steelhead and Trout*[92] provides guidance for counties and cities to protect and restore salmonid habitat.

Ecology's Puget Sound Watershed Characterization Project[93] is a regional tool that compares areas of the Puget Sound basin in terms of their suitability and value for restoration and protection. The website lets you explore individual watershed in terms of water flow processes, water quality processes, and fish and wildlife habitats.

The Puget Sound Regional Council is developing a Regional Open Space Conservation Plan[94] to accelerate the conservation of open space now and into the future. The Regional Open Space Conservation Plan will knit together open space and related plans from four counties, tribes, resource agencies, salmon recovery groups, and other organizations. The plan will identify and elevate these

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[86] WAC 365-196-730 and 735
[87] WAC 365-196-740
[88] Chapter 90.82 RCW
[89] https://ecology.wa.gov/Water-Shorelines/Water-supply/Streamflow-restoration/Watershed-plan-archive
[90] http://lawfilesext.leg.wa.gov/biennium/2017-18/Pdf/Bills/Session%20Laws/Senate/6091-S.SL.pdf#page=1
[91] Regional Salmon Recovery Organizations, https://www.rco.wa.gov/salmon_recovery/regions/regional_orgs.shtml
[92] https://wdfw.wa.gov/publications/00033/
[93] https://fortress.wa.gov/ecy/coastalatlas/wc/landingpage.html
[94] https://www.psrc.org/our-work/regional-open-space-conservation-plan

open space needs to attract funding and support. The draft plan was released January 2018 for board review. The final plan will be completed by summer 2018.

Growth Management Hearings Board Decisions Regarding an Ecosystem Approach

RCW 36.70A.030(5) defines "critical areas" to include "areas and ecosystems". Recent Growth Management Hearings Board decisions have required an ecosystem approach to protecting critical areas based on this definition. An ecosystem approach suggests that counties and cities should be collaborating to protect critical areas at a regional level.

The Western Washington Growth Management Hearings Board found that the GMA required Island County to protect the functions and values of critical areas ecosystems. The Board stated:

> An ecosystem consists of all the organisms that live in a particular area along with physical components of the environment with which those organisms interact. There must be an appropriate mixture of plants, animals, and microbes if the ecosystem is to function. . . So complete is the interconnectedness of the various living and nonliving components of the ecosystem that a change in any one will result in a subsequent change in almost all the others.[95]

The Central Puget Sound Growth Management Hearings Board also found that, under the statutory definition, counties and cities must protect "areas and ecosystems". The Board stated that development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas.[96]

[95] *Whidbey Environmental Action Network v. Island County*, 14-2-0009, Final Decision and Order (June 26, 2015), at 21.

[96] *Ann Aagaard, Judy Fisher, Bob Fisher, Glen Conley, and Save a Valuable Environment (SAVE) v. City of Bothell,* 15-3-0001, Final Decision and Order (July 21, 2015), at 23; see also Raymond Paollela, at 35-41.

Appendix 1.A

Summary of Critical Areas WAC Amendments
January 2017

This table provides information on the more substantive amendments and their effective dates to the Commerce Washington Administrative Code (WAC) chapters applicable to critical areas since their adoption. Some minor amendments to wording are not included. Commerce staff compiled this table. For the 2010 official revisions summary, go to the Code Reviser web site at http://lawfilesext.leg.wa.gov/law/wsr/2010/03/10-03-085.htm.

Effective Dates of WAC Amendments

WAC Chapter Provision - Description of Amendment	Effective Date
Chapter 365-190 WAC Minimum Guidelines to Classify Agriculture, Forest, Mineral Lands and Critical Areas	Original adoption 4/15/91
365-190-030 Definitions (5) "Erosion hazard areas" are those areas containing soils which, according to the United States Department of Agriculture ((~~Soil~~)) Natural Resources Conservation Service Soil ((~~Classification System~~)) Survey Program, may experience ((~~severe to very severe~~)) significant erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration zones. (6)(a) "Fish and wildlife habitat conservation areas" are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species. (b) "Habitats of local importance" designated as fish and wildlife habitat conservation areas include those areas found to be locally important by counties and cities. ((~~(7)~~)) (8) "Frequently flooded areas" are lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high ground water. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and ((~~the like~~)) areas where high ground water forms ponds on the ground surface. (10) "Landslide hazard areas" are areas ((~~potentially subject to~~)) at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.	1/19/2010

(18) "Seismic hazard areas" are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, ((~~or~~)) soil liquefaction, debris flows, lahars, or tsunamis. (19) "Species of local importance" are those species that are of local concern due to their population status or their sensitivity to habitat ((~~manipulation~~)) alteration or that are game species. (21) "Volcanic hazard areas" shall include areas subject to pyroclastic flows, lava flows, and inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity. (22) "Wetland" or "wetlands" means areas that …, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands may include those artificial wetlands intentionally created from nonwetland areas ((~~created~~)) to mitigate conversion of wetlands, if permitted by the county or city.	
365-190-030 Definitions – Fish and Wildlife Habitat Conservation Areas (6)(c): "Fish and wildlife habitat conservation areas" amended to reflect statutory amendment in 2012 to RCW 36.70A.030 to "not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company."	1/27/15
365-190-040 Process Amendments to (1) and (2) recognized counties and cities have adopted their initial critical areas regulations under the GMA. (4) Classification of critical areas - the "natural heritage program" was added to the state agency classification system in 4(b), formerly 4(c). (6) "Classifying, inventorying, and designating lands does not imply a change in a landowner's right to use his or her land under current law. The law requires that natural resource land uses be protected from land uses on adjacent lands that would restrict resource production. Development regulations adopted to protect critical areas may limit some land development options…." (7) Overlapping designations. The designation process may result in critical area designations that overlay other critical area or natural resource land classifications. ((~~That is,~~)) Overlapping designations should not necessarily be considered inconsistent. If two or more critical area designations apply to a given parcel, or portion of a given parcel, both or all designations apply. If a critical area designation overlies a natural resource land designation, both designations apply. For counties and cities required or opting to plan under ((~~chapter 36.70A RCW~~)) the act, reconciling these multiple designations will be the subject of local development regulations adopted pursuant to RCW 36.70A.060. (8) Counties and cities ((~~shall~~)) must involve the public in classifying and designating natural resource lands and critical areas. The process should include: Public participation program: Public participation should include, at a minimum, representative participation from the following entities: Landowners; representatives of agriculture, forestry, mining, business, environmental, and community groups; tribal governments; representatives of adjacent counties and	1/19/2010

cities; and state agencies. The public participation program should include early and timely public notice of pending designations and regulations and should address proposed nonregulatory incentive programs. Counties and cities ((~~should~~)) are encouraged to consider ((~~using: Technical and citizen advisory committees with broad representation, press releases, news conferences, neighborhood meetings, paid advertising (e.g., newspaper, radio, T.V., transit), newsletters, and other means beyond the required normal legal advertising and public notices. Plain, understandable language should be used~~)) a variety of opportunities to adequately communicate with the public. These methods of notification may include, but are not limited to, traditional forms of mailed notices, published announcements, electronic mail, and internet sites to distribute informational brochures, meeting times, project timelines, and design and map proposals to provide an opportunity for the public to participate. The department ((~~of community development will~~)) provides technical assistance in preparing public participation ((~~plans, including: A pamphlet series, workshops, and a list of agencies available to provide help~~)) programs. Adoption process. Statutory and local processes already in place governing land use decisions are the minimum processes required for designation and regulation pursuant to RCW 36.70A.060 and 36.70A.170. At ((~~least these~~)) a minimum the following steps should be included in the adoption process: Accept the requirements of chapter 36.70A RCW((~~, especially definitions of agricultural lands, forest lands, minerals, long-term commercial significance, critical areas, geologically hazardous areas, and wetlands as mandatory minimums.~~)); (ii) Consider minimum guidelines developed by the department ((~~of community development~~)) under RCW 36.70A.050((~~.~~)); (iii) Consider other definitions used by state and federal regulatory agencies((~~.~~)); (iv) Consider definitions used by ((~~the county and city and other~~)) similarly situated counties and cities((~~.~~)); (v) Determine recommended definitions and check conformance with minimum definitions ((~~of~~)) in chapter 36.70A RCW((~~.~~)); (vi) Adopt definitions, classifications, and standards((~~.~~)); (vii) Apply definitions ((~~to the land~~)) by mapping designated natural resource lands((~~.~~)); and (viii) Establish ((~~designation amendment~~)) procedures for amending natural resource lands and critical areas designations.	
365-190-080 Critical Areas - Replaced this section that addressed all five types of critical areas with provisions that apply generally to all critical areas: (1) Counties and cities must protect critical areas. Counties and cities required or opting to plan under the act must consider the definitions and guidelines in this chapter when designating critical areas and when preparing development regulations that protect the function and values of critcal areas. The department provides additional recommendations for adopting critical areas regulations in WAC 365-196-485. (2) Counties and cities must include the best available science as described in chapter 365-195 WAC, when designating critical areas and when developing policies and regulations that protect critical areas. Counties and cities must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries. Counties and cities are encouraged to also protect both surface and ground water resources, because these waters often recharge wetlands, streams and lakes.	1/19/2010

(3) Counties and cities are encouraged to develop a coordinated regional critical areas protection program that combines interjurisdictional cooperation, public education, incentives to promote voluntary protective measures, and regulatory standards that serve to protect these critical areas. (4) Counties and cities should designate critical areas by using maps and performance standards. (a) Maps may benefit the public by increasing public awareness of critical areas and their locations. County and city staff may also benefit from maps which provide a useful tool for determining whether a particular land use permit application may affect a critical area. However, because maps may be too inexact for regulatory purposes, counties and cities should rely primarily on performance standards to protect critical areas. Counties and cities should apply performance standards to protect critical areas when a land use permit decision is made. (b) Counties and cities should clearly state that maps showing known critical areas are only for information or illustrative purposes. Guidance for each of the five types of critical areas were moved and reorganized into five new separate sections for each critical area, 090 – 130. Critical areas - Under subsection (2), the phrase "that support listed species" had been removed in response to comments and to adhere more closely to the underlying statute. [Clarify or remove this and put in deleted and added words]	
365-190-090 Wetlands – a new section was created that includes the text about wetlands from former WAC 365-190-080, with revisions: (1) Wetlands. The wetlands of Washington state are fragile ecosystems that ~~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. (2) 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.~~ (3) Wetlands rating systems. Wetland functions vary widely.	1/19/2010

(a) When designating wetlands, counties and cities should use a rating system that evaluates the existing wetland functions and values to determine what functions must be protected. (b) In developing wetlands rating systems, counties and cities should consider using the wetland rating system developed jointly by the department of ecology and the United States Army Corps of Engineers. (c) If a county or city chooses to use an alternative rating system, it must include the best available science. (d) A rating system should evaluate, at a minimum, the following factors: (i) Wetlands functions and values; (ii) Degree of sensitivity to disturbance; (iii) Rarity; (iv) The degree to which a wetland contributes to functions and values of a larger ecosystem. Rating systems should generally rate wetlands higher when they are well-connected to adjacent or nearby habitats, are part of an intact ecosystem or function in a network of critical areas; and (v) The ability to replace the functions and values through compensatory mitigation. (4~~b~~) Counties and cities may use the National Wetlands Inventory and a landscape-scale watershed characterization as information sources ~~as an information source~~ for determining the approximate distribution and extent of wetlands. The National Wetlands Inventory is an ~~This~~inventory providing~~es~~ maps of wetland areas according to the definition of wetlands issued by the United States Department of Interior - Fish and Wildlife Service. A landscape-scale watershed characterization may identify areas that are conducive to forming wetlands based on topography, soils and geology, and hydrology. Any potential locations of wetlands based on the National Wetlands Inventory or landscape-scale watershed characterization should be confirmed by field visits, either before or as part of permitting activities, and identified wetlands should have their boundaries~~, and its wetland boundaries should be~~ delineated for regulation consistent with the wetlands definition in RCW 36.70A.030~~(22)~~. (5~~c~~) Counties and cities must use the methodology for regulatory delineations in the adopted state manual identified in RCW 36.70A.175.~~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.~~	
365-190-100 Critical aquifer recharge area (CARA) – a new section was created that includes the text about CARAs from former WAC 365-190-080, with the following revisions: … (3) Counties and cities must classify recharge areas for aquifers according to the aquifer vulnerability. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute directly or indirectly to contamination that may degrade 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	1/19/2010

do not facilitate degradation. Hydrological conditions may include those induced by limited recharge of an aquifer. Reduced aquifer recharge from effective impervious surfaces may result in higher concentrations of contaminants than would otherwise occur. …(b) The following may be considered to evaluate vulnerability based on the contaminant loading potential: (i) General land use; (ii) Waste disposal sites; (iii) Agriculture activities; (iv) Well logs and water quality test results; (v) Proximity to marine shorelines; and (vi) Other information about the potential for contamination. (4) A classification strategy for aquifer recharge areas should be to maintain the quality, and if needed, the quantity of the ground water, with particular attention to recharge areas of high susceptibility. (a) 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. (b) Examples of areas with a critical recharging effect on aquifers used for potable water may include: (i) Recharge areas for sole source aquifers 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) Areas near marine waters where aquifers may be subject to saltwater intrusion; and (v) Other areas meeting the definition of "areas with a critical recharging effect on aquifers used for potable water" in these guidelines. (c) Some aquifers may also have critical recharging effects on streams, lakes, and wetlands that provide critical fish and wildlife habitat. Protecting adequate recharge of these aquifers may provide additional benefits in maintaining fish and wildlife habitat conservation areas.	
365-190-110 Frequently flooded areas– a new section was created that includes the text about frequently flooded areas from former WAC 365-190-080, with the following revisions. (2) Counties and cities should consider the following when designating and classifying frequently flooded areas:	1/19/2010

(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, including the provisions for urban growth areas in RCW 36.70A.110; (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 tsunami, high tides with strong winds, sea level rise, and extreme weather events, including those potentially resulting from global climate change; (e) Greater surface runoff caused by increasing impervious surfaces.	
365-190-120 Geologically hazardous areas – a new section was created that includes the text about geologically hazardous areas from former WAC 365-190-080, with the following revisions. (2) Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to public health and safety are minimized ~~acceptable~~. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas must be ~~is best~~ avoided. The distinction between avoidance and compensatory mitigation should be considered by counties and cities that do not currently ~~do not now~~ classify geological hazards, as they develop their classification scheme.(5) Erosion hazard areas include areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. Erosion hazard areas may also include coastal erosion areas: This information can be found in the Washington state coastal atlas available from the department of ecology. Counties and cities may consult with the United States Department of Agriculture Natural Resources Conservation Service for data to help identify erosion hazard areas. (6) 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 to landslide 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~~, and include, at a minimum, the following: (a) Areas of historic failures, such as: (i) Those areas delineated by the United States Department of Agriculture ~~Soil~~ Natural Resources Conservation Service as having a ~~"severe"~~ significant limitation for building site development; (ii) Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the department of ecology Washington coastal ~~zone~~ atlas; or… (f) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;… (h) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and	1/19/2010

(i) 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~~ bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief. (7) Seismic hazard areas ~~shall~~ must include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow ground water table. 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, and ground settlement may occur with shaking. The strength of ground shaking is primarily affected by:… (8) Other geological ~~events~~ hazard areas: (a) Volcanic hazard areas ~~shall~~ must include areas subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity….	
365-190-130 Fish and wildlife habitat conservation areas - a new section was created that includes the text about fish and wildlife habitat conservation areas from former WAC 365-190-080, with the following revisions. ~~(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.~~ (1) "Fish and wildlife habitat conservation" means land management for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term. Counties and cities should engage in cooperative planning and coordination to help assure long term population viability. Fish and wildlife habitat conservation areas contribute to the state's biodiversity and occur on both publicly and privately owned lands. Designating these areas is an important part of land use planning for appropriate development densities, urban growth area boundaries, open space corridors, and incentive-based land conservation and stewardship programs. (2) Fish and wildlife habitat conservation areas that must be considered for classification and designation include: (a) Areas ~~with which~~ where endangered, threatened, and sensitive species have a primary association; (b) Habitats and species of local importance, as determined locally; (c) Commercial and recreational shellfish areas; (d) Kelp and eelgrass beds; herring, smelt, and other forage fish spawning areas; (e) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;	1/19/2010

(f) Waters of the state;

(g) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and

(h) State natural area preserves, natural resource conservation areas, and state wildlife areas.

(3)~~Counties and cities may consider the following when classifying and designating these areas:~~ When classifying and designating these areas, counties and cities must include the best available science, as described in chapter 365-195 WAC.

(a) Counties and cities should consider the following:

(i) Creating a system of fish and wildlife habitat with connections between larger habitat blocks and open spaces, integrating with open space corridor planning where appropriate:

(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 including salmonid habitat, which also includes marine nearshore areas;

(iv) Evaluating land uses surrounding ponds and fish and wildlife habitat conservation areas that may negatively impact these areas, or conversely, that may contribute positively to their function;

(v) Establishing buffer zones around these areas to separate incompatible uses from habitat areas;

(b) Counties and cities may also consider the following:

(i) Potential for restoring lost and impaired salmonid habitat;

(ii) Potential for designating areas important for local and ecoregional biodiversity; and

(iii) Establishing or enhancing nonregulatory approaches in addition to regulatory methods to protect fish and wildlife habitat conservation areas.

(4) 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.~~

(a) Endangered, threatened and sensitive species. Counties and cities should identify and classify seasonal ranges and habitat elements where 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 persist over the long term. Counties and cities should consult current information on priority habitats and species identified by the Washington state department of fish and wildlife. Recovery plans and management recommendations for many of these species are available from the Unites States Fish and Wildlife Service, the National Marine Fisheries Service and the Washington state department of fish and

wildlife. Additional information is also available from the Washington state department of natural resources, natural heritage program, and aquatic resources program.

~~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.~~

(b) Habitats and species areas of local importance. Counties and cities should identify, classify and designate locally important habitats and species. Counties and cities should consult current information on priority habitats and species identified by the Washington state department of fish and wildlife. Priority habitat and species information includes endangered, threatened and sensitive species, but also includes candidate species and other vulnerable and unique species and habitats. While these priorities are those of the Washington state department of fish and wildlife, they should be considered by counties and cities as they include the best available science. The Washington state department of fish and wildlife can also provide assistance with identifying and mapping important habitat areas at various landscape scales. Similarly, the Washington state department of natural resources' natural heritage program can provide a list of high quality ecological communities and systems and rare plants.

…

(d) Kelp and eelgrass beds; herring, smelt and other forage fish spawning areas. Counties and cities ~~shall~~ must classify kelp and eelgrass beds, identified by the Washington state department of natural resources 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*~~ Washington coastal atlas published by the department of ecology. Herring, smelt and other forage fish spawning times and locations are outlined in WAC 220-110-240 through 220-110-~~260~~271 ~~and the *Puget Sound Environmental Atlas.*~~.

…

(f) Waters of the state.

(i) Waters of the state are defined in ~~Title 222 WAC~~ RCW 90.48.020 and include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses in Washington. Stream types are classified in TITLE 222 WAC, the forest practices regulations. Counties and cities ~~should~~ may use the classification system established in WAC 222-16-030 to classify waters of the state. Counties and cities using the water types defined in WAC 222-16-030 or 222-16-031 (interim) should not rely solely on Washington state department of natural resources maps of these stream types for purposes of regulating land uses or establishing stream buffers.

(ii) Counties and cities that use the stream typing system developed by the department of natural resources should develop a process to verify actual stream conditions, identify flow alterations, and locate fish passage barriers by conducting a field visit. Field verification of all intermittent or nonfish bearing streams should occur during the wet season months of October to March or as determined locally.

(iii) Counties and cities may consider the following factors when classifying waters of the state as fish and wildlife habitat conservation areas:

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

(B) Species present which are sensitive to habitat manipulation (e.g., priority habitats and species program);

(C) Historic presence of species of local ~~concern~~ importance; (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. (g) 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 Washington state department of fish and wildlife. (h) State natural area preserves, natural resource conservation areas, and state wildlife areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by the department of natural resources. State wildlife areas are defined, established, and managed by the Washington state department of fish and wildlife, which provides information about state wildlife areas for each county. (i) Salmonid habitat. Counties and cities should consider recommendations found in salmon recovery plans (see the governor's salmon recovery office). Counties and cities may use information prepared by the United States Department of the Interior Fish and Wildlife Service, National Marine Fisheries Service, the Washington state department of fish and wildlife, the state recreation and conservation office, and the Puget Sound partnership to designate, protect and restore salmonid habitat.	

Chapter 365-195 WAC Best Available Science	Original Adoption 2000
365-195-900 Background and purpose – no amendments	
365-195-905 Criteria for determining which information is the "best available science" – no amendments	
365-195-910 Criteria for obtaining the best available science – no amendments	
365-195-915 Criteria for including the best available science in developing policies and development regulations – no amendments	
365-195-920 Criteria for addressing inadequate scientific information – no amendments	
365-195-925 Criteria for demonstrating "special consideration" has been given to conservation or protection measures necessary to preserve or enhance anadromous fisheries – no amendments	
Chapter 365-196 WAC Procedural Criteria for Adopting Comprehensive Plans and Development Regulations (Formerly Chapter 365-195, reorganized and adopted in a new Procedural Criteria chapter in 2010)	Original Adoption 1991
365-196-485 Critical Areas -formerly 365-195-410, this section addressed original critical areas designation and ordinances prior to adoption of the comprehensive plan. In 2010, the previous section was repealed and a new section adopted that addresses critical areas that recognizes all cities and counties have designated critical areas and adopted ordinances. The previous section is no longer relevant and therefore not provided here. New Section (1) Relationship to the comprehensive plan. (a) The act requires that the planning goals in RCW 36.70A.020 guide the development and adoption of comprehensive plans and development regulations. These goals include retaining open space; enhancing recreation opportunities; conserving fish and wildlife habitat; protecting the environment and enhancing the state's high quality of life, including air and water quality, and the availability of water. (b) Jurisdictions are required to include the best available science in developing policies and development regulations to protect the functions and values of critical areas. (c) Counties and cities are required to identify open space corridors within and between urban growth areas for multiple purposes, including those areas needed as critical habitat by wildlife. (d) RCW 36.70A.070(1) requires counties and cities to provide for protection of the quality and quantity of ground water used for public water supplies in the land use element. Where applicable, the land use element must review drainage, flooding, and storm water runoff in the area and in nearby jurisdictions, and provide guidance to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound.	2/19/2010

(e) Because the critical areas regulations must be consistent with the comprehensive plan, each comprehensive plan should set forth the underlying policies for the jurisdiction's critical areas program.

(f) In pursuing the environmental protection and open space goals of the act, such policies should identify nonregulatory measures for protecting critical areas as well as regulatory approaches. Nonregulatory measures include but are not limited to: Incentives, public education, and public recognition, and could include innovative programs such as the purchase or transfer of development rights. When such policies are incorporated into the plan (either in a separate element or as a part of the land use element), the consistency of the regulations can be readily assessed.

(2) Requirements. Prior to the original development of comprehensive plans under the act, counties and cities were required to designate critical areas and adopt development regulations protecting them. Any previous designations and regulations must be reviewed in the comprehensive plan process to ensure consistency between previous designations and the comprehensive plan. Critical areas include the following areas and ecosystems:

(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.

(3) Recommendations for meeting requirements.

(a) In the initial period following adoption of the act, much of the analysis which was the basis for the comprehensive plan came later than the initial identification and regulation of critical areas. Upon the adoption of the initial comprehensive plans, such designations and regulations were to be reviewed and, where necessary, altered to achieve consistency with the comprehensive plan. Subsequently, jurisdictions updating local critical areas ordinances are required to include the best available science.

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

(c) Critical areas should be designated and protected wherever the applicable environmental conditions exist, whether within or outside of urban growth areas. Critical areas may overlap each other, and requirements to protect critical areas apply in addition to the requirements of the underlying zoning.

(d) The review of existing designations during the comprehensive plan adoption process 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, counties and cities must address the requirements to include the best available science in developing policies and development regulations to protect the functions and values of critical areas, and give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries. To the extent that new information is available or errors have been discovered, the review process should take this information into account.

(e) The department recommends that planning jurisdictions identify the policies by which decisions are made on when and how regulations will be used and when and how other means will be employed (purchases, development rights, etc.). See WAC 365-196-855. (4) Avoiding impacts through appropriate land use designations. (a) Many existing data sources can identify, in advance of the development review process, the likely presence of critical areas. When developing and reviewing the comprehensive plan and future land use designations, counties and cities should use available information to avoid directing new growth to areas with a high probability of conflicts between new development and protecting critical areas. Identifying areas with a high probability of critical areas conflicts can help identify lands that are likely to be unsuitable for development and help a county or city better provide sufficient capacity of land that is suitable for development as required by RCW 36.70A.115. Impacts to these areas could be minimized through measures such as green infrastructure planning, open space acquisition, open space zoning, and the purchase or transfer of development rights. (b) When considering expanding the urban growth area, counties and cities should avoid including lands that contain large amounts of mapped critical areas. Counties and cities should not designate new urban areas within the one hundred year flood plain unless no other alternatives exist, and if included, impacts on the flood plain must be mitigated, including the provisions in RCW 36.70A.110(8). (c) If critical areas are included in urban growth areas, they still must be designated and protected. See WAC 365-196-310.	
365-196-485 Critical Areas – further amended as follows. (4) Avoiding impacts through appropriate land use designations. (b) When considering expanding the urban growth area, counties and cities should avoid including lands that contain large amounts of mapped critical areas. Counties and cities should not designate new urban areas within the one hundred-year flood plain unless no other alternatives exist, and if included, impacts on the flood plain must be mitigated((~~, including the provisions in RCW 36.70A.110(8)~~)). RCW 36.70.110(8) prohibits expansion of the urban growth area into the one hundred-year flood plain in some cases. See WAC 365-196-310.	12/3/2010

Appendix 1.B

Critical Areas Legal Review:
Critical Areas Case Law (1997 – 2017) and
Growth Management Hearings Board Decisions
(2005 – 2017)

This document has been compiled to provide county and city planners with summaries of appellate court and Growth Management Hearings Board decisions related to critical areas requirements under the Washington State Growth Management Act. The court decision summaries were written with the assistance of the Assistant Attorney General. Summaries of Growth Management Hearings Board decisions are compiled from digests provided by the Growth Management Hearings Board on its web page at http://www.gmhb.wa.gov/.

Per the Growth Management Hearings Board, the Digest provides synopses of cases and their key holdings. The case synopses and key-holdings excerpts are provided for the convenience of practitioners and should not be relied on out of context. Further, users of the Digest are reminded that decisions of the Board may be appealed to court and thus some of the excerpted cases may have been impacted by subsequent court and/or Board rulings. It is the responsibility of the user to research the case thoroughly prior to relying on holdings of a decision.

All references to CTED refer to the former Department of Community, Trade and Economic Development, now the Department of Commerce.

Table of Contents

Designation and Protection of Critical Areas

Court Decisions

Stevens County v. Futurewise, 146 Wn. App. 493 (2008), *review denied*, 165 Wn.2d 1038 (2009)
The court held that the county had failed to comply with the GMA when it only designated as critical wildlife habitat areas that had been designated by a state or federal agency process as habitat for endangered, threatened, or sensitive species. The court stated that the GMA required the county to designate and protect all critical areas, not just those identified by another agency.

Growth Management Hearings Board Decisions

Eastern Washington

Simmons, et al v. Ferry County, 09-1-0002c, FDO at 10-11 (July 30, 2009). One of the primary goals of the GMA is to protect the environment and enhance the state's high quality of life, including air and water quality and the availability of water. To accomplish this task, jurisdictions are required to adopt guidelines to classify critical areas … Jurisdictions which are required to plan or voluntarily opt to plan, like Ferry County, are also required to designate critical areas … and shall include BAS in developing policies and development regulations to protect the functions and values of critical areas.

Riparian Property Owners, et al v. Ferry County, 09-1-0002, Order on Motion to Dismiss at 5 (April 22, 2009). [Contrary to the Petitioners' assertion that an identifiable threat to critical areas was needed, the Board stated:] The GMA does not require a threat to be established to the functions and values of critical areas for these areas to be designated and protected. The term "where appropriate," indicates all critical areas as defined by the GMA … Local jurisdictions have discretion as to how this will be accomplished, but not "where" if the critical area falls within the definition.

Futurewise v. Stevens County, 05-1-0006, FDO, (Jan. 13, 2006). In designating fish and wildlife habitat conservation areas, the County must at least designate "areas with which endangered, threatened, or sensitive species have a primary association and the designation" must be based on best available science as required by 36.70A.172.

The County has done an admirable job of requiring pre-set buffers or alternative buffers set on a case by case basis, and requiring a report from a qualified professional to set management recommendations, if a development is within "a mapped critical habitat area" for endangered, threatened, or sensitive species. But the County falls short by defining "critical habitat" as "only those areas designated by a state or federal agency through a formal statutory or rule-making process.

If Stevens County does not designate fish and wildlife conservation areas for certain listed species using BAS and all the information available from WDFW, but neighboring counties, such as Ferry County and Pend Oreille County do, then there would be a disconnect in protection for the listed species and

extinction a real possibility. To protect endangered, threatened and sensitive species and their habitat, such as the lynx, which knows no country, state or county boundary, there must be intergovernmental cooperation and coordination, as stated in WAC 365-190-080(5).

Western Washington

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c FDO (September 6, 2013), at 9. The Board dismissed alleged violations of RCW 36.70A.040(3) regarding the designation and protection of critical areas stating that statute "established the requirement that jurisdictions adopt initial comprehensive plans and implementing development regulations" and the County "had adopted the required comprehensive plan and development regulations many years ago."

ADR/Diehl v. Mason County, 07-2-0010, FDO, at 19 (Jan. 16, 2008). The issue of allowing new residential construction in frequently flooded areas is a question of protection of critical areas. Pursuant to WAC 365-195-825(2)(b), "protection" of critical areas also means "to safeguard the public from hazards to health and safety." Whether to allow new residential construction in a frequently flooded area is a matter of hazards to public health and safety. Therefore, the adoption of regulations allowing such residential construction must include BAS.

Central Puget Sound

Pilchuck Audubon Society, et al v. Snohomish County, 06-3-0015c, FDO (9/15/06), at 68. [T]he Board finds that Petitioners' theory is unsupported by the GMA. The GMA acknowledges that critical areas occur throughout the landscape, within urban, rural and resource land designations. The GMA does not discriminate; it simply requires that their functions and values be protected wherever they are found.

Sno-King Environmental Allliance, et al v. Snohomish County, 06-3-0005, 5/25/06 Order on Motions, at 12-13. [Regulations affecting nuisance odors from a wastewater treatment facility such as hydrogen sulfide or ammonia are not regulations protecting critical areas, and BAS is not applicable.] Odor does not fit within the GMA's definition of critical areas (See RCW 36.70A.030(5), nor has the County defined it as such.

Pilchuck Audubon Society v. Snohomish County, 95-3-0047c, FDO (12/6/95), at 24. The requirement that critical areas are to be protected in the urban area is not inconsistent with the Act's predilection for compact urban development.

Bremerton v. Kitsap County, 95-3-0039c, FDO (10/6/95), at 31.Two of the Act's most powerful organizing concepts to combat sprawl are the identification and conservation of resource lands and the protection of critical areas (see RCW 36.70A.060 and .170) and the subsequent setting of urban growth areas (UGAs) to accommodate urban growth (see RCW 36.70A.110). It is significant that the Act required cities and counties to identify and conserve resource lands and to identify and protect critical areas before the date that IUGAs had to be adopted. This sequence illustrates a fundamental axiom of growth management: "the land speaks first."

Level of Protection and Mitigation Required under the GMA

Court Decisions

Yakima County v. Eastern Washington Growth Management Hearings Board , 168 Wn. App. 680 (2012). In updates to its critical areas ordinance, Yakima County adopted standard buffers and adjusted minimum stream and wetland buffers. The ordinance was challenged for failure to include BAS and failure to protect all the functions and values of the critical areas as required by RCW 36.70A.172. Almost all of the scientific studies reviewed by the County recommended buffers greater than those adopted by the County. The court found that the GMA requires that regulations for critical areas must protect all functions and values of the designated areas and not just some. The buffers adopted did not protect all functions either for streams or wetlands. While the court recognized that local governments may depart from BAS if a reasoned justification in provided, in this case the court found that the County failed to do so. However, the court also found that the County had provided reasoned justification for not regulating ephemeral streams as critical areas.

Swinomish Indian Tribal Community v. Western Washington Growth Management Hearings Board, 161 Wn.2d 415 (2007)
The tribe challenged the county's critical areas ordinance alleging, among other things, that a "no harm" provision failed to protect critical areas, as required by RCW 36.70A.060(2). The court concluded that the "no harm" standard protected critical areas by maintaining existing conditions. The Court stated that absent clear legislative direction, it would not conclude that the GMA imposed a duty on local governments to enhance critical areas. The county's decision to not require mandatory riparian buffers was upheld because doing so would impose a requirement to restore habitat functions that no longer existed. The GMA requirement to protect critical areas does not impose a corresponding requirement to enhance.

Whidbey Environmental Action Network v. Island County, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), *review denied*, 153 Wn.2d 1025 (2005). The GMA requires that critical areas regulations protect all functions and values of the designated areas.

Growth Management Hearings Board Decisions

Eastern Washington

Larson Beach Neighbors/Wagenman v. Stevens County, 07-1-0013 First Order on Compliance at 24 (April 16, 2009). [T]he relevant standard under the GMA is for the functions and values of critical areas are to be protected with further degradation of the area being prevented … The GMA requires the County to enact development language which protect critical areas from adverse impacts, not minimize the effect of those impacts.

Western Washington

Friends of the San Juans, P.J. Taggares Company, Common Sense Alliance, William H. Wright, and San Juan Builders Association v. San Juan County, 13-2-0012c: "Mitigation" and "mitigation sequencing" are not always clearly understood. Those terms are easily confused with "compensatory mitigation". The latter is the step in the mitigation sequence that occurs after avoidance and minimization. It involves restoring (re-establishing, rehabilitating), creating (establishing), enhancing, or preserving wetlands to replace those lost or degraded through permitted activities. "Mitigation" and "mitigation sequencing" have a broader meaning: they include as the first option, avoidance of any impact. If avoidance is not possible, the second step in mitigation sequencing is minimization. Only after those first steps does one then consider compensatory mitigation. Order Finding Compliance, p. 10 (May 14, 2015).

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c: Establishing property-specific buffers is indeed one approach [to protecting FWHCAs] and, as stated in Wetlands Volume 2 ". . . is probably the most consistent with what a review of the scientific literature reveals about buffer effectiveness." However, that is not the only method: "Three basic types of buffer regulations are generally recognized: variable-width, fixed-width, or some combination." Order Finding Compliance and Continuing Non-Compliance, (August 20, 2014), pg. 17.

If development regulations allow harm to critical areas, they must require compensatory mitigation of the harm. Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas. When developing alternative means of protection, counties and cities must assure no net loss of ecological functions and values and must include the Best Available Science. FDO (September 6, 2013), at 45.

For critical areas, the preferred option is to avoid negative impacts. However, when that is not an option, steps to reduce and mitigate adverse impacts are appropriate when a jurisdiction follows a mitigation sequencing process. FDO (September 6, 2013), at 67.

The Board finds and concludes that a blanket exemption for activities which could result in significant impacts to a critical area, without any consideration of the quality of a wetland, and which does not include steps to avoid, minimize or mitigate, fails to protect critical areas. FDO (September 6, 2013), at 71.

Ecosystem Approach to Protection

Whidbey Environmental Action Network v. Island County, 14-2-0009: Under the statutory definition, "Critical Areas" include "areas and ecosystems," and it is the functions and values of those areas and ecosystems that counties and cities are required to protect. Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas. Final Decision and Order, June 26, 2015, p. 21.

FWHCAs are "areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem". In sum, the GMA requires the County to protect the functions and values of Critical Area Ecosystems. Final Decision and Order, June 26, 2015, p. 21.

"An ecosystem consists of all the organisms that live in a particular area along with physical components of the environment with which those organisms interact. There must be an appropriate mixture of plants, animals, and microbes if the ecosystem is to function. . . So complete is the interconnectedness of the various living and nonliving components of the ecosystem that a change in any one will result in a subsequent change in almost all the others." Final Decision and Order, June 26, 2015, p. 21.

[The Board disagreed with the County's view that the sole purpose of FWHCAs, including Natural Area Preserves, is the protection of the species found therein] By failing to establish buffers for the NAP based on an assumption that it encompasses "the land required for species preservation", the County has failed to protect the NAP's habitat or the functional integrity of its ecosystem. [Citing WAC 365-190-130(3)(a) and the role of buffers to separate incompatible uses from habitat areas.] Final Decision and Order, June 26, 2015, p. 24-2.

The GMA guidelines focus on the "functional integrity of the ecosystem" and make no distinction between plant and animal species. Plants and animals are interconnected components of all terrestrial ecosystems. The GMA statutes make no distinction between plant and animal species; rather the GMA statutes require protection of the integrated habitat area and ecosystem. The County [failed to consider] WAC 365-190-130(1)(a)'s guideline to consider for classification and designation, among other things, "areas where endangered, threatened, and sensitive species [which may be plant or animal] have a primary association". Final Decision and Order, June 26, 2015, p. 28.

It is the County's obligation to designate and protect habitat areas and ecosystems; the protection afforded by other entities or regulations is irrelevant. Final Decision and Order, June 26, 2015, p. 31.

Central Puget Sound

Hood Canal Environmental Council, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06), at 39-41. Kitsap County's marine buffers buffer widths are assigned based on SMA land use classifications, not based on the functions and values of the critical areas designation – here, fish and wildlife habitat conservation areas. . . .The County has not differentiated among the functions and values that may need to be protected on shorelines that serve, for example, as herring and smelt spawning areas, juvenile chum rearing areas, Chinook migratory passages, shellfish beds or have other values. Rather they have chosen an undifferentiated buffer width that is at or below the bottom of the effective range for pollutant and sediment removal cited in [BAS]. And they have applied that buffer to SMP land use classifications, not to the location of specific fish and wildlife habitat. . . .The flaw [in this approach] is illustrated by the fact that eelgrass, kelp, and shellfish beds are protected by larger buffers if they happen to be off shores designated Natural or Conservancy [in the SMP], while the same critical resources – eelgrass, kelp, shellfish – have just 35 feet of buffer off the Urban, Semi-rural or Rural shore. Protection for critical areas functions and values should be based first on the needs of the resource as determined by BAS. . . .Here Kitsap County has opted to designate its whole shoreline as critical area but then has not followed through with the protection of all the applicable functions and values.

Ecosystem Approach to Protection

Ann Aagaard, Judy Fisher, Bob Fisher, Glen Conley, and Save a Valuable Environment (SAVE) v. City of Bothell, 15-3-0001: Under the statutory definition of "Critical Areas," counties and cities must protect "areas and ecosystems." Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas. Final Decision and Order, (July 21, 2015), p. 23; see also Raymond Paolella Concurrence, pp. 35-41.

Low Impact Development, Density, and Critical Areas

Aagaard, et al v. City of Bothell, 08-3-0002, FDO, at 11-12. [Petitioners' challenged a lot modification provision of the Low Impact Development Ordinance that would allow increased density – i.e. smaller lots than the existing large lot zoning. The City's record contained no analysis of the additional lot yield, if any, likely or possible as the result of the lot modification provisions. The City relied on a study indicating that] preserving or restoring forest cover, minimizing impervious surfaces, managing stormwater on-site and reducing the need for landscape chemicals] are the determining factors that "can be limited to an equal or greater extent for higher density development utilizing Low Impact Development techniques." (Citation omitted.) The result should be cool, reliable groundwater that supplies steady flows to streams that support native salmon. Particularly in light of the criteria for Lot Modification, identified below, the Board is not persuaded that the City's Lot Modification allowance reduces protection for the North Creek hydrology.

[Petitioners contend that designated wildlife corridors (designated critical areas) or "connecting segments" to designated critical areas would not be protected under the LID Ordinance.] The Board determines that the LID Ordinance does not exempt wildlife corridors from critical areas regulations or best available science. [Rather], any "variation, averaging or reduction" of critical areas and buffers identified as corridors requires not only the critical areas process and standards of BMC 14.04 but, in addition, a "specific finding" concerning accommodation of wildlife movement. The "specific finding" provision is not a loophole but an added requirement.

Special Consideration for Anadromous Fish

Tahoma Audubon Society, et al v. Pierce County, 05-3-0004c, FDO July 12, 2005, at 38-40. [The Board reviewed the detailed scientific evidence in the record regarding salmon habitat along marine shorelines to determine whether the County gave "special consideration to anadromous fish."] Despite the detailed information about the function and values of salmonids habitat specific to each shoreline reach, Pierce County eliminated "marine shorelines" from the fish and wildlife habitat conservation areas listed in its critical areas ordinance without determining whether the remaining designated critical areas adequately met the needs of salmon. Undoubtedly some of Pierce County's remaining designated and mapped salt-water critical areas, such as eelgrass beds, surf smelt beaches, salt marshes and steep bluffs, overlap with habitats critical to the survival of anadromous fish. But there is nothing in the record to indicate that the high-value shoreline reaches identified by the Pentec Report for salmonids habitat [much less the restorable habitat stretches] are designated and protected in the Pierce County critical areas regulations.

Deferring salmon habitat protection to a site-by-site analysis based on disaggregated factors is inconsistent with Pierce County's best available science. Nothing in the science amassed by the County supports disaggregating the values and functions of marine shorelines. [Various studies are reviewed pertaining to the integrated function and value of salmon habitat. FDO, at 40.

The Board finds that Pierce County's site-by-site assessment of marine shorelines during the permit application process, as established in (the CAO), does not meet the requirement of using best available science to devise regulations protective of the integrated functions and values of marine shorelines as critical salmon habitat. FDO, at 40-41.

Inclusion of Best Available Science

Court Decisions

Ferry County v. Growth Management Hearings Board, 184 Wash. App. 685, 339 P.3d 478 (2014).
A local government must include BAS in the record when designating fish and wildlife habitat conservation areas and must rely on and analyze the information using a reasoned process. The court found that Ferry County failed to comply with the GMA when it departed from or ignored the recommendation of WDFW to designate habitat for endangered, threatened and sensitive (ETS) species or designate species of local importance. Nor did the County indicate in the record that BAS was included or analyzed with a reasoned process. Mere inclusion of BAS is not sufficient. The written record must "show the work" of the county and show how the BAS was considered substantively in the development of the county's ordinance.

Yakima County v. Eastern Washington Growth Management Hearings Board, 168 Wn. App. 680 (2012).
In updates to its critical areas ordinance, Yakima County adopted standard buffers and adjusted minimum stream and wetland buffers. The ordinance was challenged for failure to include BAS and failure to protect all the functions and values of the critical areas as required by RCW 36.70A.172. Almost all of the scientific studies reviewed by the County recommended buffers greater than those adopted by the County. The court found that the GMA requires that regulations for critical areas must protect all functions and values of the designated areas and not just some. The buffers adopted did not protect all functions either for streams or wetlands. While the court recognized that local governments may depart from BAS if a reasoned justification in provided, in this case the court found that the County failed to do so. However, the court also found that the County had provided reasoned justification for not regulating ephemeral streams as critical areas.

Olympic Stewardship Foundation v. Western Washington Growth Management Hearings Board, 166 Wn. App. 172 (2012), *review denied*, 174 Wn.2d 1007 (2012).
Olympic Stewardship Foundation challenged Jefferson County's regulations that restricted vegetation removal in zones surrounding rivers at high risk for channel migration (channel migration zones or CMZ). The CMZ was designated as critical areas under the "geologically hazardous areas" component of the definition. The Foundation challenged the vegetation removal restrictions as not including BAS, alleging that the County had failed to develop a record showing how the science considered supported the vegetation removal record. The court held that "including" BAS does not impose a duty on local governments to describe each step of their deliberative process but rather the local government is

required to address on the record the relevant sources of BAS included in their decision-making. The court also found that, by prohibiting vegetation removal and development only within those areas determined to be "high risk" critical areas, any dedications of land within the critical areas are de facto "reasonably necessary as a direct result of the proposed developments," in compliance with RCW 82.02.020.

Stevens County v. Futurewise, 146 Wn. App. 493 (2008), *review denied*, 165 Wn.2d 1038 (2009). The court held that Stevens County had failed to consider the best available science in designating critical habitats, as required by RCW 36.70A.172(1), when it only designated as critical wildlife habitat areas that had been designated by a state or federal agency process as habitat for endangered, threatened, or sensitive species. The court ruled that, by tying the classification of critical habitat to lands designated by another state or federal agency, the county had avoided consideration of any scientific information. Instead, counties must use some kind of scientific methodology in a reasoned process of analysis to designate the critical habitats.

Ferry County v. Concerned Friends of Ferry County, 155 Wn.2d 824, 123 P.3d 102 (Nov. 17, 2005). Compliance with the GMA's best available science requirement must be supported by evidence in the record. Noting the absence of any statutory definition, the Court turned to the Growth Management Hearings Boards' interpretations of the BAS requirement as an indication of the operative standards at the time of Ferry County's actions in this case. The Court concluded the Boards "at least required local governments to produce valid scientific information and consider competing scientific information and other factors through analysis constituting a reasoned process." The Court held that regardless of the precise definition applied, the process undertaken and the information considered by Ferry County in this case did not rise to the level of BAS.

The record must demonstrate that the County used scientific information and analyzed that information using a reasoned process. The Court appears to have used a two-part test to assess the County's compliance with the GMA's BAS requirement: (1) the County must rely on scientific information—the BAS requirement does not mandate the use of a particular methodology, but it requires at a minimum the use of a scientific methodology; (2) the steps taken in analyzing the scientific information must constitute a reasoned process, with the process evident in the record. Quoting from a 2000 Western Board decision, the Court suggested it is not a reasoned process for a county to "choose its own science over all other science" or "use outdated science to support its choice."

The Court also cited approvingly to the BAS guidance adopted by the state Department of Community, Trade and Economic Development in 1999 (WAC 365-195-900 through -925), which provide criteria for assessing whether proffered information can be considered scientific information and for engaging in a "reasoned process." The rules did not apply to Ferry County's actions here because the rules took effect after those actions.

Whidbey Environmental Action Network v. Island County, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), *review denied*, 153 Wn.2d 1025 (2005). Evidence of the best available science must be included in the record and must be considered substantively in the development of critical areas policies and regulations. RCW 36.70A.172(1) requires the BAS to be included in the record and considered substantively in the development of critical areas policies and regulations.[1]

[1] *Id.* at 171, citing *Honesty in Envtl. Analysis & Legis. (HEAL) v. Cent. Puget Sound Growth Mgmt. Hrgs. Bd.*, 96 Wn. App. 522, 532, 979 P.2d 864 (1999) (discussed above at page 7).

If a city or county adopts a critical areas requirement that is outside the range supported by the best available science, it must provide findings explaining the reasons for its departure from the best available science and identifying the other GMA goals being implemented by that departure.

A Growth Management Hearings Board is free to choose from among competing scientific evidence in the record in assessing whether the County properly included the best available science. When the Board observes that the majority of scientific information in the record supports a specific conclusion and explains its reasoning, it has not inappropriately relied on a preponderance of the evidence (rather than the clearly erroneous standard required under RCW 36.70A.320(3)).

The GMA requires that critical areas regulations protect all functions and values of the designated areas.

To the extent a county or city relies on a previously-adopted ordinance to protect critical areas, that prior ordinance may be challenged for compliance with the GMA's best available science requirements. The County relied partly on a six-year-old wetlands ordinance to protect fish and wildlife habitat conservation areas. The Court agreed that the BAS requirement does not operate retroactively, but it explained that critical areas regulations adopted before the BAS requirement was enacted were subject to challenge to the extent the County relied on them to fulfill the obligations imposed by the BAS requirement. "Otherwise, a county could use myriad preexisting regulations in an attempt to satisfy GMA critical areas requirements without actually having to include BAS analysis. This would contravene RCW 36.70A.172."[2] In this case, the Court found the County did not rely substantively on the earlier wetlands buffers to protect fish and wildlife habitat, and it reversed the Board's invalidation of the wetlands buffers.

An exception from critical areas regulations for agricultural activities must be supported by evidence in the record that such an exception is necessary and that the best available science was employed in crafting the exception.

Honesty in Environmental Analysis & Legislation (HEAL) v. Central Puget Sound Growth Management Hearings Board, 96 Wn. App. 522, 979 P.2d 864 (June 21, 1999) (amended Aug. 25, 1999). Local governments must give substantial consideration to the best available science when developing critical area policies and regulations. The Court rejected the argument that the best available science requirement is purely procedural, requiring only that the science be included in the record. The Court also rejected the contention that a critical area policy or regulation must precisely mirror the best available science in the record. The Court instead took a middle approach, holding that local governments must give substantive consideration to the best available science.

The best available science requirement is intended to ensure that critical areas regulations are not based on "speculation and surmise." Borrowing from a federal case analyzing an analogous requirement in federal law, the Court of Appeals described the best available science requirement as intended "to ensure that regulations not be based on speculation and surmise."

Compliance with the best available science requirement may be necessary to satisfy constitutional nexus and proportionality requirements. The Court suggested in dictum that the best available science

[2] *Id.* at 180. The language and holding in this portion of the decision was modified from the previous decision withdrawn by the Court.

requirement may have constitutional ramifications with respect to the nexus and rough proportionality limits the United States Supreme Court has placed on governmental authority to impose conditions on development applications.

Growth Management Hearings Board Decisions

Eastern Washington

Concerned Friends of Ferry County v. Ferry County, 97–1–0018c (Order Finding Continuing Noncompliance [Fish and Wildlife Habitat Conservation Areas] February 5, 2014). Ferry County is a long-running dispute since 1997, with over 14 Growth Board Orders find Ferry County Non-Complaint with the GMA for failure to designate, protect, and include BAS in its FWHCAs; these orders were upheld and affirmed by the Superior Court, the Court of Appeals, and the Washington Supreme Court.

Under WAC 365–190–130(2), the County must classify and designate those areas where Endangered, Threatened, Sensitive (ETS) species have a primary association. The Board cited Court of Appeals and Supreme Court decisions holding that the GMA directs counties to determine what lands are primarily associated with listed species, and then to adopt regulations protecting those lands. *Stevens County v. Futurewise*, 146 Wn. App. 512 (2008), rev. denied, *Stevens County v.Futurewise*, 165 Wn.2d 1038 (2009); *Ferry County v. Concerned Friends of Ferry County*, 155 Wn.2d 824, 837 – 839 (2005).

In the 2014 Growth Board case, Petitioners challenged the County's election not to designate habitat for Bull Trout in part because there is no federally – designated "critical habitat" for the species in the County. The Board held that federal Endangered Species Act has different standards for designating habitat than the GMA. Thus, the absence of federally – designated critical habitat is not a determinative fact for purposes of a County's GMA designation of areas where endangered, threatened, or sensitive species have a "primary association." It went on to find substantial evidence in the record demonstrating that Bull Trout is present in Ferry County and has a primary association with certain areas of the County. Accordingly, the County's failure to designate any Bull Trout habitat was not supported by substantial evidence in the record and represented a departure from BAS without any reasoned justification. The Board found that Petitioners failed to come forward with evidence that the County failed to include BAS in designating habitat for the Bald Eagle, Peregrine Falcon, and Fisher.

Concerned Friends of Ferry County, 97-1-0018, coordinated with Concerned Friends of Ferry County and David L. Robinson v. Ferry County, 06-1-0003; Compliance Order (December 1, 2011), page 16: There was no substantial evidence in the record to support a County finding that Best Available Science was included in designating the following types of Fish and Wildlife Habitat Conservation Areas: (1) areas where Endangered, Threatened, and Sensitive Species have a Primary Association, and (2) Habitats and Species of Local Importance. On remand, Ferry County should provide a reasoned justification for departing from Best Available Science in designating Fish and Wildlife Habitat Conservation Areas.

Loon Lake Property Owners Assoc., et al. v. Stevens County, 03-1-0006c,
3rd Order on Compliance, (Dec. 21, 2005). Local governments must "analyze the scientific evidence and other factors in a reasoned process." Easy v. Spokane Co., EWGMHB #96-1-0016, 1997 WL 191457, at 6. Legislative bodies must also be cautious about using their own science just to support their own agenda:

> "Under Heal v. CPSGMHB, Court of Appeals, Cause #40939-1-1 (June 21, 1999), the County cannot choose its own science over all other science and cannot use outdated science to support its choice." *Island Co. Citizens' Growth Management Coalition, et al, v. Island County*, et al, WWGMHB Case No. 98-2-0023c, Compliance Order (March 6, 2000).

The role of the BAS standard has been interpreted by the courts to require more than mere "consideration" of science. BAS must substantively control the standard established and must be reflected in the record.

Concerned Friends of Ferry County, v. Ferry County, 97-1-0018, Order on Reconsideration, (Nov. 24, 1999). It is the County's obligation to include best available science in the designation and protection of frequently flooded areas. Ferry County, by its failure to demonstrate otherwise, forces this Board to conclude that best available science was not included in developing policies in the sections of the Second Amended Ordinance 95-06 under review. The contention that the silence of the reviewing Department is considered approval and constitutes consideration and inclusion of best available science is not correct.

Western Washington

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c: The Board also observes that the [Petitioners'] argument highlights the difficulty of citing Board or appellate court decisions in regard to BAS and the BAS record. The BAS in any particular decision may not be similar to BAS relied on by a different jurisdiction and reflected in the decision challenging that decision. FDO (September 6, 2013), at 73.

RE Sources v. City of Blaine, 09-2-0015, Order on Reconsideration at 2-3 (April 27, 2010) [As to Petitioner's alleged error in regards to the City's two-step process, the Board clarified its FDO and stated:] What the Board did conclude [in the FDO] was that the City failed to adequately analyze all of the functions and values of its wetlands when creating the standard buffers but, given the site-specific detailed study process, the complete analysis of functions and values would be accomplished so as to protect these areas [Citing to various provisions of the City's CAO, BMC 17.82] … Thus, BMC 17.82's two-step detailed study process incorporates BAS on a site-specific level and ensures the existing functions and values of Blaine's critical areas will be protected from further degradation as required by RCW 36.70A.060(2) and 172.

OSF/CPCA v. Jefferson County, 08-2-0029c, FDO, at 37-39 (Nov. 19, 2008). [In noting that development regulations intended to protect critical areas must be based on BAS, the Board held:] The Board finds that although the retention of vegetation [within a CMZ] is important, the importance of vegetation retention is based on bank stabilization and erosion protection and is therefore more relevant within high to moderate risk areas which are at a greater probability of being impacted by the river or stream's migration. A blanket restriction on the removal of vegetation that is not linked to the functions and values it is intended to protect is not supported by BAS.

ADR/Diehl v. Mason County, 07-2-0010, FDO, at 8 (Jan. 16, 2008). [In considering "references" as provided in WAC 365-195-905(5)(a)(6), specifically "other pertinent existing information," the Board held]: [I]t is for the County to determine to what extent the Skillings-Connolly reports may be relevant,

and to disclose the basis for either relying upon or departing from studies that have been accepted as BAS. Until that is done, the CMZ Study cannot be accepted as BAS. To the extent that the amendments to [the ordinance] rely upon a study that cannot yet be accepted as BAS, they fail to comply with RCW 36.70A.172(1).

Swinomish Indian Tribal Community et al. v. Skagit County; 02-2-0012c (Compliance Order, 12-8-03). While the Legislature could have imposed a more precise standard, the requirement to base the protection standard on BAS recognizes that science will change over time and the standards and protection measures will need to be revised. Standards and protection measures that are informed by BAS also provide cities and counties more flexibility to craft regulations that reflect local conditions. Nevertheless, this flexibility imposes on the County the complex responsibility of both setting a protection standard consistent with BAS, when the sources are sometimes conflicting, and harmonizing the goals and requirements of the GMA, while taking into consideration local conditions.

Diehl v. Mason County, 95-2-0073 (Compliance Order, 3-22-00). The "special consideration" language relating to anadromous fish under RCW 36.70A.172(1) requires a result more heavily weighted towards science than might otherwise be required under the BAS provisions of the Act.

Landscape Approach

WEAN/CARE v. Island County, 08-2-0026c, FDO at 14 (Nov 17, 2008). See also, Dec 22, 2008 Order on Reconsideration for WEAN/CARE v. Island County where the Board clarified its holding in regards to the landscape approach.The guidance offered in [Wetlands in Washington] Volume 2, that was based on the BAS synthesized in [Wetlands in Washington] Volume 1, and was considered by the County, recognizes that viable data was not yet available on wildlife habitat or wildlife corridors. Without the needed scientific data, it is impractical for the County to develop regulations based on a landscape approach. For this reason, the Board finds and concludes that the County's decision to use a site-based approach to protect wetlands rather than a landscape-based approach is not a clearly erroneous violation of RCW 36.70A.040(3), RCW 36.70A.060, and RCW 36.70A.170(1).

[T]he science in the Record noted that the performance of wetland functions is controlled by a number of environmental factors within the wetland boundary (site scale) as well as in the broader landscape (landscape scale) and that wetlands do not function in isolation, but rather a wetland's ability to provide certain functions is influenced by the conditions and land uses within their contributing basins. However, the Board noted that the data needed to develop a comprehensive, landscaped-based approach within Island County was not available at this point in time. [Citing to Ecology's Wetland Manual, the Board concluded:] In other words, although the science may suggest utilizing a landscape approach, there is no science in the record for implementing such an approach … the GMA requires the inclusion of the Best Available Science which is science that is presently available as well as practically and economically feasible so as to protect critical areas. The Board finds reliance on prescriptive buffers which incorporate readily available science and is a method supported by Ecology does not fail to protect the functions and values of wetlands. Order on Reconsideration, at 4-5 (Dec. 22, 2008).

Central Puget Sound

Hood Canal Environmental Council, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06), at 30. Petitioner KAPO contends that the County may not rely on federal habitat designations undertaken for another purpose but must conduct its own shoreline inventory or "independent analysis" and show in the record its owned "reasoned process." The Board however, reasons that the "best available science" requirement includes the word "available" as an indicator that a jurisdiction is not required to sponsor independent research but may rely on competent science that is provided from other sources. . . .The Board concludes that the County appropriately relied on available science.

HEAL reminds us that the choice of a city or a county, when faced with competing options for protecting critical areas – each based on competent and current science – is entitled to deference. Kitsap County chose the prescriptive buffer approach, with flexible alternatives, because it found the BAS supporting that approach more persuasive and because it was administratively feasible. The Board is not persuaded that the County's choice was erroneous. FCO at 35-36.

Kitsap County's marine buffers buffer widths are assigned based on SMA land use classifications, not based on the functions and values of the critical areas designation – here, fish and wildlife habitat conservation areas. . . .The County has not differentiated among the functions and values that may need to be protected on shorelines that serve, for example, as herring and smelt spawning areas, juvenile chum rearing areas, Chinook migratory passages, shellfish beds or have other values. Rather they have chosen an undifferentiated buffer width that is at or below the bottom of the effective range for pollutant and sediment removal cited in [BAS]. And they have applied that buffer to SMP land use classifications, not to the location of specific fish and wildlife habitat. . . .The flaw [in this approach] is illustrated by the fact that eelgrass, kelp, and shellfish beds are protected by larger buffers if they happen to be off shores designated Natural or Conservancy [in the SMP], while the same critical resources – eelgrass, kelp, shellfish – have just 35 feet of buffer off the Urban, Semi-rural or Rural shore. Protection for critical areas functions and values should be based first on the needs of the resource as determined by BAS. . . .Here Kitsap County has opted to designate its whole shoreline as critical area but then has not followed through with the protection of all the applicable functions and values. FDO, at 39-41.

Department of Ecology/Department of Community, Trade and Economic Development[3] , et al v. city of Kent, 05-3-0034, FDO (April 19, 2006), at 13-15. [A thorough discussion of the GMA's Best Available Science (BAS) requirement in the context of HEAL (1999) and Ferry County (2005). The Board reiterated the Supreme Court's holding in Ferry County, finding that the Court's 3-factor analysis - (1) The scientific evidence contained in the record; (2) Whether the analysis by the local decision-maker of the scientific evidence and other factors involved a reasoned process; and (3) Whether the decision made by the local government was within the parameters of the Act as directed by the provisions of RCW 36.70A.172(1) - is a case-by-case, rather than a bright-line, review.]

The GMA mandate at issue in the present case, as in WEAN, is the requirement that local jurisdictions include best available science in designating critical areas and protecting their functions and values. Once a challenger has demonstrated that there is no science or outdated science in the City's record in support of its ordinance, or that the City's action is contrary to what BAS supports, it does not impermissibly shift the burden of proof for the Board to review the City's record to determine what

[3] Department of Community, Trade and Economic Development (CTED) is now the Department of Commerce.

science, if any, it relied upon. This is precisely the process undertaken in the Ferry County case. See generally, Ferry County, supra. It is Petitioners' burden to prove by clear and convincing evidence that the City's ordinance does not comply with the GMA because it does not include BAS for wetlands protection. FDO, at 17.

The Legislature determined that scientific understanding of the necessary critical area protections would improve over time; thus, cities do not have to answer all the scientific questions they can think of but only need to apply the best science available at a particular time and place. FDO, at 39.

The Board reviews this case under the framework laid down by the Supreme Court last year in Ferry County and adds a fourth consideration based on WEAN and on the CTED guidelines at WAC 395-195-915(c):

> (1) The scientific evidence contained in the record; (2) Whether the analysis by the local decision-maker of the scientific evidence and other factors involved a reasoned process; (3) Whether the decision made by the local government was within the parameters of the Act as directed by the provisions of RCW 36.70A.172(1); AND (4) Whether there is justification for departure from BAS.

FDO at 42.

Tahoma Audubon Society, et al v. Pierce County, 05-3-0004c, 1/12/06 Compliance Order, at 6. In remanding the noncompliant regulations to [the County], the Board pointed out that . . . the record already contained abundant science concerning the matters at issue. Nevertheless, [the County] undertook additional public process and re-analysis in developing the proposal for [the remand Ordinance]. Base on the prior well developed record, as refined in the compliance process, [the County] has now enacted both designation of critical salmon habitat in [the County] marine shorelines and measures to protect the functions and values of that habitat. While there are various ways that the science in the record might have been applied by [the County] to comply . . . the Board is persuaded that Ordinance No. 2005-80s meets the GMA standard.

HEAL, et al v. City of Seattle, 96-3-0012, 10/4/01 Remand Order, at 6-7. The Board properly applied the *State of Louisiana v. Verity* to the record before it in this case. [If there are scientifically respectable conclusions disputed by rival scientific evidence of presumably equal dignity, the court will not displace the administrative choice.] The Board found that the City took evidence and included it in the record. HEAL presented evidence contrary to the evidence relied upon by the City. The Board properly concluded it could not displace the City's judgment about which science the City would rely upon as the best available science. The Board rejected the idea that the statute required any particular substantive outcome or product. The Board is correct. The legislature passed RCW 36.70A.172(1) five years after the GMA was adopted. It knew of the other factors [goals and specific requirements], but neither made best available science the sole factor, the factor above all other factors nor made it purely procedural. Instead the legislature left the cities and counties with the authority and obligation to take scientific evidence and to balance that evidence among the many goals and factors to fashion locally appropriate regulations based on the evidence not on speculation and surmise. (Citations omitted.)

[The record contained scientific evidence based on "natural systems sciences" and "engineering sciences," the City discussed both sciences, discussed and deliberated on the capital and operational costs of each, then chose and used the "natural systems sciences" in developing its steep slope regulations.] The same evidence of best available science was included and substantively considered by the City when it simultaneously adopted amendments to the steep slope portion of its critical areas

regulations and the amendment to its steep slope policy. Consequently, the Board concludes that the City's adoption of the steep slope (critical area) policy amendment, complies with [the BAS requirement of .172(1). 10/4/01 Remand Order, at 7.

The Tulalip Tribes of Washington v. City of Monroe, 99-3-0013, 1/28/00 Order, at 4. When any local government in the Central Puget Sound region adopts amendments to policies and regulations that purport to protect critical areas pursuant to RCW 36.70A.060(2), those enactments will be subject to meeting the best available science requirements of RCW 36.70A.172 and the potential of appeal to this Board pursuant to RCW 36.70A.280.

HEAL, et al v. City of Seattle, 96-3-0012, 8/21/96, FDO, at 17. Amendments to a previously adopted critical areas ordinance, after the effective date of a legislative amendment (BAS − RCW 36.70A.172) of the GMA, are subject to the best available science requirement of RCW 36.70A.172(1).

Updates to Include New Science

Seattle Audubon Society, et al v. City of Seattle, 06-3-0024, FDO (12/11/06), at 19. [T]he GMA requires that critical areas regulations be updated periodically, RCW 36.70A.130(3), and that cities "shall include" best available science in designating critical areas, RCW 36.70A.172(1). Here, the City of Seattle is aware of a great deal of new science concerning the existence and location of surficial faults and concerning the past occurrence and future risks of tsunamis and lahars. But the City has not included this new science, even provisionally, in its designations of geological hazard areas.

Critical Areas and Stormwater Controls

Bremerton, et al v. Kitsap County, 95-3-0039c/98-3-0032c, FDO, at 31. Although the Booth studies document the basin-wide 10 percent impervious surface threshold for damage to aquatic systems, the studies also identify measures to mitigate the effects of impervious surfaces.

Rather than adopting a maximum limit on impervious surfaces . . . the County, utilizing best available science in a substantive way, adopted a system for critical areas protection that includes buffers, building setbacks, mitigation, and stormwater drainage controls. FDO, at 32.

Under the sequencing scheme of the GMA, the land does speak first; but, on the rare occasion, as is the case here, where the land may speak late − it will be heard. FDO, at 35.

Departure from Best Available Science – A Reasoned Process

Court decisions

Ferry County v. Growth Management Hearings Board , 184 Wn. App. 685, 339 P.3d 478 (2014). A local government must include BAS in the record when designating fish and wildlife habitat conservation areas and must rely on and analyze the information using a reasoned process. The court found that Ferry County failed to comply with the GMA when it departed from or ignored the recommendation of WDFW to designate habitat for endangered, threatened and sensitive (ETS) species or designate species of local importance. The court also found that the County failed to provide a reasoned justification for departing from BAS. When departing from BAS, the county must "show its work" and include the analysis in the record. In the absence of scientific information, the county should adopt a precautionary or no risk approach.

Yakima County v. Eastern Washington Growth Management Hearings Board , 168 Wn. App. 680 (2012). In updates to its critical areas ordinance, Yakima County adopted standard buffers and adjusted minimum stream and wetland buffers. The ordinance was challenged for failure to include BAS and failure to protect all the functions and values of the critical areas as required by RCW 36.70A.172. Almost all of the scientific studies reviewed by the County recommended buffers greater than those adopted by the County. The court found that the GMA requires that regulations for critical areas must protect all functions and values of the designated areas and not just some. The buffers adopted did not protect all functions either for streams or wetlands. While the court recognized that local governments may depart from BAS if a reasoned justification in provided, in this case the court found that the County failed to do so. However, the court also found that the County had provided reasoned justification for not regulating ephemeral streams as critical areas.

Swinomish Indian Tribal Community. v. Western Washington Growth Management Hearings Board, 161 Wn.2d 415 (2007). The GMA doesn't require local governments to always follow BAS. Here the court stated that the county was required to "include" BAS in the record and departures from BAS would be permitted where the county provided a reasoned justification for the departure. The tribe challenged the county's critical areas ordinance for failing to require mandatory riparian buffers. The court concluded the county is not required to enhance critical areas but could protect critical areas by maintaining existing conditions. The county's decision to not require mandatory riparian buffers was a justified departure from BAS because doing so would impose a requirement to restore habitat functions that no longer existed. The GMA requirement to protect critical areas does not impose a corresponding requirement to enhance.

Ferry County v. Concerned Friends of Ferry County, 155 Wn.2d 824, 837–38 (2005); WAC 365–195–915(1)(c)(i) – (iii).A county need not follow Best Available Science if it includes sufficient reasoned justification.

Whidbey Environmental Action Network v. Island County, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), *review denied*, 153 Wn.2d 1025 (2005). Departure from BAS is not reasoned without explanation and justification of another priority. If a city or county adopts a critical areas requirement that is outside the range supported by the best available science, it must provide findings explaining the reasons for its

departure from the best available science and identifying the other GMA goals being implemented by that departure.

Growth Management Hearings Board Decisions

Eastern Washington

Concerned Friends of Ferry County v. Ferry County, 97-1-0018, 8th Compliance Order (Feb. 23, 2010) Finding no reasoned justification for deviation from BAS in the Record, failure to designate FWHCAs, failure to protect functions and values of FWHCAs (specifically as to mapped polygon areas, and failure to adopt consistent language with Comprehensive Plan).

Concerned Friends of Ferry County/Robinson v. Ferry County, EWGMHB 06-1-0003, 2nd Compliance Order at 16 (March 17, 2009). The County is correct in that it has some local government discretion in adopting its regulations, but if the County departs from the science in the record or parameters of BAS, then it must include the BAS it used in order to prevent speculation and surmise in an area that is scientific in nature, identify other GMA goals which it is implementing, and provide reasoned justification when departing from BAS.34 Departure from BAS does not amount to a relinquishment of the duty to protect the functions and values of wetlands.

[In citing to the Court of Appeals decisions in HEAL and WEAN and the Supreme Court's decision in Ferry County, the Board summarized the need for BAS in critical areas:] To reiterate from the HEAL and WEAN cases, the Court concluded:
1. Evidence of BAS must be included in the record.
2. BAS must be considered substantively during the development of critical areas regulations.
3. Local governments may adopt critical areas regulations outside of the range of BAS.
4. But if a regulation is outside of the range of BAS, then the local government must provide reasoned justification for departure from BAS and identify other GMA goals being implemented.
5. Critical areas regulations must protect all the functions and values of designated critical areas.

Concerned Friends of Ferry County /Robinson v. Ferry County, 97-1-0018, Compliance Order, at 13-14 (Feb. 13, 2009). The County's reading of WAC 365-190-080(5) fails to consider that BAS is required to be included to justify its decision whether or not to protect and designate fish and wildlife habitat conservation areas, which include "habitats and species of local importance." The County needs to keep in mind WAC 365-190 is a guideline adopted by the State to guide the classification of critical areas, the intent of which is to assist counties and cities in designating the classification of critical areas under RCW 36.70A.170. In other words, the RCW's control. The optional/permissive "sources and methods" under WAC 365-190-080(5)(c) allows counties to use other sources for BAS "other than the WDFW PHS program," not completely ignore habitats and species of local importance, particularly if the County has the science available in the record that shows certain habitat and species of local importance in the County are "candidates", a step from endangered, threatened and sensitive listing. That science was submitted by the WDFW and not refuted by any other science in the record. To reiterate the key language, the County is required by RCW 36.70A.172 to include BAS in developing policies and development regulations to protect the functions and values of critical areas. If the County chooses to disagree with or ignore scientific recommendations and resources made by state agencies, which it may, then the County must unilaterally develop and obtain valid scientific information. Critical areas are, among other areas, fish and wildlife habitat areas, which include not only areas with which endangered,

threatened, and sensitive species have a primary association, but habitats and species of local importance. If habitats and species of local importance weren't required elements to be protected, they would not have been listed under fish and wildlife Habitat areas.

Concerned Friends of Ferry County v. Ferry County, 97-1-0018, 2nd Order on Compliance, (May 23, 2000).The Board recognizes the prerogative of Ferry County to not adopt the DFW recommendation, as long as that decision was based on a sound, reasoned process that includes best available science. The County has consulted with a credentialed biologist, but the process he undertook to develop his recommendations was inadequate. There was no evidence in the record that the consultant coordinated his recommendation with any other scientists with expertise in Ferry County, such as the Colville tribe, U.S. Forest Service, or the DFW. There was no evidence that any on-site field observations were conducted. With specific reference to the Peregrine Falcon, his recommendation seems to conflict with activities of the Colville Tribe. Regarding Bull Trout, a sensitive species documented to exist in Ferry County, he makes no mention at all.

Western Washington

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c: The Yakima County (Yakima County v. E. Wash. Growth Mgmt. Hearings Bd., 168 Wn. App. 680) decision required a reasoned explanation of a jurisdiction's BAS departure decision or identification of other GMA goals being implemented by that decision. Order Finding Compliance and Continuing Non-Compliance, (August 20, 2014), pg. 45.

[In discussing the requirement for a "reasoned justification" for departure from BAS, the Board stated]: a "reasoned justification" should include a consideration of the science in the record together with predominantly scientific, technical, or legal factors that support a departure from Best Available Science recommendations. Social, cultural, or political factors should not predominate over the scientific, technical, and legal factors as a rationale for departing from science-based recommendations. Order Finding Compliance and Continuing Non-Compliance, (August 20, 2014), pg. 35.

OSF/CPCA v. Jefferson County, 08-2-0029c, FDO, at 19-20 (Nov. 19, 2008). [When establishing buffers for streams, Petitioner, in citing to *Swinomish* and *Ferry County* asserted that the Record needs to contain evidence demonstrating that the County —undertook the required reasoned process of balancing the various planning goals against BAS. The Board disagreed and stated:] … the Board does not read these two cases as requiring a balancing between the GMA's mandate to protect critical areas and the non-prioritized goals jurisdictions are to use as a guide when developing comprehensive plans and development regulations. Rather, both *Swinomish* and *Ferry County* set forth the principle that if a jurisdiction seeks to deviate from BAS it must provide a reasoned justification for such a deviation. In addition, the Court of Appeals in *WEAN v. Island County* stated that it is when a jurisdiction elects to adopt a critical area requirement that is outside the range that BAS would support, the jurisdiction must provided findings explaining the reasons for its departure from BAS and identifying the other goals of GMA which it is implementing by making such a choice. Here, Jefferson County's choice of buffer width did not deviate from BAS; rather the County selected a width within the range of BAS and as such, although the balancing of GMA goals is always required in the context of GMA planning, the justification sought by OSF is not needed for a decision supported by BAS.

Swinomish Indian Tribal Community et al. v. Skagit County; 2-2-0012c (Compliance Order, 12-8-03). When a less-than-precautionary approach is chosen for protection, that approach requires an effective

monitoring and adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions adopted by the County achieve their objectives.

Olympic Environmental Council, et al. v. Jefferson County, 01-2-0015 (Compliance Order, 12-4-02). A county which has considered the best available science and adopted less stringent protection standards that balance the need for protection of potable water supplies against the chilling effect of regulation against development has complied with the GMA only if the county also adopts a monitoring strategy that includes stricter development regulations that will be implemented at once if the less stringent protection standards prove to be inadequate to protect against seawater intrusion.

Central Puget Sound

Department of Ecology/Department of Community, Trade and Economic Development[4] , et al v. city of Kent, 05-3-0034, FDO (April 19, 2006), FDO at 53. Mere recitals on the part of the local government that it "considered" BAS and chose to depart from it in the service of other GMA goals are inadequate. The justifications for departure must be supported by evidence in the record.

[An analysis is required to demonstrate how the various regulations, projects, and programs, together or separately, protect the specific hydrologic, water quality and habitat functions and values of a City's wetlands allow for, under WEAN, a departure from protections that are within the range of best available science. FDO, at 48-49.

Pilchuck Audubon Society v. The City of Mukilteo, 05-3-0029, FDO October 10, 2005, at 10-11. Although Mukilteo argues that the best available science was "included" in providing the basis for the 40% buffer reduction provision from DOE Buffer Alternative 3 methodology, nothing in the record shows that best available science was even considered in making the decision. The 50% reduction that appeared very early in the City's revision process was not informed by best available science, as discussed supra, and nothing in the record indicates a reduction of more than 25% is an appropriate deviation from DOE Buffer Alternative 3 methodology. The City's argument that changes can be made from best available science recommendations without any justification for the changes would eliminate the stated purpose of the best available science requirement – protection of the function and values of critical areas. A jurisdiction must provide some rationale for departing from science based regulations. (Citation and quote from Court of Appeals Division I decision in WEAN v. Island County).

[4] Department of Community, Trade and Economic Development (CTED) is now the Department of Commerce.

Qualifications for Best Available Science under the GMA

Court Decisions

Ferry County. v. Growth Mgmt. Hearings Bd., 184 Wash. App. 685, 339 P.3d 478 (2014).
The court found that Ferry County failed to comply with the GMA when it departed from or ignored the recommendation of WDFW to designate habitat for endangered, threatened and sensitive (ETS) species or designate species of local importance. A county must rely on scientific information in designation of critical areas but need not develop the scientific information itself. Neither is the county required to use a particular methodology in its analysis but it must use some kind of scientific methodology. Counties must consider competing scientific information and other factors in a reasoned process of analysis. If a county chooses to disagree with or ignore the scientific information from other sources, it must then develop or obtain other valid information supporting its decision or provide a reasoned justification for departure.

Kitsap Alliance of Property Owners v. Central Puget Sound Growth Management Hearings Board, 160 Wash. App. 250 (2011)
The GMA requires local governments to use best *available* science and the court recognized that the best science that is available may include science that is "immature" or not fully developed. The court upheld the board finding that the GMA required including the best science that was available and the proper remedy for addressing the problem of science that was not fully developed was the requirement in the GMA for periodic updates rather than rejection of the available but not fully developed science.

Ferry County v. Concerned Friends of Ferry County, 155 Wn.2d 824, 123 P.3d 102 (Nov. 17, 2005).
Compliance with the GMA's best available science requirement must be supported by evidence in the record. Noting the absence of any statutory definition, the Court turned to the Growth Management Hearings Boards' interpretations of the BAS requirement as an indication of the operative standards at the time of Ferry County's actions in this case. The Court concluded the Boards "at least required local governments to produce valid scientific information and consider competing scientific information and other factors through analysis constituting a reasoned process." The Court held that regardless of the precise definition applied, the process undertaken and the information considered by Ferry County in this case did not rise to the level of BAS.

The record must demonstrate that the County used scientific information and analyzed that information using a reasoned process. The Court appears to have used a two-part test to assess the County's compliance with the GMA's BAS requirement: (1) the County must rely on scientific information—the BAS requirement does not mandate the use of a particular methodology, but it requires at a minimum the use of a scientific methodology; (2) the steps taken in analyzing the scientific information must constitute a reasoned process, with the process evident in the record. Quoting from a 2000 Western Board decision, the Court suggested it is not a reasoned process for a county to "choose its own science over all other science" or "use outdated science to support its choice."

The Court also cited approvingly to the BAS guidance adopted by the state Department of Community, Trade and Economic Development in 1999 (WAC 365-195-900 through -925), which provide criteria for assessing whether proffered information can be considered scientific information and for engaging in a

"reasoned process." The rules did not apply to Ferry County's actions here because the rules took effect after those actions.

Honesty in Environmental Analysis & Legislation (HEAL) v. Central Puget Sound Growth Management Hearings Board, 96 Wn. App. 522, 979 P.2d 864 (June 21, 1999) (amended Aug. 25, 1999). Local governments must give substantial consideration to the best available science when developing critical area policies and regulations.

The best available science requirement is intended to ensure that critical areas regulations are not based on "speculation and surmise."

Compliance with the best available science requirement may be necessary to satisfy constitutional nexus and proportionality requirements. The Court suggested in dictum that the best available science requirement may have constitutional ramifications with respect to the nexus and rough proportionality limits the United States Supreme Court has placed on governmental authority to impose conditions on development applications.

Growth Management Hearings Board Decisions

Western Washington

WEAN/CARE v. Island County, Order on Reconsideration (Dec. 22, 2008), at 4. [As to the GMA's requirement for the use of BAS, the Board noted:] … the adjective "available" generally meaning to be present or ready for immediate use. Therefore, the word "available" would be pointless if construed to mean science that is expected to be available at some future date, especially given the GMA's requirement to include BAS - as how can the County include that which does not exist?

The Board recognizes that a graduate-level research study, such as the Pantier Thesis, may satisfy WAC 365-195-906's criteria for a valid scientific process. However, parties should not take for granted that any document will be automatically considered BAS under the GMA just because it is scientific in nature. Petitioners asserting that a jurisdiction has failed to utilize BAS and are countering the jurisdiction's actions with a competing document must ensure that the document conforms to the WAC criteria for BAS so that it will be properly considered by the Board. Order on Reconsideration at 10.

WEAN wants the Board to ignore all other numbers in favor of the numbers presented in the Pantier Thesis. In other words, WEAN requests that the Board grant the Pantier Thesis the status of BEST available science and argues that Island County was required to use the results of that research when developing its definitional criteria for MF wetlands. RCW 36.70A.172 requires Island County to include and consider BAS when developing critical area regulations. In doing so, the County is permitted to not adopt WEAN's scientific recommendations and resources in favor of other valid scientific information. In fact, this is the discretion the Legislature has granted the County and to which the Board is directed to defer. It is not for the Board to decide what is the BEST science or to displace the County's judgment about which science to rely upon with its own. Order on Reconsideration at 12-13.

For further discussion as to qualifications for BAS See *WEAN /CARE v. Island County*, Case No. 08-2-0026c, FDO at 49-54 (Nov 17, 2008).

ADR/Diehl v. Mason County, 07-2-0010, FDO (Jan. 16, 2008), at 7. Criteria for determining which information is BAS are described in the Procedural Criteria for Adopting Comprehensive Plans and Development Regulations, Chapter 365-195 WAC. In WAC 365-195-905(5), there are listed six elements that a local jurisdiction should consider to determine whether the scientific information that has been produced was obtained through a valid scientific process such that it is the best available science. The "characteristics of a valid scientific process" are: peer review, methods, logical conclusions and reasonable inferences, quantitative analysis, context, and references.

[In considering "peer review' as provided in WAC 365-195-906(5)(a)(1), the Board, relying on Concerned Friends of Ferry County v. Ferry County, 155 Wn2d 824 (2005) held]: [T]he CTED guidelines provide guidance for the scientific methodology of the evidence. We need not decide whether peer review is mandated in every case. The failure of the CMZ Study to consider the Skillings Connolly reports or the relevant information regarding future flows from the Cushman dam demonstrates that peer review is necessary in this case. FDO at 11-12.

[If a jurisdiction adopts a program as part of its critical areas protections, then the program] [M]ust comply with the provision of the GMA that dictates that "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." The County cannot make such a change to its critical areas' protections unless BAS is included in the record … Here, the record does not include BAS, a reasoned analysis of BAS by the decision makers, or an identification of the risks of departing from BAS and measures to minimize these risks. Therefore, the County's decision to abandon its dike monitoring program does not comply with RCW 36.70A.172. FDO at 14-16.

ARD/Diehl v. Mason County, 07-2-0006, FDO (Aug. 20, 2007), at 31. WAC 365-195-900 allows counties and cities to use information that local, state, or federal natural resource agencies have determined represented the best available science consistent with criteria set out in WAC 365-195-900 through 365-195-925. Those provisions require that scientific information be produced through a valid scientific process subject to peer review and setting out methods, logical conclusions, quantitative analysis, context, and references.

WEAN v. Island County, 98-2-0023c (2006 Order Finding Compliance of Critical Areas Protections in Rural Lands, September 1, 2006); WEAN v. Island County, 06-2-0012c (FDO, September 14, 2006). Based on the County's reasoned review of the factors in WAC 365-195-905(5) for determining if the NRCS BMPs constitute best available science; and the assessment of the state agencies with expertise in this area – Ecology, Fish and Wildlife, and CTED[5] – we find that the NRCS BMPs constitute best available science for the regulation of ongoing noncommercial agricultural practices in Island County, so long as they are accompanied by monitoring and an adaptive management program.

PPF v. Clallam County 00-2-0008 FDO (12-19-00). 'Available' means not only that the evidence must be contained in the record, but also that the science must be practically and economically feasible. 'Best' means that within the evidence contained in the record a local government must make choices based upon the scientific information presented to it. The wider the dispute of scientific evidence, the broader the range of discretion allowed to local governments. Ultimately, a local government must take into account the practical and economic application of the science to determine if it is the 'best available'.

[5] Now, the Washington State Department of Commerce.

Updates to Critical Areas Regulations

Court Decisions

Thurston County v. Western Washington Growth Management Hearings Board, 164 Wn.2d 329, 2008. In a challenge to the expansion of the Thurston County's urban growth area as part of its required update under RCW 36.70A.130, the Court stated:

> …a party may challenge a County's failure to revise a comprehensive plan only with respect to those provisions that are directly affected by new or recently amended GMA provisions, meaning those provisions related to mandatory elements of a comprehensive plan that have been adopted or substantively amended since the previous comprehensive plan was adopted or updated, following a seven year update.

Growth Management Hearings Board Decisions

Central Puget Sound

Futurewise, Pilchuck Audubon Society, and the Tulalip Tribes v. Snohomish County, Case No. 15-3-0012c, FDO at 6 (February 17, 2017). Futurewise and Pilchuck Audubon Society challenged the County's update to its critical areas ordinance where there had been no new or recent GMA amendments, no substantive, relevant regulatory amendments, and no new best available science. The Central Puget Sound Growth Management Hearings Board rejected the petitioners' interpretation of the Thurston County Supreme Court decision. However, the Board found that the County had clearly articulated the applicable law: "…where a regulation is wholly unchanged or is amended in a manner unrelated to the substance of the legal issue…and petitioner cites no changed science or GMA mandate, the challenge is time barred." The Hearings Board went on to state:

> "…even though the Board rejects Petitioners' interpretation of *Thurston County*, challenges to CAR amendments may be raised if the County failed to consider BAS in substantively amending the CARs. That is, if there has been "new", more recent, science developed applicable to the protection of the functions and values of a particular critical area, an amended CAR would need to reflect consideration of same."[6]

John Postema v. Snohomish County, Case No. 15-3-0011, FDO at pp 5-6 (April 8, 2016)**.** A specific restriction to the Board's scope of review arises when a party challenges a comprehensive plan or development regulation that has been "updated" in response to GMA planning cycles. The Supreme Court has ruled that the periodic updates required in the statute do not create an open season for challenges to previously-adopted provisions that are carried over into the new plan or code.

[6] Note: This summary is the author's as the Growth Management Hearings Board had not posted a summary in its digest as of the publication of this chapter.

[Citations omitted].Thus a party may challenge only new or amended plan and regulatory provisions in an update. Challenge to unchanged provisions is time-barred except where required by a recent GMA legislative amendment, new population forecast, or changed science concerning protection of critical area functions and values.

Adaptive Management

Court Decisions

Swinomish Indian Tribal Community v. Western Washington Growth Management Hearings Board, 161 Wn.2d 415 (2007). The court found that the county's adaptive management and monitoring program was not compliant with the GMA agreeing with the Board below that the ordinance did not have an effective management process that was capable of responding to detected harm. The county had not established benchmarks thus the county could not analyze data gathered in the monitoring program against a sufficient benchmark. The court also found that the proposal to monitor current conditions in an effort to establish benchmarks in the future was not compliant with the GMA and only held the promise of future compliance. To comply with the GMA, local governments must either be certain that their critical areas regulations will prevent harm or be prepared to recognize and respond effectively to any unforeseen harm that arises.

Growth Management Hearings Board Decisions

Western Washington

WEAN/CARE v. Island County, 08-2-0026c, FDO at 75 (Nov. 17, 2008). [B]ecause Island County is well along in establishing a baseline for certain wetland parameters due the completion of the assessment and survey completed for the Phase 1 Report, has adopted a system of protective buffers, and is following Ecology's recommendations on what kind of information to collect and report, the Board finds that an adaptive management and monitoring program with benchmarks and triggering mechanism that the Board found necessary in previous cases [such as *Swinomish Tribe v. Skagit County*, WWGMHB 02-2-0012, *Olympic Environmental Council v. Jefferson County* , WWGMHB 02-2-0015, and *WEAN v. Island County*, WWGMHB Case No. 98-2-0023c] is not critical at this stage of the County's monitoring and adaptive management program.

Evergreen Islands/Futurewise, et al v. Anacortes, Case No. 05-2-0016, Compliance Order, at 5 (April 9, 2007) [The Western Board held that] ...because the City has adopted precautionary measures based on BAS to protect wetlands, [the Board does not] need to reach the issue of whether its adaptive management problem complies with RCW 36.70A.172.

WEAN v. Island County, Case No. 98-2-0023c (2006 Order Finding Compliance of Critical Areas Protections in Rural Lands, September 1, 2006); WEAN v. Island County, WWGMHB Case No. 06-2-0012c (FDO, September 14, 2006). [T]he County's monitoring and adaptive management program for the NRCS BMPs it has adopted to regulate farming activities in critical areas meet the scientific standards for such programs. The County's program sets monitoring parameters that are reasonably related to the

protection of the functions and values of critical areas affected by agricultural activities. The program will establish baseline conditions, monitor water quality according to State standards, tie any contamination to the source, and refer this information to the Planning Director for action.

Stephen F. Ludwig v. San Juan County, Case No. 05-2-0019c (FDO, Compliance Order, April 19, 2006) In light of the limitations of its ground water model and the data assembled to date, the studies done do not conclusively show that the increased densities of the UGA will not result in saltwater intrusion into the water supply. The adaptive management program recommended by the advisory group is a necessary part of the County's protection strategy. Until the County completes these missing pieces, the Lopez Village UGA fails to comply with RCW 36.70A.070(3)(a)-(d), RCW 36.70A.070(1), and RCW 36.70A.020(10) and (12).

Olympic Environmental Council, et al. v. Jefferson County, 01-2-0015 (Compliance Order, 12-4-02). A county which has considered the best available science and adopted less stringent protection standards that balance the need for protection of potable water supplies against the chilling effect of regulation against development has complied with the GMA only if the county also adopts a monitoring strategy that includes stricter development regulations that will be implemented at once if the less stringent protection standards prove to be inadequate to protect against seawater intrusion.

Wetlands

Court Decisions

Yakima County v. Eastern Washington Growth Management Hearings Board, 168 Wn. App. 680 (2012). In updates to its critical areas ordinance, Yakima County adopted standard buffers and adjusted minimum stream and wetland buffers. The ordinance was challenged for failure to include BAS and failure to protect all the functions and values of the critical areas as required by RCW 36.70A.172. Almost all of the scientific studies reviewed by the County recommended buffers greater than those adopted by the County. The Court found that the GMA requires that regulations for critical areas must protect all functions and values of the designated areas and not just some. The Court found that the County had failed to justify its departure from best available science in allowing administratively approved wetland buffers of 25 feet. The Court noted that the vast majority of best available science included in the decision making process recommended much larger minimum buffers and the County gave no basis in its review for the reduction and also didn't require individual adjustments to be based on best available science.

Growth Management Hearings Boards

Eastern Washington

Concerned Friends of Ferry County/Robinson v. Ferry County, 06-1-0003, 2nd Compliance Order, at 19 (March 17, 2009). The County chose to protect wetlands using the DOE's Buffer Alternative 3, which is "[W]idth based on wetland category, intensity of impacts, and wetland functions or special

characteristics." The intensity of impacts criteria, which are directly related to the frequency and duration of disturbance, is a key component of Alternative 3. By allowing high impact agricultural activities and residential use in its low intensity wetland areas, the County failed to protect the functions and values of wetlands, and failed to provide any reasoned justification, such as scientific-based information, to depart from the DOE's land use recommendations for Low Intensity Land Use.

Western Washington

WEAN/CARE v. Island County, 08-2-0026c, FDO at 14 (Nov 17, 2008). See also, Dec 22, 2008 Order on Reconsideration for WEAN/CARE v. Island County where the Board clarified its holding in regards to the landscape approach.The guidance offered in [Wetlands in Washington] Volume 2, that was based on the BAS synthesized in [Wetlands in Washington] Volume 1, and was considered by the County, recognizes that viable data was not yet available on wildlife habitat or wildlife corridors. Without the needed scientific data, it is impractical for the County to develop regulations based on a landscape approach. For this reason, the Board finds and concludes that the County's decision to use a site-based approach to protect wetlands rather than a landscape-based approach is not a clearly erroneous violation of RCW 36.70A.040(3), RCW 36.70A.060, and RCW 36.70A.170(1).

For discussion as to measures for the protection of wetland functions and values, including buffers, mitigation, mature wetland forests, land use intensity and fencing, see FDO at 54-73 and, for further clarification, Dec. 22, 2008 Order on Reconsideration at 6-14 and 17-21.

Olympic Environmental Council v. Jefferson County, 01-2-0015 (FDO, 1-10-02). If the county wishes to adopt less-than precautionary protection standards and Best Management Practices, an adaptive management program must be developed and implemented that would ensure that monitoring of new and existing wells would continue and more strict protective action were planned for and ready to implement at once if the adopted strategies are not adequate.

Central Puget Sound

Seattle Audubon Society, et al v. City of Seattle, 06-3-0024, FDO (12/11/06), at 24. In Category IV wetlands (the most degraded) of less than 100 square feet, the City allows development impacts if they are mitigated by on-site replacement, bioswales, revegetation, or roof gardens. SMC 25.09.160.C.3. However, no buffers are required. In Hood Canal, the Board acknowledged the potential disproportionality of requiring buffers as the means of protecting functions of the smallest, most degraded wetlands. *Hood Canal*, at 19, fn. 23. The Board noted that other mitigating strategies, such as best management practices or compensatory on-site or off-site mitigation might be scientifically supported. Id. Here, Seattle has opted for alternative protection mechanisms for these limited cases of small, isolated, low-functioning wetlands. The Petitioners have not carried their burden of proving that the City's regulations for small Category IV wetlands are clearly erroneous.

[Seattle's CAO exempts hydrologically isolated wetlands of less than 100 square feet, relying on science that states that wetlands down to 200 square feet may provide habitat for amphibians but that BAS cannot yet assess ecological functions of very small wetlands.] Nevertheless, Seattle has undertaken a study to map wetlands in Seattle, in collaboration with the U.S. Fish and Wildlife Service. Doc. 3h, at 7.

Preliminary findings of the survey identified 733 possible wetlands in the City, of which 197 were estimated to be smaller than 1,000 square feet. *Id*. at 9. Wetlands smaller than 100 square feet – and hydrologically isolated - would necessarily be a smaller subset of the 197. To require the City to address specific harm from possible loss of this subset of very small isolated wetlands, when best available science cannot assess their ecological functions, would stretch the Board's authority. A fee-in-lieu compensatory mitigation program would of course be preferable, as it would enable the City to mitigate any cumulative impacts that future scientific understandings might bring to light. However, in the context of a narrowly-tailored exemption based on science, the Board is not persuaded that the GMA requires more. FDO, at 26.

The GMA mandates that local governments must protect the function and values of critical areas, and buffers around certain critical areas are scientifically supported as a preferred protection strategy. The GMA does not mandate that critical area buffers must be "no-build" or "no touch" areas. The Board reviews the BAS in the City's record to determine whether the particular buffer regulation adopted – whether "no build" or fully mitigated – provide protections for functions and values within the scope of the science. FDO, at 35.

Department of Ecology/Department of Community, Trade and Economic Development[7] , et al v. city of Kent, 05-3-0034, FDO (April 19, 2006), at 10. In designating critical areas, cities and counties "shall consider" the minimum guidelines promulgated by CTED in consultation with DOE pursuant to RCW 36.70A.050(1) and (3); .170(2). In particular, wetlands "shall be delineated" pursuant to the DOE manual. RCW 36.70A.175.

Wetlands are defined in Section .030(21) and are required to be delineated according to Ecology's manual. RCW 36.70A.175. WAC 365-190-080(1) states that city and county designation of wetlands "shall use the definition" in Section .030(21). Expanding the statutory exemption results in a failure of accurate designation and, thus, a failure to protect the functions and values of these critical areas, as required by RCW 36.70A.172(1). FDO, at 26.

Identifying and designating wetlands in order to protect their functions and values is a requirement of the GMA. Jurisdictions are not free to rewrite the statutory definition where its terms are explicit, as they are with respect to the exemption for accidentally-created wetlands. FDO, at 27.

The GMA imposes a requirement to protect critical area functions and values based on best available science. Wetland classification schemes are not necessary, but if used, they must be based on BAS in order to ensure that the related buffer requirements provide the needed protections. FDO at 31.

[T]he Petitioners have met their burden of proof by demonstrating that the City's record lacks a current scientific basis for its wetlands rating system and that the three tier system is designed "with specific and narrow functions in mind," rather than protecting "the entirety of functions" of the City's wetlands. The Board does not find in the City's record any current science supporting the truncated wetland rating system or indicating how wetland functions will be identified and protected with this system. FDO, at 33.

In reenacting its three-tier wetlands ranking system, Kent failed to account for the full range of wetland functions and therefore failed in its GMA obligation to protect critical area functions and values. [As clarified in the following section, protection of functions could possibly have been provided, even under

[7] Department of Community, Trade and Economic Development (CTED) is now the Department of Commerce.

a three-tier system, with wider required buffers and other adjustments.] Retaining this outdated system ignores the advances of science and understanding of wetland functions and values that have occurred over the last decade. Retention of an obsolete, albeit "comfortable" system makes a mockery of, and totally ignores, the requirement of RCW 36.70A.130(1) that local cities and counties must update CAOs based upon BAS, which is continually being refined. FDO, at 34.

[T]he complexity of wetlands protection is a function of the interplay between land uses, the specific wetland functions at risk, the degree of effectiveness, and other factors that might be more accurately assessed on a case-by-case basis. Where prescriptive regulation is enacted, a first step is designing a ranking system that reflects the full range of wetland functions and so addresses the protection of all functions. FDO, at 39.

Hood Canal Environmental Council, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06) at 19-20. [The County exempted from regulation very small, truly isolated and poorly functioning wetlands. The County was advised by state agencies that such exemptions were not supported by BAS. The Board reviewed the case of *ClallamCounty v. Western Washington Growth Management Hearings Board*, 130 Wash. App. 127, 140, 121 P.3d 764 (2005), pertaining to the limitations on exemptions from critical areas regulations.] The Board reads the Court's opinion to require CAO exemptions to be supported by some analysis of cumulative impacts and corresponding mitigation or adaptive management. Here, Kitsap County has not expanded its small wetlands exemption; in fact the exemption has been somewhat narrowed. But there is no evidence in the record of the likely number of exempt wetlands, no cumulative impacts assessment or adaptive management, and no monitoring program to assure no net loss. In light of the Court's guidance in Clallam County, which the Board finds controlling, the Board is persuaded that a mistake has been made; Kitsap's wetland exemption is clearly erroneous.

Fish and Wildlife Habitat Conservation Areas

Court Decisions

Ferry County v. Concerned Friends of Ferry County, 155 Wn.2d 824, 123 P.3d 102 (Nov. 17, 2005). In 1997, a citizens group filed a petition with the Eastern Board alleging the County had failed to include best available science (BAS) when adopting policies to protect two types of critical areas: wetlands and fish and wildlife habitat conservation areas. The Board agreed and found the County in noncompliance. After some delay, the County responded by amending its comprehensive plan policies designating fish and wildlife habitat conservation areas. The County chose not to follow the recommendations provided in materials produced by the state Department of Fish and Wildlife, instead relying on the recommendations of a paid consultant.

The citizens group alleged the consultant's recommendations were not based on BAS and were inconsistent with other science in the record. Again, the Board agreed and found the County in continued noncompliance. The Superior Court and Court of Appeals affirmed. The Court of Appeals held the Board's decision was supported by substantial evidence in the record, and it explained how the County's consultant relied on only two sources to determine which species required habitat protection: a guide to breeding birds in Washington and conversations with an unidentified state biologist. The consultant did not conduct any field observations, did not consult with other experts with knowledge of the region, and did not engage in any other "reasoned analysis."

The Supreme Court accepted review to decide whether substantial evidence supported the Board's finding that the County did not base its species listing on the best available science. The Court concluded:

- Compliance with the GMA's best available science requirement must be supported by evidence in the record. Noting the absence of any statutory definition, the Court turned to the Growth Management Hearings Boards' interpretations of the BAS requirement as an indication of the operative standards at the time of Ferry County's actions in this case. The Court concluded the Boards "at least required local governments to produce valid scientific information and consider competing scientific information and other factors through analysis constituting a reasoned process."[8] The Court held that regardless of the precise definition applied, the process undertaken and the information considered by Ferry County in this case did not rise to the level of BAS.
- The Court appears to have used a two-part test to assess the County's compliance with the GMA's BAS requirement: (1) the County must rely on scientific information—the BAS requirement does not mandate the use of a particular methodology, but it requires at a minimum the use of a scientific methodology; (2) the steps taken in analyzing the scientific information must constitute a reasoned process, with the process evident in the record. Quoting from a 2000 Western Board decision, the Court suggested it is not a reasoned process for a county to "choose its own science over all other science" or "use outdated science to support its choice."[9]

The Court also cited approvingly to the BAS guidance adopted by the state Department of Community, Trade and Economic Development in 1999 (WAC 365-195-900 through -925), which provide criteria for assessing whether proffered information can be considered scientific information and for engaging in a "reasoned process." The rules did not apply to Ferry County's actions here because the rules took effect after those actions.

Growth Management Hearings Boards

Eastern Washington

Confederated Tribes and Bands of the Yakama Nation v. Yakima County, 10-1-0007:
[The] Yakima County map, together with the various performance standards, definitions, and policy statements in Yakima County Code Chapter 16C.06, constitutes Yakima County's designation of fish and wildlife habitat conservation areas for aquatic species located outside of [Shoreline Management Act] jurisdiction, as contemplated by the GMA and reflecting a consideration of the applicable Department of Commerce Guidelines. Petitioner offered no evidence that this multi-layered approach to habitat designation fails to satisfy the requirement in RCW 36.70A.170(1). Final Decision and Order (August 17, 2010), at 9.

[8] 155 Wn.2d at 835, ¶ 21.

[9] *Id.* at 837-38, ¶ 28.

Endangered, Threatened or Sensitive Species

Concerned Friends of Ferry County v. Ferry County, 97-1-0018c (January 23, 2013) Order Finding Continuing Noncompliance at p. 11. [In addressing bull trout critical habitat, the Board stated: [T]he absence of federally-designated critical habitat is not a determinative fact for purposes of a county's GMA designation of areas where endangered, threatened or sensitive species have a "primary association."

Futurewise v. Stevens County, 05-1-0006, FDO, (Jan. 13, 2006) In designating fish and wildlife habitat conservation areas, the County must at least designate "areas with which endangered, threatened, or sensitive species have a primary association and the designation" must be based on best available science as required by 36.70A.172.

The County has done an admirable job of requiring pre-set buffers or alternative buffers set on a case by case basis, and requiring a report from a qualified professional to set management recommendations, if a development is within "a mapped critical habitat area" for endangered, threatened or sensitive species. But the County falls short by defining "critical habitat" as "only those areas designated by a state or federal agency through a formal statutory or rule-making process.

If Stevens County does not designate fish and wildlife conservation areas for certain listed species using BAS and all the information available from WDFW, but neighboring counties, such as Ferry County and Pend Oreille County do, then there would be a disconnect in protection for the listed species and extinction a real possibility. To protect endangered, threatened, or sensitive species and their habitat, such as the lynx, which knows no country, state or county boundary, there must be intergovernmental cooperation and coordination, as stated in WAC 365-190-080(5).

Simply put, the federal government can designate critical habitat for endangered, threatened or sensitive species, but under a separate rule-making process and, for the most part, only for federal lands. Therefore, the U.S. Fish and Wildlife Service rule-making does not have an effect on most state or Stevens County lands.

The Board asks the following question. If the state does not have the legislative authority to designate critical habitat for endangered, threatened or sensitive species through a rule-making process and the federal government's rule-making for endangered, threatened or sensitive species habitat is separate from its listed species, then what jurisdiction is responsible to protect the endangered, threatened or sensitive species habitat? This question is answered by Mr. Kevin Robinette in his e-mail to Ms. Wagenman on July 28, 2004:

> "Since Critical Areas are designated by Counties and Cities under the Growth Management Act (with input from WDFW and the public), the formal rule making process is that of the local municipalities."

Since there is no "formal statutory or rule-making process for endangered, threatened or sensitive species critical habitat", SCC 13.10.034(3)(C) fails to protect Fish and Wildlife Habitat Conservation Areas as required by the GMA. The protection measures are based on a specific "mapped critical habitat area".

As required by the GMA, the County must protect listed species and their habitat. Even though the County has protected five of the six listed species to some degree by protecting riparian areas, wetlands,

lakes and waterways, it has not fully complied by protecting all fish and wildlife conservation areas for listed species using BAS. If the County had not added SCC 13.10.034(3)(C) and if they had referenced and adopted the use of the WDFW's Priority Habitats and Species Database maps, which include polygon habitat areas for species such as the lynx, as the County did with SCC 13.10.034(4), Mapped Point Species Observations, it would be in compliance. But the County did not.

CFFC/Robinson v. Ferry County, 97-1-0018, Compliance Order, at 15 (Feb. 13, 2009).
A nomination process for habitats and species of local importance is necessary for listing those habitats and species which become candidates in the future, not as the sole process to protect those already in danger. It is not the responsibility of the WDFW or any other state agency, as suggested by the County, to petition the County to adopt a habitat, species or both. The GMA specifically requires the County to protect fish and wildlife conservation areas, thus endangered, threatened and sensitive species and habitats and species of local importance.

Polygon and point data are based on actual field surveys and observations of the species … WDFW claims if a habitat is mapped, then a species inhabits or has been known to inhabit that area … The Board has held that failing to protect both point and polygon data violates the GMA. Compliance Order, at 18.

As to point and polygon validations in Section 9.04, the Board finds this section is out of compliance with RCW's 36.70A.060 and 36.70A.172 for failure to protect endangered, threatened and sensitive species by requiring WDFW, a state agency without authority to enforce local CAO provisions (or any Ferry County code provisions, even if they relate to fish and wildlife), to validate point observations and polygon observations, which would only then trigger protection measures. Compliance Order, at 18.

Habitats and Species of Local Importance

Loon Lake Property Owners Assoc., et al. v. Stevens County, 03-1-0006c, 3rd Order on Compliance, (Dec. 21, 2005). The County is required to make a "reasoned analysis on the record, including best available science and other local factors" in determining whether or not a habitat or species should be designated as Habitat or Species of Local Importance. *Island County Citizens Growth Management Coalition v. Island County (supra)*. The Growth Management Act requires the record to include best available science in developing policies and development regulations to protect the functions and values of critical areas, which Habitats and Species of Local Importance are an important part. RCW 36.70A.172(1).

Case law has made it perfectly clear that legislative bodies, such as counties and cities, must substantially consider best available science to support their findings concerning the nominations of Habitat of Local Importance and/or Species of Local Importance. In addition, a local jurisdiction is not constrained to adopt only the science recognized by state or federal agencies, but a variation from formally identified BAS must be supported in the record by evidence that also meets the BAS standard (see WAC 365-195-905).

Local governments must "analyze the scientific evidence and other factors in a reasoned process." *Easy v. Spokane Co*., EWGMHB #96-1-0016, 1997 WL 191457, at 6. Legislative bodies must also be cautious about using their own science just to support their own agenda:

> "Under Heal v. CPSGMHB, Court of Appeals, Cause #40939-1-1 (June 21, 1999), the County cannot choose its own science over all other science and cannot use outdated science to support its choice*." Island Co. Citizens' Growth Management Coalition, et al, v. Island County*, et al, WWGMHB Case No. 98-2-0023c, Compliance Order (March 6, 2000).

In addition, the Board takes note from *Clark County Natural Resources Council, et al. v. Clark County*, et al., WWGMHB Case #96-2-0017, Compliance Order (Nov., 1997), that science determines what habitat and species should be designated Habitat and Species of Local Importance, not whether the nominated habitat or species is listed by the WDFW as priority habitat and species. The Western Board held the following:

> "In the final order in this case, we noted that the overwhelming scientific evidence in the record virtually required establishment of the three FWHAs of local importance that were not otherwise previously designated by DFW as priority habitat and species areas."

Ephemeral Streams

Hazen, et al v. Yakima County, 08-1-008c (April 5, 2010) , FDO at 34. [In regards to Ephemeral Streams] the GMA itself does not define fish and wildlife habitat. WAC 365-190-130(2)(f) states that "waters of the state" must be considered for designation as habitat. An ephemeral stream meets the definition of "waters of the state" and thus was required to be considered for designation.

[In finding the County's action in not designating ephemeral streams as a critical area failed to comply with the GMA, the Board noted] [F]or Yakima County, ephemeral and intermittent streams comprise a large portion of the County's watershed and contribute to the hydrological, biogeochemical, and ecological health of the watershed. Wes Hazen/Futurewise emphasizes the important role small streams play in the overall functioning of a stream corridor system, even those that have no fish influence because of their impact on downstream habitat quality, primary due to sediment flow regulation … The role of small streams is further supported by the County's own BAS.

Western Washington

Endangered, Threatened or Sensitive Species

Whidbey Environmental Action Network v. Island County, 14-2-0009: WAC 365-190-130(2) directs jurisdictions to consider and designate areas where endangered, threatened, and sensitive species have a primary association. The County's prairies have such an association with the three referenced [ETS] plant species. Final Decision and Order, June 26, 2015, p. 34.

[Citing WAC 365-190-130(2)(b)'s direction to consider habitats and species of local importance for classification and designation, the Board found the County had failed to protect critical areas by its decision to] not designate Westside prairies, Oak woodlands and herbaceous balds as habitats of local

importance [notwithstanding] the record establishe[d] these areas constitute rare or vulnerable ecological systems and habitat or habitat elements. Final Decision and Order, June 26, 2015, p. 37.

Habitats and Species of Local Importance

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c: [T]he decision on whether or not to designate species or habitats of local importance lies with the County in accordance with WAC 365-190-130. FDO (September 6, 2013), at 39.

The Board is unaware of any requirement in the GMA which mandates the establishment of a process for designating new habitats of local importance. FDO (September 6, 2013), at 42.

ICCGMC v. Island County, 98-2-0023c, Compliance Order, 11-26-01. A county has wide discretion in determining which plant species and/or habitats have sufficient local importance to warrant designation and protection as species of local importance.

Central Puget Sound

Citizens for a Health Bay v. City of Tacoma, 06-3-0001, FDO (11-1-07), at 7-9. [The Board contrasted the Tahoma Audubon Society v. Pierce County case (CPSGMHB No. 05-3-0004c, FDO, (Jul. 12, 2005), to the present controversy noting that here, the City had designated all its marine shorelines as FWHCAs, based upon salmon habitat protection. The Board noted that Petitioners had failed to document the presence of the "specific habitats or species" that needed designation; and that Petitioners had failed to indicate a different strategy that would be necessary to protect such areas beyond the designation assigned by the City.] Petitioners have put nothing in the record here suggesting that, if science based regulations are adopted to protect salmon habitat, such regulations will not be sufficient to protect other marine resources which they argue should be identified.

The Board takes official notice of the state and federal focus on Puget Sound and on local salmon species. In the last eight years, the federal government has listed several species of Puget Sound anadromous fish under the Endangered Species Act (Citation omitted). In response, communities around the Sound, through collaborative watershed planning and other efforts, have sponsored studies and nearshore inventories to learn how best to protect salmon and other aquatic resources. The Governor has launched an initiative to restore Puget Sound, supported by the Legislature with the creation of the Puget Sound Partnership. One key component of the Puget Sound strategy is the expectation that each city and county has enacted science-based development regulations that protect marine shoreline habitats, as required by the Growth Management Act. RCW 36.70A.480(4), .172(1). FDO, at 10-11.

The Legislature set December 1, 2005 (extended to December 1, 2005), as the deadline for Central Puget Sound cities and counties to update their critical areas ordinances in light of the best available science. . . . The City acknowledged that it has not yet complied with the statutory mandate with respect to regulations for marine shorelines. Thus habitat for endangered salmon, and presumably other marine resources, is not being protected along Tacoma shorelines, although protective regimes have been adopted form marine shores in adjacent and cross-Sound jurisdictions. FDO, at 11.

Tahoma Audubon Society, et al v. Pierce County, 05-3-0004c, FDO July 12, 2005, at 37. [Pursuant to RCW 36.70A.480] the Board agrees with Pierce County that marine shorelines are not per se fish and wildlife habitat conservation areas [critical areas] The Board then asks (1) whether Pierce County used best available science to protect critical fish and wildlife habitat conservation areas on its marine shorelines; (2) whether Pierce County's regulations gave priority to anadromous fish; (3) whether Pierce County's regulations protect the functions and values of marine shorelines as salmon habitat, and (4) whether a vegetative buffer is required. [The County's CAO] identifies a number of critical fish and wildlife conservation areas on its marine shorelines. These include eelgrass beds, shellfish beds, surf smelt spawning areas and the like. However, [the CAO] was drafted to designate and protect all Pierce County marine shorelines. When the County Council voted to remove the marine shorelines from critical areas, it did so (a) without ascertaining whether the remaining protected salt-water areas included all the areas important for protection and enhancement of anadromous fisheries and (b) without assessing whether the overlay of elements remaining in the CAO [i.e. steep slopes, erosion areas, eelgrass beds, etc.] would protect the "values and functions" necessary for salmon habitat. [A discussion of WEAN v. WWGMHB, 122 Wn. App. 173, (2004) follows.]

Critical Aquifer Recharge Areas

Growth Management Hearings Board Decisions

Eastern Washington

Citizens for Good Governance v. Walla Walla County, 09-1-0013: The Board remanded to the County to achieve compliance on three issues: (1) Include the Best Available Science regarding horizontal permeability underlying the airport; and determine whether or not the aquifer contamination risk at the airport satisfies the GMA's standard of being a vulnerable aquifer -- as indicated by the combined effect of land uses and hydrogeologic conditions that contribute directly or indirectly to or facilitate contamination of groundwater; (2) Determine whether or not the Shallow Gravel Aquifer is vulnerable to contamination conveyed through Zone 2 recharge areas; and if vulnerability is found, classify/designate Zone 2 recharge areas according to whether or not the Shallow Gravel Aquifer is vulnerable to contamination from identified Zone 2 recharge areas; (3) Either amend its regulations as to aquifer contamination threats from pre-existing non-conforming uses to reflect the inclusion of Best Available Science, or provide a reasoned justification for departing from the Best Available Science as to aquifer contamination threats from pre-existing non-conforming uses within CARAs. Compliance Order (April 5, 2012), page 27.

The Board found and concluded that Walla Walla County had included the Best Available Science in designating and protecting Critical Aquifer Recharge Areas and had achieved compliance with the Growth Management Act as to the GMA's requirements to designate and protect critical areas. *Order Finding Compliance [Re: Critical Aquifer Recharge Areas] (June 3, 2013).*

Hazen, et al. v. Yakima County, Coordinated Cases 08-1-0008c and 09-1-0014, Coordinated Compliance Order/Issuance of Stay (April 27, 2011) at 10.: WAC 365-190-080(4) states that counties and cities should designate critical areas by using maps and performance standards, and counties and cities should clearly state that maps showing known critical areas are only for information or illustrative purposes …

[during its compliance efforts, Yakima County's CARA map, which was based on older, superseded science, was not reviewed or revised to reflect updated best available science, thus] …Without a mapping update to include Best Available Science, the pre-existing CARA designation map does not comply with the GMA.

Citizens for Good Governance v. Walla Walla County, 09-1-0013 Final Decision and Order at 6-7 (May 3, 2010).The record reveals that Walla Walla County relied exclusively upon pre-existing "Wellhead Protection Areas" as satisfying the GMA requirement to designate Critical Aquifer Recharge Areas. This approach is not supported by the science. The scientific information does not indicate that using wellhead protection areas alone is sufficient to protect the large Gravel Aquifer. Individual wellhead protection areas may protect some wells that constitute regulated public water systems, but there is no evidence in the record that this approach protects the large number of unregulated individual or exempt wells, nor is there any evidence that this approach is sufficient to protect the larger Gravel Aquifer which underlies a land area of about 190 square miles.

The WAC 365-190-080 guidelines state that to determine the location of aquifer recharge areas, counties may using existing studies or may use existing soil and surficial geologic information. The record does not show that Walla Walla County made any such determinations as to the Gravel Aquifer recharge areas. In the absence of basic locational information on specific recharge areas, the County cannot effectively determine which areas are "critical" to preventing adverse impacts to the aquifer. Moreover, the record does not show a consideration of the WAC guidelines which prescribe (1) an evaluation of the threat of ground water contamination from existing land use activities, and (2) the designation of aquifer specific recharge areas based upon vulnerability of the aquifer to contamination. Final Decision and Order at 7-8.

The WAC 365-190-080 guidelines state that to determine the location of aquifer recharge areas, counties may using existing studies or may use existing soil and surficial geologic information. The record does not show that Walla Walla County made any such determinations as to the Gravel Aquifer recharge areas. In the absence of basic locational information on specific recharge areas, the County cannot effectively determine which areas are "critical" to preventing adverse impacts to the aquifer. Moreover, the record does not show a consideration of the WAC guidelines which prescribe (1) an evaluation of the threat of ground water contamination from existing land use activities, and (2) the designation of aquifer specific recharge areas based upon vulnerability of the aquifer to contamination. Final Decision and Order at 7-8.

[T]he County did not use best available scientific information about aquifer contamination threats to inform its CARA designation process, nor did it use a reasoned process to analyze best available scientific information regarding identified recharge areas for the Gravel Aquifer. Because Walla Walla County has not properly designated CARAs for the Gravel Aquifer, it has not followed the GMA's requirement to protect the functions and values of this type of critical area. Final Decision and Order at 10.

[T]he GMA does not necessarily require designation of the entire 190 square mile aquifer. Rather, the GMA requires designation and protection of "areas with a critical recharging effect on aquifers used for potable water." The extent of these designated critical recharge areas, as distinct from the underlying aquifer itself, is determined through a substantive consideration of Best Available Science, which has not yet occurred in Walla Walla County. Final Decision and Order at 10.

Hazen, et al v. Yakima County, 08-1-0008c, FDO at 22 (April 5, 2010). The GMA includes CARAs under its definition of critical areas and defines these as being "areas with a critical recharging effect on aquifers used for potable water." An aquifer is an underground geologic formation of rock, soil, or sediment that is naturally saturated with water and serves as a water supply for wells. Recharge - the infiltration of water into the aquifer – is essential for the continued use of the aquifer. Thus, the key function and value of CARAs is to provide clean, safe, and available drinking water by protecting areas so as to permit recharge and preventing contamination of the aquifer.

WAC 365-190-040(5)(b) goes on to state in circumstances where critical areas cannot be readily identified, these areas should be designated by performance standards or definitions and WAC 365-190-040(5)(c) provides that designation could be satisfied by the adoption of a policy statement. It would appear to the Board that CARAs expressly fall within this realm because, unlike wetlands or streams which can be visually delineated, the underground nature of an aquifer provides for a more challenging determination as to their location and boundaries. FDO at 22-23.

Western Washington

Stephen F. Ludwig v. San Juan County, Case No. 05-2-0019c (FDO, Compliance Order, April 19, 2006) In light of the limitations of its ground water model and the data assembled to date, the studies done do not conclusively show that the increased densities of the UGA will not result in saltwater intrusion into the water supply. The adaptive management program recommended by the advisory group is a necessary part of the County's protection strategy. Until the County completes these missing pieces, the Lopez Village UGA fails to comply with RCW 36.70A.070(3)(a)-(d), RCW 36.70A.070(1), and RCW 36.70A.020(10) and (12).

Olympic Environmental Council, et al. v. Jefferson County, 01-2-0015 (Compliance Order, 12-4-02). A county which has considered the best available science and adopted less stringent protection standards that balance the need for protection of potable water supplies against the chilling effect of regulation against development has complied with the GMA only if the county also adopts a monitoring strategy that includes stricter development regulations that will be implemented at once if the less stringent protection standards prove to be inadequate to protect against seawater intrusion.

Both the Growth Management Act and the county's own comprehensive plan require a county to protect not only those places where freshwater enters the ground, but also the aquifers that they feed. The county must classify and designate seawater intrusion areas as critical areas, including best available science in a substantive way.

Although the county claimed that the data in the record were not adequate to designate vulnerable seawater intrusion areas, that does not nullify the county's obligation to take action to designate and protect CARAs including aquifers used for potable water.

A county's decision to use a different approach then previously adopted does not necessarily make that choice non-GMA compliant. However, the new approach must comply with the Act. The county's approach of failing to designate any vulnerable seawater intrusion areas as critical areas does not comply with the Act.

It makes great sense for the intergovernmental planning group to study water issues on a watershed basis. However, that group has no authority to take binding action on this issue. The county cannot abdicate its GMA responsibility for seawater intrusion designation to the planning group.

Olympic Environmental Council v. Jefferson County, 01-2-0015 (FDO, 1-10-02). We are not persuaded by a county's argument that it has no authority to impose some form of water conservation measures, limiting the number of new wells allowed, or other measures to reduce the withdrawal of groundwater from individual wells if that withdrawal would disrupt the seawater/freshwater balance and lead to greater seawater intrusion. The exemption of RCW 90.44.050 does not limit a local jurisdiction from complying with its mandate for protection of groundwater quality and quantity under the GMA.

Geologically Hazardous Areas

Court Decisions

Olympic Stewardship Found. v. Western Washington Growth Management Hearings Board , 166 Wn. App. 172 (2012), *review denied*, 174 Wn.2d 1007 (2012). Olympic Stewardship Foundation challenged Jefferson County's regulations which restricted vegetation removal in zones surrounding rivers at high risk for channel migration (channel migration zones or CMZ). The CMZ was designated as a critical area under the "geologically hazardous areas" component of the definition. The Foundation challenged the vegetation removal restrictions as not including best available science alleging that the County had failed to develop a record showing how the science considered supported the vegetation removal record. The court held that "including" best available science does not impose a duty on local governments to describe each step of their deliberative process but rather the local government is required to address on the record the relevant sources of best available science included in their decision-making.

Growth Management Hearings Board Decisions

Western Washington

OSF/CPCA v. Jefferson County, 08-2-0029c, FDO, at 28 (Nov. 19, 2008). [In determining if the County's action of designating [channel migration zones] as a Geological Hazard Area was clearly erroneous, the Board concluded:] … designation of [geologically hazardous areas] is based, in part, on an analysis of historical activity of the site and the potential or susceptibility of the site for future geological instability based on historical data in combination with present day scientific methodologies … It is this futuristic potential or susceptibility of damage that creates the risk for which critical area designation as a GHA is needed.

[In responding to Petitioner's assertion that the functions and values of a designated critical area must presently exist, the Board stated:]… the Board disagrees with Petitioner's contention that the functions and values of a [channel migration zone] do not presently exist and therefore the GMA does not authorize the designation. To support this statement would be contrary to the very functions and values underlying a [geologically hazardous area] - to protect against future loss of life and/or property due to the geological event being addressed. In other words, the functions and values sought to be protected

by [geologically hazardous areas] are the protection of life and property and those functions and values exist today. Here, Jefferson County, in considering the geological consequences of channel migration, namely the potential for stream bank erosion and channel migration within the historical and projected path of a stream or river, appropriately designated [channel migration zones] as a type of [geologically hazardous area] given the geological nature of the impacts. As such, the County's designation of [channel migration zones] as a critical area is appropriate under the GMA. FDO, at 29.

See FDO at 31-39 for general discussion on [channel migration zones as a type geologically hazardous area] including designation, risk assessment, and development standards.

Diehl v. Mason County, 95-2-0073 (Compliance Order, 7-13-01). Reduction of distance from a [geologically hazardous area] location that required geological reports and assessments, was not in conformance with BAS and did not comply with the Act.

Diehl v. Mason County, 95-2-0073 (Compliance Order, 3-22-00). A requirement for geotechnical assessment which does not include definitive standards in a DR against which the assessment can be measured does not comply with the GMA.

CCNRC v. Clark County, 96-2-0017 (FDO, 12-6-96).The County's failure to designate geologically hazardous areas other than those involving 40% plus slopes under the record in this case did not comply with the GMA.

Central Puget Sound

Friends of Pierce County, et al. v Pierce County, 12-3-0002c, FDO July 9, 2012, pg. 98, 103: There is no GMA directive that prohibits development [in a lahar or liquefaction zone] because of geological risks. While hazard areas are defined as areas that are not suited to development consistent with public health and safety, the GMA definition by itself does not impose an independent duty upon the County to protect life and property by prohibiting development…. The Board notes in the case of flood risks, the Legislature has defined the 100-year floodplain as mapped by FEMA as setting the bounds for more intensive development. No such bounds have been legislated into the GMA for other geological hazards.

Seattle Audubon Society, et al v. City of Seattle, 06-3-0024, 5/29/07 Order Finding Compliance, at 4. The Board finds that the City has designated areas at risk of more remote geologic hazards, as set forth in the Board's FDO in accordance with CTED's guidelines. The City has adopted various state and federal maps to designate these geologically hazardous areas, and has enacted a procedure, including public participation, allowing for the update of these maps by Director's rule. [These actions achieve compliance with the Act.]

Sno-King Environmental Alliance, et al v. Snohomish County, 06-3-0005,FDO (7/24/06), at 15. [A jurisdiction's] duty and obligation to protect the public from potential injury or damage that may occur if development is permitted in geologically hazardous areas is not rooted in the challenged GMA critical area provisions. Rather, providing for the life safety of occupants and the control of damage to structures and buildings is within the province of building codes. Chapter 19.27 RCW.

There is no disagreement that construction of buildings and structures near a seismic hazard area is governed by the IBC [2003 International Building Code], as adopted by the State Building Code, and

applicable to Snohomish County. However, the County has identified a "regulatory gap" which is characterized as follows: The IBC's seismic provisions only apply to faults that have been verified and mapped by the USGS. [The newly discovered faults and inferred faults have not yet been mapped by USGS.] Therefore, the IBC provisions are not directly applicable. Consequently, to protect the public and property, the County has taken the action of adopting the Seismic Ordinance to fill this gap. [Petitioners do not dispute the gap, but rather contend that the regulations do not go far enough. The Board concluded that the County's adoption of the Seismic regulations was a responsible and reasonable action in face of the regulatory gap identified.] FDO, at 15-16.

The Board finds and concludes that there is no discrepancy between the County's definition of "seismic hazard areas" and the GMA's definition of "geologically hazardous areas." While the GMA definition imposes no independent duty upon the County to protect life safety, the Board notes that the County's definition falls within the broader GMA definition and is more protective than that included in the IBC, since it includes protections for "inferred fault" areas. FDO, at 16.

Fuhriman, et al v. City of Bothell, 05-3-0025c, FDO (8/29/05), at 34-36. [The City designated a 357 acre area with an R-40,000 minimum lot size – Fitzgerald Subarea. The basis for the designation to protect large-scale, complex, high rank value critical areas that could not be adequately protected by existing critical areas regulations.] It seems apparent to the Board that, at least for the 357-acres disputed here, the City's present critical areas regulations were believed to be inadequate in protecting the critical areas at issue. This is evidenced by the Litowitz Test Report [which identified the area as having large-scale, complex and high rank value critical areas] and the fact that even the Planning Commission [which did not support the designation] recommended a "special overlay designation" and "special protections and regulations" to be developed to adequately protect the critical areas in question. The Commission's recommendation by itself evidences perceived inadequacies in the City's existing critical areas regulations that can support the added protection of the R136 40,000 designation. Further, the overall size and interconnectedness of the affected hydrologic system is well documented; it is not inappropriate to look at a sub-basin or related hydrologic feature to assess critical areas in a specific area. [The Board upheld the R-40,000 designation for the affected area.]

[The City designated a portion of the Norway Hill area with an R-40,000 minimum lot size. Steep slopes, erosive soils, difficulty in providing urban services and connection to an aquifer and salmon stream were the basis for the designation. The Board noted that only a portion of the area designated was within the city limits, the remainder being within the unincorporated county, but within the UGA and planned annexation area of the City.] There is no question that the area designated R-40,000 within the Norway Hill Subarea is not a large scale, complex, high rank order value critical area as analyzed in the Board's Litowitz case. The City's Litowitz Test Report confirms this conclusion. However, in a recent Board decision [Kaleas, 05-3-0007c, FDO.], the Board acknowledged that the critical areas discussed in the Litowitz case, and several cases thereafter, were linked to the hydrologic ecosystem, and that the Board could conceive of unique geologic or topographical features that would also require the additional level of protection of lower densities in those limited geologically hazardous landscapes. [To qualify, geologically hazardous critical areas would have to be mapped, and use best available science, to identify their function and values. The Board concluded that the geologically hazardous areas on Norway Hill were mapped, and the area contained aquifers connected to salmon bearing streams. The Board upheld the R-40,000 designation for the affected area.] FDO, at 37-39.

King County, et al v. Snohomish County, 05-3-0031, 8/8/05 Order on Motions, at 6. [A seismic ordinance regulating conditions on construction in seismic areas is a development regulation subject to review by the Board.

Tahoma Audubon Society, et al v. Pierce County, 05-3-0004c, FDO July 12, 2005, at 23-25. The Board finds that "best available science' was included in the designation of Lahar Inundation Zones and Lahar Travel Time Zones. To the extent the new regulations were built around that mapping exercise, they reflect best available science as required by RCW 36.70A.172(1). . . . The more troubling question is what land use regulations are required, once a hazard is acknowledged. . . . The County reasons that the only remaining question – reasonable occupancy limits [for a covered assembly in the lahar zone] – is a policy choice based on weighing risks. In the County's calculus, the low frequency of lahar events, the likelihood of early warning, and the opportunity for evacuation must be weighed against the economic opportunity presented by new tourist facilities. . . . The Board agrees with Pierce County that land use policy and responsibility with respect to Mount Rainier Case II lahars – "low probability, high consequence" events – is within the discretion of the elected officials; they bear the burden of deciding "How many people is it okay to sacrifice."

The GMA defines geologically hazardous areas as areas that are not suited to siting of . . . development consistent with public health or safety concerns," [RCW 36.70A.030(9)], but there is no affirmative mandate associated with this definition except to "protect the functions and values." Petitioners have not persuaded the Board that the requirement to protect the functions and values of critical areas has any meaning with respect to volcanic hazard areas or that the GMA contains any independent life-safety mandate. FDO, at 25.

The analogy between floods and lahars is limited. The scientific references linking 100-year floods and Case II Lahars refer only to periodicity, not to depth or viscosity or rate of flow ore even predictability. . . The GMA imposes no duty on the County to treat both hazards alike in its development regulations just because their frequency may be analogous. FDO at 26.

The Board reads the cautionary approach recommended in the CTED guidelines [WAC 365-195-920] to refer to situations where incomplete science may result in inadequate protection for the "functions and values" of critical areas. In this case, we are not concerned with protecting the "function and values" of volcanic debris flows. Here, the science of lahar inundation hazards on Mount Rainier is sufficiently detailed; the question dealt with in the County occupancy regulations is the feasibility of rapid evacuation from sites very close to the mountain – identified by the URS report as an engineering and life-safety question rather than an issue of vulcanology. FDO, at 28.

Frequently Flooded Areas

Growth Management Hearings Board Decisions

Western Washington

OSF/CPCA v. Jefferson County, 08-2-0029c, FDO, at 27 (Nov. 19, 2008).The Board views the GMA as effectively establishing two categories of critical areas – those areas whose functions and values are protected for the beneficial services they provide (i.e. Wetlands, FWHCAs, Aquifer Recharge Areas) and those areas for which protection is needed due to the threat these areas pose to persons and property (i.e. Frequently Flooded Areas, GHAs).

See FDO at 31-39 (Nov. 19, 2008) for general discussion on [channel migration zones] including designation, risk assessment, and development standards.

ADR/Diehl v. Mason County, 07-2-0010, FDO, at 19 (Jan. 16, 2008). The issue of allowing new residential construction in frequently flooded areas is a question of protection of critical areas. Pursuant to WAC 365-195-825(2)(b), "protection" of critical areas also means "to safeguard the public from hazards to health and safety." Whether to allow new residential construction in a frequently flooded area is a matter of hazards to public health and safety. Therefore, the adoption of regulations allowing such residential construction must include BAS.

Futurewise v. Skagit County, 05-2-0012c, Consolidated FDO/Compliance, at 17 (April 5, 2007). We find nothing in RCW 36 70A.110 that prohibits the inclusion of a critical area or a floodplain in an [urban growth area].

Diehl v. Mason County, 95-2-0073c (Compliance Order, 6-27-01). In an area where dike failure is common, under the GMA a county has the duty to identify, inspect, monitor, and impose restrictions or conditions on the maintenance of existing dikes.

A map which is an intricate part of a regulatory scheme to preclude new construction in certain FFAs must be adopted by formal action of the local government.

A [development regulation] that precludes densities more intense than 1 DU per 10 acres for [agricultural resource lands] within [frequently flooded areas] complies with the Act.

[A frequently flooded area] designation must be clearly mapped and must include buffers sufficient to protect critical area functions and values.

Diehl v. Mason County, 95-2-0073 (Compliance Order, 9-6-96). The lack of a DR on minimum lot size and density requirements in FFAs did not comply with the GMA.

Ordinances which merely regulated building requirements within a floodplain and did not address issues of whether and under what conditions building should occur in a floodplain did not comply with the GMA. (FDO, 1-8-96)

Central Puget Sound

Tahoma Audubon Society, et al v. Pierce County, 05-3-0004c, FDO July 12, 2005, at 26. The analogy between floods and lahars is limited. The scientific references linking 100-year floods and Case II Lahars refer only to periodicity, not to depth or viscosity or rate of flow ore even predictability. . . The GMA imposes no duty on the County to treat both hazards alike in its development regulations just because their frequency may be analogous.

Critical Areas and Shoreline Master Programs

Court Decisions

Kitsap Alliance of Property Owners v. Central Puget Sound Growth Management Hearings Board, 160 Wash. App. 250 (2011). In response to the decision in *Futurewise v. W. Wash. Growth Management Hearings Board*, 164 Wn.2d 242 (2008), in 2010 the Legislature amended RCW 36.70A.480 to clarify that development regulations adopted under the GMA apply to protect critical areas within shorelines until the Department of Ecology approves a shorelines master program, update, or segment related to critical areas. Once Ecology approves the master program, critical areas within shorelines are protected under the SMA. The court recognized the Legislature's intention to overrule the *Futurewise* decision and also ruled that the legislation retroactively applied to Kitsap County's critical areas ordinance. [10]

Kailin v. Clallam County, 152 Wash. App. 974 (2009). The Shorelines Hearings Board does not have jurisdiction to review claims related to a county critical areas ordinance where that ordinance is not incorporated into the shoreline master program.

Preserve Our Islands v. Shoreline Hearings Board, 133 Wn. App. 503, 137 P.3d 31 (June 19, 2006), review denied, 162 Wn.2d 1008 (2008). A Shoreline Master Program adopted under the Shoreline Management Act must be read together with that jurisdiction's comprehensive plan and development regulations adopted under the GMA. Citing RCW 36.70A.480, which specifically states that a county's shoreline master program goals and policies are part of that county's GMA comprehensive plan, and the County's shoreline master program regulations are development regulations, and RCW 36.70A.040(4)(d), which states that development regulations must be consistent with and implement the comprehensive plan, the Court held that allowing inconsistency "would create chaos in attempts to implement and apply the numerous, varied and sometimes competing policies and regulations governing the use of land."[11]

A local government may not interpret its Shoreline Master Program to create conflicts with its comprehensive plan or development regulations (or vice versa, presumably).

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[10] As noted in this decision, the Legislature amended RCW 36.70A.480 in 2010 to address the issue of "timing" of the transfer of critical areas to shoreline master programs. Therefore, there are a number of Hearings Board and court findings that led up to the Futurewise v. W. Wash. Growth Management Hearings Board, 164 Wn.2d 242 (2008) decision that are no longer relevant. They are not included in this legal review.

[11] *Id.* at 524, ¶ 31.

Washington Shell Fish, Inc. v. Pierce County, 132 Wn. App. 239, 131 P.3d 326 (Mar. 28, 2006). Critical areas regulations adopted under the GMA and a shoreline master program adopted under the SMA may be independently enforced against an activity regulated by both.

Growth Management Hearings Board Decisions

Eastern Washington

Spokane Riverkeeper, The Lands Council, and Trout Unlimited v. Spokane County and Washington State Department of Ecology, Case No. 13-1-0003c5 (FDO, December 23, 2013). Petitioners appealed a decision by the Washington State Department of Ecology to give "Final Ecology Approval of Spokane County Shoreline Master Program Comprehensive Update." The Board upheld the decision on critical areas-wetlands, fish and wildlife habitat, recreation trails, channel migration zones, and public access but reversed the decision as to on-site sewage systems and remanded.

Spokane County chose not to enlarge its Shoreline Master Program jurisdiction to include for buffers for GMA-designated Critical Areas that occur within shorelines of the state and chose not to include the entire one-hundred-year-floodplain. Therefore, Critical Areas that occur within shorelines of the state, together with their required buffers, are regulated pursuant to GMA-adopted Critical Areas Ordinances. FDO at pp. 13-14.

Ecology's decision to approve Spokane County's Shoreline Master Program Update, without requiring standards relating to vertical separation between on-site sewage drainfields and the groundwater table or equivalent design criteria or performance standards, in order to prevent water quality impacts that would result in a net loss of shoreline ecological functions, failed to comply with the policies of the Shoreline Management Act and the Shoreline Master Program Guidelines. FDO at pp. 48-50.

Yakama Nation v Yakima County, Case No. 10-1-0011 (FDO, April 4, 2011). It is clear from both the statute [RCW 90.58.030(2)(d)] and the guidelines [WAC 173-22-040(3)] that inclusion of larger portions of the floodplain in the SMP is discretionary on the part of local government .... Further, Petitioner has not adduced evidence in support of its argument that the exclusion of large areas of flood plain from the SMP violates the "no net loss" standard. Without any legal authority requiring inclusion of larger areas of floodplain in the SMP, and in the absence of scientific evidence dictating such inclusion in the SMP, Petitioner cannot satisfy its burden of proof… FDO at 14.

The burden is on the Yakama Nation to demonstrate the newly adopted SMP provisions [for floodplain mining within the Yakima River basin as a conditional use] fail to adequately protect the shorelines. By merely referring to past impacts without coming forward with current scientific evidence to demonstrate inadequate shoreline protections, Petitioner cannot satisfy its burden of proof. FDO at 21-22.

[In finding Yakima County failed to prepare a comprehensive Cumulative Impact Analysis that evaluated, considered, and addressed reasonably foreseeable impacts, the Board stated] WAC 173-26-186(8) clearly contemplates that the SMP consider impacts from past actions … [and] WAC 173-26-186(8)(d) provides that analysis of cumulative impacts should consider "current circumstances affecting the shorelines" together with "reasonably foreseeable future development" … the term "cumulative impact" has been defined in case law as "the impact on the environment which results from the

incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." FDO at 22-24.

Western Washington

Elizabeth Mooney and Janet Hays v City of Kenmore and Ecology, Case 12-3-0004, Feb 27, 2013). Pro se petitioners challenged the adoption of an update to the City of Kenmore's Shoreline Master Program for failing to adequately protect the shoreline in light of new information pertaining to contaminants. Petitioners sought to add documentation of the history of industrial contamination in Kenmore's downtown waterfront. *Order on Motion to Supplement, December 10, 2012*. The Board found Kenmore's SMP inventory documented existing contamination and the SMP policies, development regulations, and restoration plan provided "no net loss" of shoreline functions. The petition for review was dismissed.

Citizens for Rational Shoreline Planning v Whatcom Co and Ecology, Case No. 08-2-0031 (April 20, 2009) [Relying in part on the Board's previous holding in Evergreen Islands v. Anacortes and WAC 173-26-191, the Board stated]: [The designation of critical area in the shoreline are by the Critical Areas Ordinance], which are incorporated by reference, are to be subject to public review at the time of their incorporation … Petitioners/Intervenor were entitled to "an opportunity to participate in the formulation of the regulations" including "their incorporation into the master program". To suggest that the public has no right to appeal the regulations as they are incorporated into the master program would render them passive participants and the SMA's provisions related to public participation meaningless. FDO, at 14-15.

Had the County merely designated its shorelines as critical areas without consideration of whether those shorelines qualified as critical areas, the County would have run afoul of RCW 36.70A.480(5)'s requirement to designate those "specific" shorelines of the state that "qualify for critical area designation" … RCW 36.70A.480(5) permits Shorelines of the State to be considered critical areas when specific areas located within these shorelines qualify for critical area designation based on the definition of critical areas set forth in RCW 36.70A.030(5) and they have been designated as such by the local government … The County CAO designates as critical areas all areas that are of critical importance to the maintenance of special status fish, wildlife and/or plant species. FDO, at 16-17.

[After reviewing the Record related to specific water bodies, the Board held]: In short, the County developed a record in its CAO, CAO maps, and Shoreline Inventory which supports the designation of Whatcom County's shorelines as a type of critical area – specifically, fish habitat. While the Board might well wonder whether some areas of the shoreline are so developed or isolated from protected species as to afford little habitat, Intervenors have not carried their burden of proof by showing that these [blanket] designations were clearly erroneous … The record in this case shows that these shorelines were designated as critical areas because of their role as fish and wildlife habitat conservation areas. FDO, at 19.

Evergreen Islands, Futurewise and Skagit County Audubon Society v. City of Anacortes, 05-2-0016 (FDO, December 27, 2005). [The Board] find that the City did designate critical areas in the shorelines. The designation of "Areas With Which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association" and the designation of herring and smelt spawning areas as fish and

wildlife habitat areas in Ordinance 2702 makes those areas in the shorelines "critical areas." RCW 36.70A.060.

Central Puget Sound

Lake Burien Neighborhood, et al. v. City of Burien, 13-3-0012 FDO (June 16, 2014), p. 11.: BAS may be a key factor as applied to the protection of critical areas under RCW 36.70A.172, but the standard set out in RCW 90.58.100 for the development of SMPs is the applicable standard here. Burien's 2003 Critical Areas Ordinance as incorporated in its SMP is subject to review in this case, but the scope of review is limited to compliance with the SMA and Ecology's Guidelines so that Petitioners may not now argue the City's 2003 CAO was not supported by BAS or challenge various characterizations of Lake Burien's wetlands over the history of Burien's CAO.

Citizens for a Health Bay v. City of Tacoma, 06-3-0001, Order of Compliance (8/7/08) at 4. include marine buffer zones and protections for its 44 miles of marine shorelines. The Board found the City's action compliant with the GMA.] The Board notes that the detailed and site specific analysis undertaken by the City of Tacoma in enacting the shoreline protections in Ordinance No. 27728. While this case was reviewed under the GMA standard of best available science – RCW 36.70A.172, the adopted regulations provide a strong foundation for shoreline master program provisions.

Hood Canal Environmental Council, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06), at 26. Since the enactment of ESHB 1933 in 2003, the Board has been presented with a number of challenges to local CAO enactments involving critical areas, as defined by the GMA, that are within shorelines, as defined by the SMA. Since ESHB 1933, at least six CAO updates have been challenged before this Board – three counties and three cities. First, no jurisdiction whose CAO has been appealed to this Board has omitted CAO regulations for wetlands, freshwater shorelines, or floodplains on the basis of ESHB 1933. Similarly, no jurisdiction, to our knowledge, has submitted its CAO update to DOE for approval under the SMA. Central Puget Sound counties and cities appear to agree that – for wetlands, freshwater shorelines, and floodplains – the current round of CAO updates is a GMA process that must be based on the GMA best available science provisions notwithstanding the interaction with SMA land use designations.

[The Board discussed various approaches used by different Puget Sound jurisdictions to protect marine shorelines.] The Board finds that there is no single interpretation of the ambiguity inherent in ESHB 1933 – specifically RCW 36.70A.480(5) – but a range of reasonable responses by local cities and counties in the Central Puget Sound region. The Board will defer to the County's decision, [the County designated all saltwater shorelines, stream segments with flow greater than 20 cubic feet per second, and lakes greater than 20 acres as critical areas under the category of "fish and wildlife habitat conservation areas."] based on local circumstances, unless persuaded by Petitioners that the County's approach was clearly erroneous. [The County had in its record ample BAS to support its designation of marine shorelines and Petitioners failed in this effort.] FDO, at 26-29.

Kitsap County's marine buffers buffer widths are assigned based on SMA land use classifications, not based on the functions and values of the critical areas designation – here, fish and wildlife habitat conservation areas. . . .The County has not differentiated among the functions and values that may need to be protected on shorelines that serve, for example, as herring and smelt spawning areas, juvenile chum rearing areas, Chinook migratory passages, shellfish beds or have other values. Rather they have chosen an undifferentiated buffer width that is at or below the bottom of the effective range for

pollutant and sediment removal cited in [BAS]. And they have applied that buffer to SMP land use classifications, not to the location of specific fish and wildlife habitat. . . .The flaw [in this approach] is illustrated by the fact that eelgrass, kelp, and shellfish beds are protected by larger buffers if they happen to be off shores designated Natural or Conservancy [in the SMP], while the same critical resources – eelgrass, kelp, shellfish – have just 35 feet of buffer off the Urban, Semi-rural or Rural shore. Protection for critical areas functions and values should be based first on the needs of the resource as determined by BAS. . . .Here Kitsap County has opted to designate its whole shoreline as critical area but then has not followed through with the protection of all the applicable functions and values. FDO at 39-41.

Tahoma Audubon Society, et al v. Pierce County, 05-3-0004c, FDO (July 12, 2005), at 37. [Pursuant to RCW 36.70A.480] the Board agrees with Pierce County that marine shorelines are not per se fish and wildlife habitat conservation areas [critical areas]. The Board then asks (1) whether Pierce County used best available science to protect critical fish and wildlife habitat conservation areas on its marine shorelines; (2) whether Pierce County's regulations gave priority to anadromous fish; (3) whether Pierce County's regulations protect the functions and values of marine shorelines as salmon habitat, and (4) whether a vegetative buffer is required. [The County's CAO] identifies a number of critical fish and wildlife conservation areas on its marine shorelines. These include eelgrass beds, shellfish beds, surf smelt spawning areas and the like. However, [the CAO] was drafted to designate and protect all Pierce County marine shorelines. When the County Council voted to remove the marine shorelines from critical areas, it did so (a) without ascertaining whether the remaining protected salt-water areas included all the areas important for protection and enhancement of anadromous fisheries and (b) without assessing whether the overlay of elements remaining in the CAO [i.e. steep slopes, erosion areas, eelgrass beds, etc.] would protect the "values and functions" necessary for salmon habitat. [A discussion of WEAN v. WWGMHB, 122 Wn. App. 173, (2004) follows.]

[The Board reviewed the detailed scientific evidence in the record regarding salmon habitat along marine shorelines to determine whether the County gave "special consideration to anadromous fish."] Despite the detailed information about the function and values of salmonids habitat specific to each shoreline reach, Pierce County eliminated "marine shorelines" from the fish and wildlife habitat conservation areas listed in its critical areas ordinance without determining whether the remaining designated critical areas adequately met the needs of salmon. Undoubtedly some of Pierce County's remaining designated and mapped salt-water critical areas, such as eelgrass beds, surf smelt beaches, salt marshes and steep bluffs, overlap with habitats critical to the survival of anadromous fish. But there is nothing in the record to indicate that the high-value shoreline reaches identified by the Pentec Report for salmonids habitat [much less the restorable habitat stretches] are designated and protected in the Pierce County critical areas regulations. FDO, at 38-40.

Deferring salmon habitat protection to a site-by-site analysis based on disaggregated factors is inconsistent with Pierce County's best available science. Nothing in the science amassed by the County supports disaggregating the values and functions of marine shorelines. [Various studies are reviewed pertaining to the integrated function and value of salmon habitat]. FDO, at 40.

The Board finds that Pierce County's site-by-site assessment of marine shorelines during the permit application process, as established in (the CAO), does not meet the requirement of using best available science to devise regulations protective of the integrated functions and values of marine shorelines as critical salmon habitat. FDO, at 40-41.

A final issue is whether vegetative buffers are required. Pierce County declined to establish a regulatory requirement for vegetative buffers on marine shorelines, except to the extent they might be required in connection with a narrower protective regime (eelgrass beds, for example, or bald eagle nesting sites), and has substituted a 50-foot setback from ordinary high water mark. There is a wealth of scientific opinion in the County's record supporting vegetative buffers to protect multiple functions and values of marine shoreline salmon habitat. [The Board reviewed the record documents provided to the County; and concludes that the County rejected the recommendations of experts and agencies with expertise without any sound reasoned process.] FDO, at 41-44.

While the 2003 GMA amendments [ESHB 1933, amending RCW 36.70A.480] prohibit blanket designation of all marine shorelines (or indeed, all freshwater shorelines) as critical fish and wildlife habitat areas, the GMA requires the application of best available science to designate critical areas, explicitly recognizing that some of these will be shorelines. The legislature sought to ensure that this correction did not create loopholes. "Critical areas within shorelines" must be protected, with buffers as appropriate, if they meet the definition of critical areas under RCW 36.70A.030(5). RCW 36.70A.480(5) and (6). [The BAS in the County's record supported the conclusion that near-shore areas meet this definition, and the BAS] may provide the basis for designating less than all of Pierce County's marine shorelines as critical habitat for salmon. ESHB 1933 does not justify Pierce County's blanket deletion of marine shorelines and marine shoreline vegetative buffer requirements from its [CAO]. FDO, at 49.

Adoption of other Regulations Requiring Best Available Science

Growth Management Hearings Board Decisions

Western Washington

ADR/Diehl v. Mason County, 07-2-0010, FDO, at 19 (Jan. 16, 2008). The issue of allowing new residential construction in frequently flooded areas is a question of protection of critical areas. Pursuant to WAC 365-195-825(2)(b), "protection" of critical areas also means "to safeguard the public from hazards to health and safety." Whether to allow new residential construction in a frequently flooded area is a matter of hazards to public health and safety. Therefore, the adoption of regulations allowing such residential construction must include BAS.

Overton et al. v. Mason County, 05-2-0009c, FDO (11/14/05). Petitioners' argument that RCW 36.70A.172 must apply to all development regulations that may impact critical areas since other regulations could nullify the protections of the critical areas ordinance has no foundation in the GMA. First and foremost, the Board cannot impose a requirement that the GMA does not create. On its face, RCW 36.70A.172 only applies to the designation and protection of critical areas. "In designating and protecting critical areas under this chapter…" Therefore, inclusion of best available science and special consideration of anadromous fisheries is only required in the adoption of critical areas designations and protections. While a best available science analysis of the impact of zoning regulations on critical areas might be useful, the GMA does not require it.

If newly adopted regulations impact the effectiveness of the critical areas regulations, then the challenge to those new regulations would be that they violate the requirement to protect critical areas. However, this does not mean that they violate the requirement to include best available science in those

protections. A challenge to development regulations that change the protectiveness of critical areas regulations would rest on RCW 36.70A.060 rather than on the failure to include best available science pursuant to RCW 36.70A.172.

Critical Areas in Natural Resource Lands under the GMA

Court Decisions

Swinomish Indian Tribal Community. v. Western Washington Growth Management Hearings Board, 161 Wn.2d 415 (2007). The court recognized the competing goals in the GMA of protection of critical areas and natural resource lands stating that local governments are not given much direction as to whether protection of critical areas or the maintaining of agricultural lands is a priority. The court noted that RCW 36.70A.172(1) does require local governments to include best available science in developing regulations and policies to protect critical areas and that they are to "give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries." However, the court recognized that there was still deference given to balancing of local circumstances and in this case, the court did not require the county to curtain historic agricultural activities in critical areas and upheld the county's "no harm" provision in its ordinance. The court concluded that the "no harm" standard protected critical areas by maintaining existing conditions. The county's decision to not require mandatory riparian buffers in agricultural lands was upheld because doing so would impose a requirement to restore habitat functions that no longer existed.

Clallam County v. Western Washington Growth Management Hearings Board, 130 Wn. App. 127, 121 P.3d 764 (Oct. 25, 2005), *review denied*, 163 Wn.2d 1053 (2008). The GMA authorizes counties and cities to regulate existing uses in critical areas and their buffers to advance the GMA's goals. The petitioners argued that the GMA requires the County to regulate preexisting agricultural uses in critical areas. The Court compared the language in RCW 36.70A.060(1) (development regulations adopted to assure the conservation of agricultural, forest, and mineral resource lands "may not prohibit uses legally existing on any parcel prior to their adoption") with that in RCW 36.70A.060(2) (which is silent as to whether development regulations adopted to protect critical areas may prohibit prior uses). Based on its review of the legislative history of RCW 36.70A.060, the broad definition of "development regulations" in RCW 36.70A.030, the breadth of the best available science requirement in RCW 36.70A.172(1), and the natural resources goal in RCW 36.70A.020(8), the Court concluded the Legislature intended that counties regulate critical areas, including existing uses, to advance the GMA's goals.

An agricultural exemption from critical areas may extend to include agricultural uses on rural lands, but any exemption must be balanced with restrictions based on best available science that address any harm to critical areas resulting from the exemption. Acknowledging that some agricultural lands could be exempt from critical areas regulations, the Court reversed the Board's conclusion that only existing uses in designated agricultural resource lands may be exempted from critical areas regulations. Characterizing the Board's conclusion as an "apparent policy," the Court explained that such a policy is contrary to the GMA's emphasis on balancing competing goals, a balance which is to be undertaken by the County, with the Board owing deference to that balancing. The Court held the County could expand its agricultural land exemption to include agricultural uses outside designated agricultural lands, but it must balance the exemption with restrictions based on best available science that address any threatened harm resulting from the expanded exemption.

The court concluded that preexisting agricultural uses are not exempt from all critical areas regulation. The court also held that the county was not limited to exempting only designated agricultural resource land from full critical areas regulation and that it may expand its exempt agricultural land to meet its local conditions. However, the county must balance such expanded exemption with corresponding restrictions that take into account the specific harms threatened by the expanded class of farm lands.

Whidbey Environmental Action Network v. Island County, 122 Wn. App. 156, 93 P.3d 885 (June 7, 2004), *review denied*, 153 Wn.2d 1025 (2005). An exception from critical areas regulations for agricultural activities must be supported by evidence in the record that such an exception is necessary and that the best available science was employed in crafting the exception.

Voluntary Stewardship Program

Protect the Peninsula's Future v. Growth Management Hearings Board, 185 Wn. App. 959 (2015). When the Legislature amended the GMA in 2011 to create the Voluntary Stewardship Program (VSP), it provided in RCW 36.70A.735 that if a county opting into the program was unable to implement a watershed work plan for the reasons provided in sub (2) of the section, the county could avail itself of options for compliance including adopting Clallam County's ordinances for protecting critical areas in areas used for agricultural activities. Clallam County did not opt to participate in the VSP. In response to a challenge for failure to update its critical areas ordinance, Clallam County argued that the Legislature had validated the County's 2001 ordinance. The court disagreed and held that Clallam County's ordinance was compliant only for those counties participating in the VSP. Because Clallam County was not participating, the county would have to comply with the "traditional" requirements of RCW 36.70A.060 rather than the alternative requirements for VSP participants.

Growth Management Hearings Board Decisions

Western Washington

Weyerhaeuser, et al v Thurston County, 10-2-0020c: WAC 365-190-040(7) provides that the " . . . designation process may result in critical area designations that overlay . . . natural resource land classifications" and that " . . . if a critical area designation overlies a natural resource land designation, both designations apply". Additionally, WAC 365-190-020(7) provides " . . . that critical areas designations overlay other land uses including designated natural resource lands. For example, if both critical area and natural resource land use designations apply to a given parcel or a portion of a parcel, both or all designations must be made". Precluding designation of mineral resource sites that contain CARA 1, class I or 2 wetlands (and their buffers), certain habitat and species areas (and their buffers), as well as 100 year floodplains and geologically sensitive areas, may in fact be justifiable. However, the record fails to provide that justification. AFDO, June 17, 2011, pg. 29.

[The challenged action, which precluded the designation of Mineral Resource Land within certain critical areas affects critical areas regulation. RCW 36.70A.172 mandates the application of BAS when "protecting critical areas," but the County failed to utilize BAS.] AFDO, June 17, 2011, pg. 51.

The Board conclude[d] that the exclusionary criteria designed to protect critical areas included in the Resolution's Comprehensive Plan violate RCW 36.70A.170's mandate to designate [Mineral Resource

Land] of long term commercial significance and critical areas and the WAC Minimum Guidelines which provide that if such designations overlap, both designations apply. (Compliance Order, July 17, 2012) pg. 26.

WEAN v. Island County, 98-2-0023c (2006 Order Finding Compliance of Critical Areas Protections in Rural Lands, September 1, 2006); WEAN v. Island County, WWGMHB Case No. 06-2-0012c (FDO, September 14, 2006). Based on the County's reasoned review of the factors in WAC 365-195-905(5) for determining if the NRCS BMPs constitute best available science; and the assessment of the state agencies with expertise in this area – Ecology, Fish and Wildlife, and CTED – we find that the NRCS BMPs constitute best available science for the regulation of ongoing noncommercial agricultural practices in Island County, so long as they are accompanied by monitoring and an adaptive management program.

WEAN v. Island County, 98-2-0023c (2006 Order Finding Compliance of Critical Areas Protections in Rural Lands, September 1, 2006).For agricultural practices, the state agencies recommend BMPs rather than buffers. In the 2005 publication Wetlands in Washington State: Vol 2: Guidance for Protecting and Managing Wetlands (R-8769-12c), the state Departments of Ecology and Fish and Wildlife clearly express this view: BMPs should be used to regulate ongoing agricultural activities… Where the agencies with expertise and responsibility for addressing protection of critical areas unequivocally recommend the use of BMPs instead of standard buffers, Petitioner has a heavy burden to show that the BMPs are not adequate protection under RCW 36.70A.170 and 36.70A.060.

Where standard buffers widths respond to a variety of possible circumstances, BMPs and farm plans are able to target more specifically the practices that are actually in use on each farm.

Swinomish Indian Tribal Community et al. v. Skagit County, 02-2-0012c (Compliance Order, 12-8-03). RCW 36.70A.060(2) and .040(1) do not require buffers on every stretch of every watercourse containing or contributing to a watercourse bearing anadromous fish to protect the existing functions and values of fish and wildlife habitat conservation areas in ongoing agricultural lands.

The overall intent of the pertinent sections of the GMA and WAC 365-190-020 is to assure no further degradation, no further negative impacts, no additional loss of functions or values of critical areas. They also focus on new activities and preventing new impacts or new degradation rather than requiring enhancement of existing conditions.

In ongoing agricultural lands, where current stream conditions do not meet all seven functions and values of fish habitat, and where the functions and values in that location are not necessary to preserve anadromous fish, requiring farmers to remove from agriculture all their lands abutting those streams in an effort to achieve all those functions and values, not met for many years, would be mandating enhancement of fish habitat (which the Act does not require).

After careful consideration of all the arguments, and the entire record, we are no longer convinced that the Act requires the County to mandate that regulation of critical areas provide for all the functions in every watercourse that contains or contributes to watercourses that contain anadromous fish in ongoing commercially significant agricultural lands where some of those functions have been missing for many years and where these functions are not required for a particular life stage of anadromous fish. By reaching the above conclusion, we are not saying that farmers do not need to alter their practices if they are continuing activities which will further degrade the streams. Those activities must stop and practices must be implemented which ensure no additional harm or further loss of function.

Central Puget Sound

Keesling v. King County, 05-3-0001, FDO (7/5/05), at 11-12. The GMA "requires all local governments to designate all lands within their jurisdictions which meet the definition of critical areas." (Citation omitted.) Agricultural lands cannot be excluded. [The County's designation of critical areas within an agricultural production district] recognizes the dual obligation under GMA to protect agricultural resource lands and to protect long-term water quality for people and for fish and wildlife. The Board will defer to King County in the balance it has struck.

Indirect Amendment of a Critical Areas Ordinance

Growth Management Hearings Board Decisions

Western Washington

Olympia Master Builders v. Thurston County, 15-2-0002, FDO 5/12/16. The Board found that the "2015 Interim Process" addressing Mazama pocket gopher habitat which was adopted in lieu of formally amending the County's CAO regulations constituted a de facto amendment of the CAO, that those changes were made in violation of the requirements of RCW 36.70A.035 and RCW 36.70A.140.

Reliance on Other Regulations

Court Decisions

Stevens County v. Eastern Washington Growth Management Hearings Board, 163 Wn. App. 680 (2011), *review denied*, 173 Wn.2d 1019 (2012). The court upheld the board's determination that development regulations that are not part of the critical areas ordinance still must meet GMA requirements for protection of critical areas. The court concluded that the county subdivision code failed to protect critical areas, as required by the GMA. Significantly, the code did not address impervious surface coverage in multiple important contexts, it did not apply county-wide, and it did not mention methods for addressing storm water or impervious surface coverage.

Stevens County v. Futurewise, 146 Wn. App. 493 (2008), *review denied*, 165 Wn.2d 1038 (2009)
The court held that the county had failed to comply with the GMA when it only designated as critical wildlife habitat areas that had been designated by a state or federal agency process as habitat for endangered, threatened, or sensitive species. The court stated that the GMA required the county to designate and protect all critical areas, not just those identified by another agency particularly since federal designations only considered federal lands or lands with a federal nexus.

Growth Management Hearings Boards

Eastern Washington

Confederated Tribes and Bands of the Yakima Indian Nation v. Yakima County, 94-1-0021, FDO (Mar. 10, 1995). A local government's attempt to consolidate and streamline its critical area designation and protection requirements of these acts, the GMA, the Shoreline Management Act, and the Flood Plain Management Act is desirable and fully consistent with the goals of the GMA. Regulatory process consolidation, however, cannot come at the expense of the substantive requirements of the laws being consolidated. In other words, successful integration demands compliance with the laws that govern each subject area being integrated.

The required level of protection of wetlands and riparian buffers must be reasonably based on relevant science; however, a County has a range of discretion as to how exactly that level is met. To the extent a County relies on other statutes as part of its protection scheme, they should be referenced in the ordinance. A citizen should be able to understand what protection elements exist by reading the ordinance. FDO (Mar. 10, 1995).

Stormwater Regulations

Larson Beach/Wagenman v. Stevens County, 07-1-0013, FDO at 47 (Oct. 6, 2008).The CAO provides various regulations intended to protect critical areas, including the classification of critical areas (i.e. category of wetlands or susceptibility of aquifers), with protections provided through the establishment on minimum buffers, building setbacks, limitation on uses (CARAs only), report requirements (i.e. hydrogeologic site evaluation or wildlife habitat management plan), satisfaction of building or flood code provisions (i.e. structural requirements for geological hazard areas), enforcement and review/appeal provisions. However, as the Petitioners correctly note, the CAO does not assign zoning densities or uses (which the limited exception of some uses sets forth in provisions applicable to CARAs) or sets forth specific design standards (i.e. minimum lot sizes, lot coverage, etc) that may assist in providing protection for the functions and values of the critical areas. In contrast, SCC Title 3 is adopted pursuant to both the GMA and the County's authority granted by the Washington State Constitution and has many purposes in relationship to the development of land within the County … Title 3 provides the establishment of zoning districts, uses and densities, development and design standards (i.e. setbacks, road classifications, parking requirements), including special standards for certain types of development … Title 3 specifically sets forth Environmental Performance Standards.

The Board does not discount the County's use of a CAO to protect critical areas from adverse impacts and pursuant to SCC 3.04.020, all designated critical areas will be considered during development application review. However, as noted supra, RCW 36.70A.060(2) requires the adoption of DRs that protect designated critical areas and the Board does not see a CAO as the only regulation which serves to protect critical areas. DRs Title 3 can be utilized to amplify protections set forth in a jurisdiction's CAO by setting forth simple design standards, such as those suggested by the Petitioners – limitations on impervious coverage and consideration of storm water runoff. FDO at 49.

With the exception of provisions relating to the expansion of non-conforming uses, the CAO does not address impervious surfaces, nor, with the exception of noting one of the beneficial functions of

wetlands is storm water control, does the CAO address storm water run-off itself. Therefore, these aspects of environmental protection are left to other development regulations. FDO at 50.

It is common knowledge storm water discharges, carrying both natural (silt, sediment, etc) and man-made (oils, chemicals, etc) pollutants can adversely impact the chemistry of a critical area. Although the Board recognizes the method of storm water control within the rural area will differ from that of the UGA, the consideration of storm water discharge resulting from a development proposal should, at a minimum, be considered within the development review process so as to ascertain whether increases in discharge resulting from the development would adversely impact critical areas. The Board further recognizes not all development proposals within areas outside of the UGAs would result in storm water issues; however, some types, such as cluster developments, may necessitate the provision of some type of controls given the compact nature of such developments. FDO at 50-51.

Western Washington

Hydraulic Permit Approvals

Whidbey Environmental Action Network v. Island County, 14-2-0009: [Allowing an exemption from the FWHCA regulations for removal of beaver and beaver dams based on] reliance on the issuance of an HPA from WDFW, an agency which is precluded from considering any functions and values beyond fish life, fails to protect critical area functions and values and fails to include BAS. Final Decision and Order, June 26, 2015, p. 12.

Central Puget Sound

Stormwater Regulations

Seattle Audubon Society, et al v. City of Seattle, 06-3-0024, FDO (12/11/06), at 37. The question of reliance on stormwater regulations for protection of critical areas functions and values has come before the Board in several recent decisions. The Court of Appeals set the standard in *WEAN v. Island County*, 122 Wn.App. 156, 180, 93 P.3d 885 (2004), stating that if a local government is relying substantially on preexisting regulations to satisfy its obligations under RCW 36.70A.172, then "those regulations must be subject to the applicable critical areas analysis to ensure compliance with the GMA."

Enforcement of Critical Areas Ordinances

Court Decisions

Preserve Our Islands v. Shoreline Hearings Board, 133 Wn. App. 503, 137 P.3d 31 (June 19, 2006), review denied, 162 Wn.2d 1008 (2008). A Shoreline Master Program adopted under the Shoreline Management Act must be read together with that jurisdiction's comprehensive plan and development regulations adopted under the GMA. Citing RCW 36.70A.480, which specifically states that a county's shoreline master program goals and policies are part of that county's GMA comprehensive plan, and the County's shoreline master program regulations are development regulations, and RCW 36.70A.040(4)(d), which states that development regulations must be consistent with and implement the comprehensive plan, the Court held that allowing inconsistency "would create chaos in attempts to implement and apply the numerous, varied and sometimes competing policies and regulations governing the use of land."[12]

A local government may not interpret its Shoreline Master Program to create conflicts with its comprehensive plan or development regulations (or vice versa, presumably).

Washington Shell Fish, Inc. v. Pierce County, 132 Wn. App. 239, 131 P.3d 326 (Mar. 28, 2006). Critical areas regulations adopted under the GMA and a shoreline master program adopted under the SMA may be independently enforced against an activity regulated by both.

Growth Management Hearings Boards

Eastern Washington

Concerned Friends of Ferry County/Robinson v. Ferry County, 06-1-0003, FDO, at 15-16 (Oct. 2, 2006). The Critical Areas Ordinance is the tool for carrying out the GMA requirement that all jurisdictions, whether or not they plan under GMA, must designate and protect critical areas.

While the GMA is specific as to what critical areas counties and cities must designate and protect using best available science, the Act is silent on what a county or city must do to enforce these requirements or punish violations of them. Enforcement of the Act through local comprehensive plan regulations and critical areas ordinances are where counties and cities are allowed to use their discretion [bounded by state law]. CFFC/Robinson v. Ferry County, EWGMHB Case No. 06-1-0003, FDO, at 16 (Oct. 2, 2006). …The County has included a violation section, a penalty section, and a civil remedy section in its final RLCAO. It may not be the most comprehensive, but it provides a legal remedy and enforcement for violations of the [CAO]. The Board looks to theses sections and the State's enforcement capabilities [under RCW 90.58] to ensure that Ferry County's critical areas will be protected as required. FDO at 16-17.

The [CAO] is the tool for carrying out the GMA requirement that all jurisdictions, whether or not they plan under GMA, must designate and protect critical areas, which include wetlands, areas with a critical recharging effect on aquifers used for potable water, frequently flooded areas, geologically hazardous

[12] *Id.* at 524, ¶ 31.

areas and fish and wildlife habitat conservation areas. In designating and protecting critical areas, counties and cities shall include the [BAS] in developing polices and development regulations to protect the functions and values of critical areas. RCW 36.70A.030(5), RCW 36.70A.170, and RCW 36.70A.172. FDO at 15-16.

Western Washington

Friends of Skagit County v. Skagit County, 96-2-0025 (FDO, 1-3-97). Where [critical areas] are designated and the Forest Practices Act provides a local government with some authority to act, the GMA requires a local government to protect CAs and their buffers within the scope of that authority.

Harmonizing the GMA Goals and Requirements

Court Decisions

Swinomish Indian Tribal Community. v. Western Washington Growth Management Hearings Board, 161 Wn.2d 415 (2007). The court recognized the competing goals in the GMA of protection of critical areas and natural resource lands stating that local governments are not given much direction as to whether protection of critical areas or the maintaining of agricultural lands is a priority. The court noted that RCW 36.70A.172(1) does require local governments to include best available science in developing regulations and policies to protect critical areas and that they are to "give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries." However, the court recognized that there was still deference given to balancing of local circumstances and in this case, the court did not require the county to curtail historic agricultural activities in critical areas and upheld the county's "no harm" provision in its ordinance. The court concluded that the "no harm" standard protected critical areas by maintaining existing conditions. The county's decision to not require mandatory riparian buffers in agricultural lands was upheld because doing so would impose a requirement to restore habitat functions that no longer existed.

Growth Management Hearings Board Decisions

Western Washington

Friends of the San Juans v. San Juan County, 10-2-0012, FDO, Oct. 12, 2010, pg. 24. When the County used a conditional use permit process, subject to hearing examiner review, the Board concluded that the hearing examiner may impose "reasonable" conditions of approval that do not render the [essential public facility] impractical. The Board has decided numerous cases giving discretion to an administrator. In this case, however, the Board decided the hearing examiner did not have clear guidance about what would constitute "reasonable" conditions for an [essential public facility]. Without clearer guidance about what constitutes "reasonable", and without requirements to fully mitigate impacts, the Board found the County's regulation on siting [essential public facilities] in critical areas lacked guidance on mitigation, Best Available Science, and failed to protect critical area functions and values. Critical areas are the "natural infrastructure" and the foundation of a landscape and cannot be overruled or "trumped" by siting [essential public facilities].

OSF/CPCA v. Jefferson County, 08-2-0029c, FDO, at 19-20 (Nov. 19, 2008). [When establishing buffers for streams, Petitioner, in citing to *Swinomish* and *Ferry County* asserted that the Record needs to contain evidence demonstrating that the County —undertook the required reasoned process of balancing the various planning goals against BAS. The Board disagreed and stated:] … the Board does not read these two cases as requiring a balancing between the GMA's mandate to protect critical areas and the non-prioritized goals jurisdictions are to use as a guide when developing comprehensive plans and development regulations. Rather, both *Swinomish* and *Ferry County* set forth the principle that if a jurisdiction seeks to deviate from BAS it must provide a reasoned justification for such a deviation. In addition, the Court of Appeals in *WEAN v. Island County* stated that it is when a jurisdiction elects to adopt a critical area requirement that is outside the range that BAS would support, the jurisdiction must provide findings explaining the reasons for its departure from BAS and identifying the other goals of GMA which it is implementing by making such a choice. Here, Jefferson County's choice of buffer width did not deviate from BAS; rather the County selected a width within the range of BAS and as such, although the balancing of GMA goals is always required in the context of GMA planning, the justification sought by OSF is not needed for a decision supported by BAS.

Swinomish Indian Tribal Community et al. v. Skagit County; 02-2-0012c (Compliance Order, December 8, 2003). While the Legislature could have imposed a more precise standard, the requirement to base the protection standard on BAS recognizes that science will change over time and the standards and protection measures will need to be revised. Standards and protection measures that are informed by BAS also provide cities and counties more flexibility to craft regulations that reflect local conditions. Nevertheless, this flexibility imposes on the County the complex responsibility of both setting a protection standard consistent with BAS, when the sources are sometimes conflicting, and harmonizing the goals and requirements of the GMA, while taking into consideration local conditions.

PPF v. Clallam County, 00-2-0008 (Compliance Order, 10-26-01). Applying reduced CA protections for ongoing agriculture in non RL designated areas, or restricted to only agricultural uses areas, based only upon the criteria of RCW 84.34, does not comply with the Act and substantially interferes with the goals of the Act. A process that involves reduction of CA protections for lots as small as one acre is not an allowable balancing of GMA goals.

Central Puget Sound

Ann Aagaard, Judy Fisher, Bob Fisher, Glen Conley, and Save a Valuable Environment (SAVE) v. City of Bothell, 15-3-0001, FDO (July 21, 2015), p. 12.: The Board is aware of no statutory authority supporting the City's theory that "balancing" protection of critical areas with the City's achievement of anticipated development [guaranteeing a zoned lot yield] is within its discretion. Instead, the GMA prescribes a consideration of multiple goals and directs cities and counties to simultaneously accommodate growth and protect critical areas. The Board finds the City's assertion that GMA provisions for accommodating growth trump the GMA provisions for protecting critical areas is clearly erroneous.

Department of Ecology/Department of Community, Trade and Economic Development[13] , et al v. city of Kent, 05-3-0034, FDO (April 19, 2006), at 11-13. [A thorough discussion as to balancing of the GMA's goals and requirements in light of several decisions of the Courts including Quadrant (2005), King County

[13] Department of Community, Trade and Economic Development (CTED) is now the Department of Commerce.

(2000), and Bellevue (2003). The Board concluded that these decisions of the Supreme Court and Court of Appeals established the rule that a jurisdiction may not assert the need to balance competing GMA goals as a reason to disregard specific GMA requirements.]

[The Board concludes that GMA goals provide a framework for plans and regulations, and many of the goals are backed and furthered by specific and directive GMA requirements and mandates. Therefore cities and counties may not merely rely upon GMA goals, standing alone, to dilute or override GMA requirements.] FDO, at 52-53.

[The Board acknowledges the language used by the Court of Appeals in both the HEAL case and subsequently in WEAN that apparently allows "balancing" in the context of critical areas regulation. In the CAO context, such "balancing" is clearly appropriate if GMA requirements are in conflict, but there is no hard evidence here to support such a divergence from wetland ranking and buffers based on best available science.] FDO, at 53.

Adequate Standards for Administrative Discretion

Growth Management Hearings Board Decisions

Western Washington

WEAN v. Island County, 14-2-0009 (FDO, June 24, 2015). [In considering administrative allowance of an exemption from critical area regulations,] The Board's concern is the lack of adequate standards to guide a County administrator in determining what constitutes an "appropriately limited and reasonable amount of time". The County has the obligation to protect critical areas and the absence of clear standards could lead to the resumption of agricultural activities, with potential negative impacts on the functions and values of FWHCAs, following a decade or more of no agricultural activity.

RE Sources v City of Blaine, 09-2-0015, Order on Reconsideration at 6 (April 27, 2010). [The Board reiterated its FDO holding] As the Board noted in the FDO in its discussion pertaining to administrator discretion, providing sufficient guidance for decision-makers is an important element of development regulations.

Evergreen Islands, Futurewise and Skagit County Audubon Society v. City of Anacortes, 05-2-0016 (FDO, 12/27/05). While we find that RCW 36.70A.172(1) does not require a new BAS investigation at the time of permitting, we find, as we have in previous cases, that discretion in issuing permit decisions should be guided by specific criteria. The City's requirements for an extensive critical areas report by a qualified biologist, coupled with the requirement that habitat alterations or mitigations must protect the quantitative and qualitative functions and values of habitat conservation areas when permits are issued, make these regulations compliant.

Identification of Critical Areas in Ordinance versus Maps

Court Decisions

Common Sense Alliance v. Growth Management Hearings Board, 2015 Wash App. LEXIS 1908 (2015). [Note: This is an unpublished case and therefore not precedential.] This case involved San Juan County's 2012 critical areas ordinance updates. Friends of the San Juans raised 52 issues for review, contending the four ordinances at issue did not go far enough to protect critical areas, and those with an opposing view raised 27 issues, contending the ordinances went too far to protect critical areas. In San Juan Superior Court, the Alliance brought six issues and Friends brought seven. The Court upheld the Board on each issue. The arguments on appeal focused mainly on San Juan's habitat conservation ordinance. In this unpublished case, Division One reaffirmed the propriety of identify critical areas during the permitting process rather than specifically identifying them on a map. Id. at *23-*24 (noting that all shorelines are not per se critical areas). In addition, all potential critical habitat areas need not be specifically evaluated and mapped out in advance of development activity. "The Act does not require that a critical area ordinance take a parcel-by-parcel approach."

Growth Management Hearings Board Decisions

Eastern Washington

Hazen, et al v. Yakima County, 08-1-0008c, FDO at 22-23 (April 5, 2010). WAC 365-190-040(5)(a) denotes that when designating critical areas, Yakima County was to provide for the general distribution, location, and extent of the critical area. WAC 365-190- 040(5)(b) goes on to state in circumstances where critical areas cannot be readily identified, these areas should be designated by performance standards or definitions and WAC 365-190- 040(5)(c) provides that designation could be satisfied by the adoption of a policy statement. It would appear to the Board that CARAs expressly fall within this realm because, unlike wetlands or streams which can be visually delineated, the underground nature of an aquifer provides for a more challenging determination as to their location and boundaries.

Woodmansee, et al. v. Ferry County, 95-1-0010, Order on Compliance (Apr. 16, 1997).The standard for designating critical areas and forestlands is "land use designations must provide landowners and public service providers with the information needed to make decisions." Given the recognized deficiency in the maps in this case, it is necessary to follow up that designation with a process, which includes on-site inspections as permits are processed.

Western Washington

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c: [Contrary to an assertion that RCW 36.70A.170 and RCW 36.70A.480 required the County to classify and designate specific areas as FWHCAs], the Board stated " . . . Department of Commerce regulations specifically anticipate the need to designate critical areas using 'maps' and/or 'performance standards,' with a preference for performance standards when adopting land use regulations because maps are less precise", citing WAC 365-190-040(5)(b) and WAC 365-190-080(4) *FDO (September 6, 2013)*, at 90, 91.

While the County has assembled some critical area maps, it is clear that those maps do not serve to designate FWHCAs. Conditions in the field control. As addressed elsewhere in this FDO, the County's system is site specific. Mapping of specific fish and wildlife habitat conservation critical areas is not a GMA requirement. *FDO (September 6, 2013)*, at 92.

Reliance on State or Federal Regulations for Critical Areas Protection

Growth Management Hearings Board Decisions

Eastern Washington

Hazen, et al v. Yakima County, 08-1-0008c, FDO at 26 (April 5, 2010) [The Board relying on the Court of Appeals holding in *WEAN v Island County, 122 Wn. App.156 (2004)* stated] Although the Board has no doubt federal, state, and local regulations intended to protect aquifers are based on credible science, it is impossible for the Board to determine if these regulations where subject to the critical areas analysis required by the GMA … federal and state regulations do not replace local regulations because they cannot focus on local conditions in the way local governments can. If the County seeks to fulfill its duty by relying on existing regulations – whether they be federal, state, local, or tribal - then those regulations must be subject to the applicable critical areas analysis to ensure compliance with RCW 36.70A.172(1)'s requirement to include BAS.

Central Puget Sound

Hood Canal Environmental Council, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06), at 30. Petitioner KAPO contends that the County may not rely on federal habitat designations undertaken for another purpose but must conduct its own shoreline inventory or "independent analysis" and show in the record its owned "reasoned process." The Board however, reasons that the "best available science" requirement includes the word "available" as an indicator that a jurisdiction is not required to sponsor independent research but may rely on competent science that is provided from other sources. . . .The Board concludes that the County appropriately relied on available science.

Exemptions from Critical Areas Ordinances

Growth Management Hearings Board Decisions

Eastern Washington

Hazen, et al v. Yakima County, 08-1-0008c, FDO at 29 (April 5, 2010). [In responding to petitioner's issue contending CAO exemptions violated the GMA, the Board, relying on *Clallam County v. WWGMHB*, 130 Wn. App. 127, 140 (2005) held] Although exemptions are not prohibited under the GMA, all development regulations, even those for exempt activities, are to be based on BAS and tailored so as to reasonably ameliorate potential harm and address cumulative impacts.

[In regards to CAO exemptions, the Board noted] The County contends the administrative review process of YCC 16C.03.06 will assure the functions and values of the critical area will be protected. However, it is not the review process but the inclusion of BAS that is imperative when it comes to critical areas. FDO at 30.

Western Washington

Whidbey Environmental Action Network v. Island County, 14-2-0009: [The County failed to protect critical areas as it allowed] "grandfathered non-conforming uses" which no longer comply with more recently enacted and, presumably, more protective land use laws, [to be] be considered a "reasonable use" when determining whether a proposed use met the reasonable use criteria. Final Decision and Order, June 26, 2015, p. 8.

Friends of the San Juans, et al. v. San Juan County, 13-2-0012c: [Petitioners challenged an exception from the CAO's for public agencies and public/private utilities when such an entity "has difficulty" meeting protection regulations resulting in preclusion of the proposal, to which the Board responded] "The clause 'would preclude a development proposal' does not include a qualifier that places the initial burden on the agency to show the location of the proposed development is necessary. . . the initial determination under the County's system, the location of the 'development proposal', is left solely to the proponent, notwithstanding the possibility the proposal could be located in an area with fewer negative impacts to a critical area. The County has the obligation to protect critical areas and leaving the choice of location to the proponent is in effect a delegation of authority, would abrogate the duty to protect critical areas and fails to assure no net loss of ecological functions. Furthermore, there are no standards by which to determine that a project proponent would "have difficulty" meeting standard critical area regulations." FDO (September 6, 2013), at 33, 34.

RE Sources v City of Blaine, 09-2-0015, Order on Reconsideration at 6 (April 27, 2010). [In response to the City's assertion that the Board's holding requires adoption of a numerical limitation, which not only misinterprets the reasonable use exemption but ignores the applicable compensatory mitigation requirements] The Board has long recognized that although reasonable use exemptions may actually permit impacts to a critical area, they are an indispensable component of critical area regulations

because they address the issue of regulatory takings claims. Thus, the presence of such provisions within Blaine's CAO are not, in and of themselves, the basis for non-compliance with the GMA. And, although RUEXs are necessary to prevent regulatory takings claims, it does not mean such provisions should not seek to prevent the protection of all the functions and values of wetlands. Thus, the Board agrees that setting a specific numerical requirement would not allow the flexibility necessary for a project proponent to work with the City to find a reasonable use for their property. However, the Board does not believe the City's process, through its planning commission, is sufficiently clear so as to determine the reasonable use of the property while protecting all functions and values of the wetland.

WEAN/CARE v. Island County, 08-2-0026c, FDO at 23 (Nov. 17, 2008).The Board recognizes that although they may actually permit impacts to a critical area, reasonable use provisions are an indispensable component of critical area regulations because they address the issue of regulatory takings claims. Regulatory takings have been an element of American jurisprudence since the 1920s and are founded on constitutional principles, seeking to provide a remedy when a regulation takes all reasonable use of a parcel of land. Given this grounding in constitutional law, the Board has no jurisdiction to determine Petitioners' claims as to whether the County's regulations exceed what is necessary to protect the County from a constitutionally-based takings claim as this is a question for the courts. However, although reasonable use provisions are necessary to prevent a constitutional takings claim, that does not mean such provisions should not prevent the protection of all the functions and values of wetlands and do not need to be supported by BAS.

Permitting uses based upon uses that were established, albeit legally, prior to the adoption of ordinances that required the protection of critical areas cannot be considered a regulation that includes BAS. Instead such a regulation improperly employs existing uses as the benchmark of what is appropriate in the vicinity of critical areas and merely perpetuates the establishment of uses that are incompatible with BAS. FDO at 26.

PPF v. Clallam County, 00-2-0008 (FDO, 12-19-00). A local government must regulate preexisting uses in order to fulfill its duty to protect critical areas. GMA requires any exemption for preexisting use to be limited and carefully crafted.

FOSC v. Skagit County, 96-2-0025 (FDO, 1-3-97). [Critical areas] upon which exempted activities occur are still designated CAs. Exemptions are a means to lessen protection of CAs for certain activities. The real question is whether the exemptions are supported by reasoned choices based upon appropriate factors actually considered as contained in the record.

Central Puget Sound

Hood Canal Environmental Council, et al v. Kitsap County, 06-3-0012c, FDO (8/28/06) at 19-20. [The County exempted from regulation very small, truly isolated and poorly functioning wetlands. The County was advised by state agencies that such exemptions were not supported by BAS. The Board reviewed the case of *Clallam County v. Western Washington Growth Management Hearings Board*, 130 Wash. App. 127, 140, 121 P.3d 764 (2005), pertaining to the limitations on exemptions from critical areas regulations.] The Board reads the Court's opinion to require CAO exemptions to be supported by some analysis of cumulative impacts and corresponding mitigation or adaptive management. Here, Kitsap County has not expanded its small wetlands exemption; in fact the exemption has been somewhat

narrowed. But there is no evidence in the record of the likely number of exempt wetlands, no cumulative impacts assessment or adaptive management, and no monitoring program to assure no net loss. In light of the Court's guidance in Clallam County, which the Board finds controlling, the Board is persuaded that a mistake has been made; Kitsap's wetland exemption is clearly erroneous.

State Review

Growth Management Hearings Board Decisions

Eastern Washington

Concerned Friends of Ferry County, v. Ferry County, 97-1-0018, Order on Reconsideration, (Nov. 24, 1999). It is the County's obligation to include best available science in the designation and protection of frequently flooded areas. Ferry County, by its failure to demonstrate otherwise, forces this Board to conclude that best available science was not included in developing policies in the sections of the Second Amended Ordinance 95-06 under review. The contention that the silence of the reviewing Department is considered approval and constitutes consideration and inclusion of best available science is not correct.

Critical Areas Policies in the Comprehensive Plan and Subarea Plans

Court Decisions

Honesty in Environmental Analysis & Legislation (HEAL) v. Central Puget Sound Growth Management Hearings Board, 96 Wn. App. 522, 979 P.2d 864 (June 21, 1999) (amended Aug. 25, 1999). Growth Management Hearings Boards may review critical areas policies for compliance with the best available science requirement. The Court acknowledged that the GMA does not require local governments to adopt critical areas policies, but held that if a city or county chooses to adopt critical areas policies, the Board has jurisdiction under RCW 36.70A.280 to review the policies to determine whether they comply with RCW 36.70A.170 and .172(1).[14]

Growth Management Hearings Boards

Central Puget Sound

Fuhriman, et al v. City of Bothell, 05-3-0025c, FDO (August 29, 2005), at 34-36. [The City designated a 357 acre area with an R-40,000 minimum lot size – Fitzgerald Subarea. The basis for the designation to protect large-scale, complex, high rank value critical areas that could not be adequately protected by

[14] 96 Wn. App. at 528. The court inadvertently referred to RCW 36.70A.171 (which does not exist), rather than RCW 36.70A.170.

existing critical areas regulations.] It seems apparent to the Board that, at least for the 357-acres disputed here, the City's present critical areas regulations were believed to be inadequate in protecting the critical areas at issue. This is evidenced by the Litowitz Test Report [which identified the area as having large-scale, complex and high rank value critical areas] and the fact that even the Planning Commission [which did not support the designation] recommended a "special overlay designation" and "special protections and regulations" to be developed to adequately protect the critical areas in question. The Commission's recommendation by itself evidences perceived inadequacies in the City's existing critical areas regulations that can support the added protection of the R136 40,000 designation. Further, the overall size and interconnectedness of the affected hydrologic system is well documented; it is not inappropriate to look at a sub-basin or related hydrologic feature to assess critical areas in a specific area. [The Board upheld the R-40,000 designation for the affected area.]

[The City designated a portion of the Norway Hill area with an R-40,000 minimum lot size. Steep slopes, erosive soils, difficulty in providing urban services and connection to an aquifer and salmon stream were the basis for the designation. The Board noted that only a portion of the area designated was within the city limits, the remainder being within the unincorporated county, but within the UGA and planned annexation area of the City.] There is no question that the area designated R-40,000 within the Norway Hill Subarea is not a large scale, complex, high rank order value critical area as analyzed in the Board's Litowitz case. The City's Litowitz Test Report confirms this conclusion. However, in a recent Board decision [Kaleas, 05-3-0007c, FDO.], the Board acknowledged that the critical areas discussed in the Litowitz case, and several cases thereafter, were linked to the hydrologic ecosystem, and that the Board could conceive of unique geologic or topographical features that would also require the additional level of protection of lower densities in those limited geologically hazardous landscapes. [To qualify, geologically hazardous critical areas would have to be mapped, and use best available science, to identify their function and values. The Board concluded that the geologically hazardous areas on Norway Hill were mapped, and the area contained aquifers connected to salmon bearing streams. The Board upheld the R-40,000 designation for the affected area.] FDO, at 37-39.

Tulalip Tribes of Washington v. City of Monroe, 99-3-0013, January 28, 2000 Order, at 4. [The Tribe] has raised important and provocative questions about the responsibility of a city to protect fish habitat in view of the recent federal listings of Chinook salmon, bull trout, and other species. The GMA contains specific requirements for local governments to designate and protect critical areas, including fish and wildlife habitat. . . . Significantly, the Tribes insist that they are not challenging the City's critical areas regulations adopted pursuant to [the GMA]. They instead assert that the City' [adoption of a Subarea Plan] violates the GMA because the Subarea Plan and critical areas regulations are inextricably intertwined.

The critical area scheme set out by the GMA for [jurisdictions] is: (1) designate critical areas by September 1, 1991; (2) adopt development regulations to protect these designated critical areas by September 1, 1991; and (3) when adopting a comprehensive plan by the July 1, 1994 deadline, review the critical area designations and protective development regulations. In other words, the requirement of RCW 36.70A.060(3) applies to the adoption of the initial comprehensive plan required by RCW 36.70A.040; nothing in RCW 36.70A.060(3) creates a duty for the [jurisdiction] to review its critical area designations and development regulations upon adoption of a subsequent subarea plan. 1/28/00 Order, at 10.

Taxes and Fees on Development

Court Decisions

Olympic Stewardship Foundation v. Western Washington Growth Management Hearings Board, 166 Wn. App. 172 (2012), *review denied*, 174 Wn.2d 1007 (2012).
Olympic Stewardship Foundation challenged Jefferson County's regulations which restricted vegetation removal in zones surrounding rivers at high risk for channel migration (channel migration zones or CMZ). The CMZ was designated as a critical area under the "geologically hazardous areas" component of the definition. Among other issues, the Foundation challenged the vegetation removal restrictions as being in violation of RCW 82.02.020 which prohibits local governmental bodies from imposing taxes, fees or charges on development. The court found that by prohibiting vegetation removal and development only within those areas determined to be "high risk" critical areas, any dedications of land within the critical areas are de facto "reasonably necessary as a direct result of the proposed developments," in compliance with RCW 82.02.020. Local governments can impose restrictions on development without running afoul of RCW 82.02.020 where they can demonstrate that restrictions are reasonably necessary as a direct result of the proposed development. The development conditions must be tied to a specific, identified impact of a development on a community (thus both a nexus and rough proportionality to the impacts).

Citizens for Rational Shoreline Planning v. Whatcom County, 172 Wn.2d 384, 387, 258 P.3d 36, 38 (2011).
Generally, RCW 82.02.020 prohibits local governmental bodies from imposing taxes, fees or charges on development not authorized in state law. The plaintiffs in the case alleged that the regulations in Whatcom County's shoreline management plan (SMP) constituted a direct or indirect tax or fee. The plaintiffs also argued that the SMP was subject to RCW 82.02.020 because the regulations mirrored the County's critical areas ordinance. The court held that an SMP is required by state law and subject to the review and approval of Ecology, and so does not constitute local action for the purposes of RCW 82.02.020. The court also held that the even if portions of the SMP were essentially the same as the County critical areas ordinance, this didn't make the SMP challengeable under RCW 82.02.020.

Citizens' Alliance for Property Rights v. Sims, 145 Wash. App. 649, 654, 187 P.3d 786, 788–89 (2008).
As part of its critical areas ordinance, King County imposed limitations on the amount of land that could be graded or cleared in on a given parcel of property zoned as rural. The limits depended on parcel size. Citing Isla Verde Int'l Holdings, Inc. v. City of Camas (146 Wn.2d 740, 49 P.3d 867 (2002)) and other cases, the court of appeals noted that ordinances that imposed conditions or payments in lieu of compliance constituted an "in kind indirect tax, fee, or charge on new development." The County argued that this regulation was mandated by the GMA as part of its critical areas protection. The court recognized that a critical areas ordinance is mandated by the GMA but observed that the County has much latitude in compliance and the GMA didn't mandate the County's particular grading and clearing restrictions. Local governments have authority to adopt regulations and impose conditions for development,but courts have allowed these conditions only where the purpose is to mitigate problems caused by particular development and are reasonably necessary as a direct result of the development.

Appendix 1.C

Example Findings of Fact

Bellevue

Des Moines

Edmonds

Selah

3422-RES
10/12/2016

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 9152

A RESOLUTION regarding completion of the required periodic update to City of Bellevue development regulations for consistency with the requirements of the Growth Management Act pursuant to Chapter 36.70A RCW.

WHEREAS, the Bellevue Comprehensive Plan initially was adopted on December 6, 1993, and was updated November 29, 2004; and

WHEREAS, on October 22, 2012, the Bellevue City Council initiated a Comprehensive Plan update to respond to the requirement of the state Growth Management Act to periodically update such plans; and

WHEREAS, the City engaged in a multi-year planning process to update the Comprehensive Plan that included public events and open houses; over 70 meetings of different boards and commissions; an online strategy that included a project website, social media, and online open house; meetings with neighborhoods and stakeholders; a series of press releases and op-eds; and a speaker series; and

WHEREAS, the Planning Commission held a public hearing on March 4, 2015, with regards to the proposed update to the Comprehensive Plan; and

WHEREAS, on March 25, 2015, the Planning Commission recommended that the City Council approve such proposed update; and

WHEREAS, the Planning Commission's recommendation was presented to the City Council by representatives of the Planning Commission, Arts Commission, Environmental Services Commission, Human Services Commission, Parks and Community Services Board, and Transportation Commission on April 6, 2015; and

WHEREAS, pursuant to RCW 36.70A.130(1), the City Council adopted the Comprehensive Plan update on August 3, 2015; and

WHEREAS, following adoption of the Comprehensive Plan update in August 2015, City worked to evaluate its development regulations to ensure consistency with the requirements of Chapter 36.70A RCW; and

WHEREAS on April 4, 2016, City of Bellevue staff completed an analysis of the City's development regulations for consistency with the requirements of Chapter 36.70A RCW, and staff found the development regulations and protections currently in effect complied with Chapter 36.70A RCW, with the exception of certain critical areas regulations; and

WHEREAS, the Bellevue City Council held a public hearing on April 18, 2016 to receive public comments on the recommended staff findings on review, but no members of the public made any comments; and

WHEREAS, based on its review of the requirements of Chapter 36.70A RCW, the analysis and findings prepared by staff, and the lack of public comments received at the public hearing, the City Council found and declared pursuant to Resolution No. 9094 that the development regulations and protections currently in effect comply with Chapter 36.70A RCW, with the exception of certain critical areas regulations; and

WHEREAS, pursuant to RCW 36.70A.130(7), the deadline for the City to review its critical area regulations and to provide an update to the Washington Department of Commerce passed on June 30, 2016; and

WHEREAS, although the City had worked diligently to complete the Best Available Science and Existing Conditions Technical Reports and Gap Analysis (included with the Resolution as Attachment 1 and to develop a package of code amendments to ensure that the Bellevue critical areas overlay complies with the critical areas regulations in Chapter 36.70A RCW, more time was needed for the City to complete its review and adoption of necessary code amendments; and

WHEREAS, the Bellevue City Council held a public hearing on October 10. 2016, to receive public comments on the recommended code amendments necessary to comply with the critical areas regulations in Chapter 36.70A RCW; and

WHEREAS, contemporaneously to the GMA required update to the critical areas regulations, the City of Bellevue submitted its required update to its Shoreline Master Program to the Department of Ecology in compliance with the Shoreline Management Act (SMA) Chapter 90.58 RCW; and

WHEREAS, the required update to the Shoreline Master Program submitted to the Department of Ecology on December 30, 2015, and the updates subsequently required to the Bellevue critical areas overlay amend overlapping sections of the Bellevue City Code; and

WHEREAS, in order to avoid confusion or inadvertent inconsistencies between the amendments to the Bellevue critical areas overlay necessary to comply with GMA, and amendments that were approved by the Council to comply with SMA, the GMA and SMA updates have been consolidated in a single code amendment included in this Resolution as Attachment 1, and

WHEREAS, Chapter 90.58 RCW has granted to the Department of Ecology approval authority over local shoreline master programs, and the Bellevue shoreline master program incorporates the critical areas overlay by reference, the shoreline

master program and critical area updates will both become effective upon approval by the Department of Ecology; and

WHEREAS, based on its review of the requirements of Chapter 36.70A RCW, the analysis and findings prepared by city staff and consultants, the City Council finds and declares that the review and findings have been prepared in conformance with Chapter 36.70A RCW, Chapter 90.58 RCW, Chapter 43.21C RCW, and sections 20.35.400 through 440 and Part 20.30J of the Bellevue City Code; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. Based on its review of the requirements of Chapter 36.70A RCW, the analysis and findings prepared by staff, and the public comments received, the City Council hereby finds and declares that the development regulations and protections as updated by code amendments contained in Attachment 1 to this Resolution comply with Chapter 36.70A RCW and that the update required by RCW 36.70A.130(1)(a) is complete.

Section 2. The City Manager is hereby authorized to submit this Resolution along with the attachments to the Washington State Department of Commerce to demonstrate compliance with the required GMA periodic update completed as of the date of this Resolution.

Section 3. The City Manager is hereby further authorized to submit this Resolution along with the attachments to the Washington State Department of Ecology for review and to become effective upon Ecology approval.

Passed by the City Council this 10th day of October, 2016, and signed in authentication of its passage this 12th day of October, 2016.

(SEAL)

John Stokes, Mayor

Attest:

Kyle Stannert, City Clerk

EXHIBIT A

ORDINANCE NO. 1649

Findings of Fact
Review and Revision of Comprehensive Plans and Development Regulations Required (RCW 36.70A.040)

1. Counties and cities required to plan under RCW 36.70A.040 must review, and revise if necessary, their entire comprehensive plan and development regulations. These cities and counties should affirm this status in their findings.

2. The City of Des Moines is required to plan under RCW 36.70A.040. Every seven years, RCW 36.70A.130(1) requires City of Des Moines to take legislative action to review and, if needed, revise its comprehensive plan and development regulations, including its policies and regulations designating and conserving natural resource lands and designating and protecting critical areas to comply with the requirements in Chapter 36.70A RCW.

3. Pursuant to RCW 36.70A.130(4), the deadline for the City of Des Moines to comply with the update required by RCW 36.70A.130(1) is June 30, 2015.

4. On June 25, 2015, the City of Des Moines adopted Ordinance No. 1623 revising and updating the comprehensive plan now entitled *Des Moines 2035: Charting Our Course for a Sustainable Future*.

5. Washington Department of Commerce August 19, 2015 letter to the City of Des Moines indicating:

   a. Receipt of Des Moines's adopted Ordinance No. 1623 on June 6, 2015;

   b. Completion of the City's comprehensive plan review and update required under RCW 36.70A.130(1); and

   c. Notifying the City of the need to finalize the review and update of the City's development regulations and critical area regulations.

6. On August 11, 2015, consultant Parametrix prepared a technical memorandum related to the Federal Emergency Management Agency's National Flood Insurance Program Compliance Review

that discussed the City's on-going participation in the Program and strategies to achieve compliance with the Biological Opinion from National Marine Fisheries Services to apply Reasonable and Prudent Alternatives to protect listed species and their critical habitat, referred to as Door 1, Door 2, or Door 3 strategies and recommending that the City of Des Moines remain in Door 3.

7. On October 26, 2015, consultant AHBL, Inc. prepared a GAP analysis of the City's environmentally critical area regulations currently in effect in the City of Des Moines for consistency with the requirements of Chapter 36.70A.172 RCW and best available science. This analysis was supplemented by a February 12, 2016 technical memorandum related to the National Flood Insurance Program Compliance. Based on this analysis, AHBL, Inc. prepared proposed revisions to Des Moines environmentally critical area regulations it concluded are needed to comply with Chapter 36.70A RCW.

8. The Des Moines City Council Environment Committee reviewed the analysis and recommended updates to the environmentally critical area regulations at their February 18, 2016 meeting and recommended that proposed revisions be brought forward to the full City Council at a public hearing.

9. On March 10, 2016, a 60-day notice of intent to adopt the proposed amendments was sent to the Washington State Department of Commerce and the City received acknowledgement from Commerce that the procedural requirements of RCW 36.70A.106 have been met on March 16, 2016.

10. On March 31, 2016, Des Moines City Council adopted Resolution No. 1327 setting a public hearing date on May 12, 2016 to consider Draft Ordinance No. 15-147 amending the City of Des Moines development regulations relating to the protection and regulation of environmentally critical areas to ensure compliance with the Washington State Growth Management Act (chapter 36.70A RCW).

11. On April 6, 2016 a combined Notice of Public Hearing and SEPA Determination of Nonsignificance was issued providing for a 15-day comment period and 10-day appeal period and no comments or appeals were filed.

12. On May 12, 2016, the Des Moines City Council held a public hearing to receive public comments on the recommended findings on review and proposed revisions. Based on its review of the

requirements of Chapter 36.70A RCW, the analysis and proposed revisions prepared by (staff and consultants AHBL, Inc. and Parametrix), the recommended findings on review and proposed revisions, the Des Moines City Council finds and declares that the review and needed revisions have been prepared in conformance with applicable law, including Chapter 36.70A RCW, Chapter 43.21C RCW, and appropriate public participation and adoption process established in chapter 18.20 DMMC.

ORDINANCE NO. 4026

AN ORDINANCE OF THE CITY OF EDMONDS, WASHINGTON, AMENDING THE CRITICAL AREAS REGULATIONS CONTAINED IN EDMONDS COMMUNITY DEVELOPMENT CODE CHAPTERS 23.40 ENVIRONMENTALLY CRITICAL AREAS GENERAL PROVISIONS, 23.50 WETLANDS, 23.60 CRITICAL AQUIFER RECHARGE AREAS, 23.70 FREQUENTLY FLOODED AREAS, 23.80 GEOLOGICALLY HAZARDOUS AREAS, AND 23.90 FISH AND WILDLIFE HABITAT CONSERVATION AREAS, AMENDING ECDC SECTION 19.00.025, A PROVISION OF THE BUILDING CODE RELATED TO FREQUENTLY FLOODED AREAS, AMENDING ECDC SECTION 21.40.030, TO ADD A NEW EXCEPTION TO THE DEFINITION OF "HEIGHT" FOR USE IN COASTAL HIGH HAZARD AREAS AND COASTAL "A" FLOOD ZONES; AMENDING CERTAIN PERMIT REVIEW PROCESSES RELATED TO CRITICAL AREAS IN ECDC SECTIONS 20.01.003 AND 20.03.002.

WHEREAS, the City of Edmonds is required to plan under RCW 36.70A.040; and

WHEREAS, RCW 36.70A.130(1) requires City of Edmonds to take legislative action to review and, if needed, revise its comprehensive plan and development regulations, including its policies and regulations designating and conserving natural resource lands and designating and protecting critical areas to comply with the requirements in chapter 36.70A RCW (the Growth Management Act or GMA); and

WHEREAS, on June 16, 2015, the city council of the City of Edmonds reviewed its comprehensive plan and conducted a public hearing on the 2015 update to the City of Edmonds comprehensive plan; and

WHEREAS, the City of Edmonds adopted the 2015 update to the City of Edmonds comprehensive plan with Ordinance 4003; and

WHEREAS, based on early direction from the City Council, the 2015 update did not involve a major policy shift, but instead focused on consistency and streamlining, including the latest data, as well as the addition of several performance measures; and

WHEREAS, it was determined during this review process that, with the exception of the critical areas regulations, the City of Edmonds' development regulations remained consistent with and would continue to implement the comprehensive plan and the proposed update to it so that no other development regulations would need to be revised at this time; and

WHEREAS, the Growth Management Act (GMA) defines "critical areas" to 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; and

WHEREAS, the GMA requires that each city adopt development regulations that protect critical areas; and

WHEREAS, cities in Snohomish County are expected to take action to review and, if needed, revise their comprehensive plans and development regulations to ensure the plan and regulations comply with the requirements of the GMA on or before June 30, 2015, and every eight years thereafter; and

WHEREAS, cities must include the best available science in developing policies and development regulations to protect the functions and values of critical areas; and

WHEREAS, cities must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries; and

WHEREAS, the City has not comprehensively reviewed its critical areas ordinance and best available science since 2005 when the current version of the critical area regulations became effective; and

WHEREAS, the City selected environmental consultants ESA to assist the City in updating the 2004 City's Best Available Science Report (Exhibit 1 to September 8, 2015 agenda memo 7969) and to evaluate the City's critical area regulations given the changes in science; and

WHEREAS, the Best Available Science addendum prepared by ESA reviewed the current science related to critical areas as it has changed since 2004 (see Exhibit 2 to September 8, 2015 agenda memo 7969); and

WHEREAS, ESA also prepared a memo for the City's review that outlines certain provisions that may deviate from Best Available Science, as required by WAC 365-195-915; and

WHEREAS, the Planning Board reviewed proposed changes to the critical area regulations over the course of five Planning Board meetings between March 25 and July 22, 2015; and

WHEREAS, the Board's review included a July 8, 2015 public hearing; and

WHEREAS, the Planning Board forwarded its recommended changes to the City's critical area regulations to the City Council; and

WHEREAS, the Planning Board also forwarded a recommendation for some modifications to the building code Title 19 ECDC and definitions in Title 21 ECDC, in conjunction with its recommendations on critical areas and frequently flooded area regulations; and

WHEREAS, the City Council reviewed the draft updated critical area regulation as recommended by the Planning Board at the September 8, 2015 Council meeting and continued that review at the September 22, 2015 Council meeting; and

WHEREAS, the City Council held a public hearing at the October 6, 2015 City Council meeting and continued to review the critical area regulations at the November 2, 2015 City Council meeting; and

WHEREAS, the City Council directed the City Attorney to prepare an ordinance to adopt the updated critical areas regulations as amended by the City Council during the December 15, 2015 City Council meeting; and

WHEREAS, the Mayor asked the City Council to reconsider the amendments that were approved during the December 15, 2015 City Council meeting; and

WHEREAS, the Mayor forwarded to the City Council a December 22, 2015 memo that addresses the implications of the December 15, 2015 amendments; and

WHEREAS, on January 26, 2016, the City Council adopted a critical areas ordinance in the form of Ordinance 4017, which included the eight amendments made at the December 15, 2015 City Council meeting; and

WHEREAS, Ordinance 4017 was vetoed by Mayor Earling on January 28, 2016; and

WHEREAS, at the February 2, 2016 City Council meeting, rather than voting on whether to override the veto, the City Council discussed returning to the December 15, 2015 (pre-amendments) version of the critical area regulations and providing staff a new set of proposed amendments, using that version as a baseline, for discussion at future City Council meetings; and

WHEREAS, an initial set of proposed amendments were discussed at the February 23, 2016 City Council meeting; and

WHEREAS, the City Council adopted Resolution 1351 on March 1, 2016, which expressed a goal date of April 30, 2016 for adoption of another critical areas ordinance and made a finding that, except for the critical areas ordinance, the required 2015 review of the City's comprehensive plan and development regulations had been completed and found to be consistent with the GMA; and

WHEREAS, the City Council decided to hold another public hearing on potential amendments to the draft critical area regulations on March 15, 2016; and

WHEREAS, the City Council took preliminary action on the proposed amendments on March 15, 2016, April 5, 2016, April 12, 2016 and April 19, 2016; and

WHEREAS, this ordinance serves as the final legislative action required by the City under RCW 36.70A.130 for the 2015 review and update;

NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF EDMONDS, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. The following chapters of the Edmonds Community Development Code are hereby amended to read as set forth in **Attachment A** hereto, which is incorporated herein by this reference as if set forth in full (new text is shown in underline; deleted text is shown in ~~strikethrough~~; text moved from one location to another is shown in double underline where it was moved to and shown in ~~double strikethrough~~ where it was moved from; new graphics have an underline under the graphic; deleted graphics have been crossed-out with an X): chapter 23.40, entitled "Environmentally Critical Areas General Provisions;" chapter 23.50, entitled "Wetlands;" chapter 23.60, entitled "Critical Aquifer Recharge Areas;" chapter 23.70, entitled

ORDINANCE NO. 2019

AN ORDINANCE ADOPTING THE SELAH GMA PERIODIC UPDATE OF THE CRITICAL AREAS ORDINANCE

WHEREAS, in compliance with the Washington State Growth Management Act (GMA), the City adopted a Comprehensive Plan in 2006; and,

WHEREAS, in accordance with RCW 36.70A.130, an adopted Comprehensive Plan shall be subject to continuing evaluation and review, and amendments to the Comprehensive Plan shall be considered no more frequently than once every year; and,

WHEREAS, the schedule established by the GMA in RCW 36.70A.130(4) mandates each fully planning city in Washington to take action to review and, if necessary, revise its comprehensive plan, development regulations and critical areas ordinance to ensure compliance with the Growth Management Act; and,

WHEREAS, the City has updated the Comprehensive Plan, development regulations and critical areas ordinance to ensure compliance with any changes to the GMA; to ensure compliance with the Yakima County Countywide Planning Policies; to fully reflect the issues and opportunities facing the City; to insure internal and regional consistency; and to revise policies and other language in the plan to update information, improve readability and eliminate redundancy; and,

WHEREAS, the Selah City Council has reviewed the updated critical areas ordinance regulations as required by the GMA; and,

WHEREAS, the amendments to the Critical Areas Ordinance implement the goals and policies of the Comprehensive Plan which establishes the community's desirable character and physical pattern of growth and preservation over the next 20 years; and,

WHEREAS, the GMA periodic update provides guidance in balancing the development of resources with the preservation of environmental values; and,

WHEREAS, the Comprehensive Plan sets goals and policies for growth that will be implemented through the development regulations and critical areas ordinance contained in the Selah Municipal Code, including the zoning ordinance and official zoning map, in a fiscally and environmentally responsible fashion; and,

WHEREAS, the recommended revisions incorporate changes in State law, Countywide Planning Policies, demographics and land use resources;

WHEREAS, Chapter 43.21C RCW, the State Environmental Policy Act (SEPA) requires

the City of Selah to conduct environmental review of the periodic update and amended Critical Areas Ordinance; and,

WHEREAS, on June 5, 2017, the City of Selah published in the legal advertising section of the Yakima Herald Republic, the legal newspaper for the City of Selah, notice of the City of Selah Council's public hearing scheduled for June 27, 2017, to consider the periodic update of the Selah Comprehensive Plan and Critical Areas Ordinance amendments. A Mitigated Determination of Nonsignificance (MDNS) was issued based on comments of agencies and affected tribes on May 30, 2017; and,

WHEREAS, the proposed Critical Areas Ordinance amendments were made available for review on the City of Selah's website at http://www.selahwa.gov/; and,

WHEREAS, all persons desiring to either provide written testimony or speak for or against or in relation to the proposed Critical Areas Ordinance amendments at public hearings held by the Planning Commission on June 6, 2017 and the City Council Meeting on June 27, 2017, were given a full and complete opportunity to be heard; and,

WHEREAS, the City Council of the City of Selah has concluded that the adoption and implementation of proposed Critical Areas Ordinance amendments is essential to direct the future growth and development of the City of Selah.

NOW THEREFORE BE IT HEREBY ORDAINED BY THE CITY COUNCIL OF THE CITY OF SELAH:

Section 1. Findings and Conclusions. The City Council bases its findings and conclusions on the entire record of testimony and exhibits, including the recommendation of the Planning Commission and all written and oral testimony before the City Council. The Selah City Council hereby adopts the following findings and conditions as recommended by the Planning Commission:

1. The proposed Comprehensive Plan Update and development regulation revisions, including amendments of SMC 10, SMC 11.50 and SMC 21 meet the requirements of the Growth Management Act.

2. As required by law, best available science was used in developing the amendments to the Critical Areas Ordinance. They incorporate recommendations made by the Washington Department of Ecology and the Yakama Nation. As required by WAC 365-195-925, the following findings are with respect to the Best Available Science (BAS) used in drafting the amendments:

    a. The original amendments were prepared for the City by the Yakima Valley Conference of Governments (YVCOG) using best available science. Further

revisions in the original draft have been made by staff and recommended to the Planning Commission by the Department of Ecology, a State natural resource agency and the Yakama Nation. Consultation with State and Federal natural resource agencies and Tribes can provide a quick and cost-effective way to develop scientific information and recommendations (WAC 365-195-910(1)).

b. It is the belief of staff that the best available science used by YVCOG along with the recommendations made by the Yakama Nation and Department of Ecology are applicable to the local area.

c. Special Consideration has been given in preparing the CAO updates to the preservation of anadromous fisheries, as indicated by the recommendations of the Yakama Nation and incorporation of those recommendations into the periodic update.

3. *Internal Consistency:* The proposed Critical Areas Ordinance amendments are consistent with and implement the Comprehensive Plan. They are consistent with the Growth Management Act and other requirements of State law. Both together and separately, the comprehensive plan update and Critical Areas Ordinance amendments further the goals of the Growth Management Act.

4. The public use and interest will be served.

5. *Environmental Review:* Environmental Review for the entire proposal was conducted under the State Environmental Policy Act (SEPA). A Determination of Nonsignificance (DNS) was issued on March 27, 2017 and withdrawn and a Mitigated Determination of Nonsignificance (MDNS) was issued on May 30, 2017. Comments that were made were received and considered. The City Council finds that environmental review that was conducted is adequate.

6. The proposed amendments were submitted to and received by the Department of Commerce for the required 60-day review on March 24, 2017. The review period ended May 23, 2017. Comments were received and considered related to definitions of wetland categories. These comments were incorporated into the currently proposed amendments.

7. *Public Participation:* Public notice of the public hearing was published in the official newspaper of the City and sent to all parties who expressed interest in being notified and who commented on the plan and development regulations through the public review and SEPA processes. Comments were received and considered.

8. This action is part of the required periodic update under the Growth Management Act.

Upon adoption of these amendments by the Selah City Council, the City will have taken all necessary action and the periodic update would be complete.

Section 2. Adoption of the City of Selah GMA Periodic Update. The City of Selah hereby adopts the City of Selah GMA Periodic Update, a copy of which is attached to this ordinance.

Section 3. Transmittal to State. This ordinance shall be submitted to the Washington Department of Commerce for their records within 10 days of adoption.

Section4. Severability/Validity. The provisions of this ordinance are declared separate and severable. If any section, paragraph, subsection, clause or phrase of this ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance. The City Council hereby declares that they would have passed this ordinance and each section, paragraph, subsection, clause or phrase thereof irrespective of the fact that any one or more sections, paragraphs, clauses or phrases were unconstitutional or invalid.

Section 5. Effective Date. This ordinance shall be in full force and effect 5 days after its passage and publication as required by law.

Dated this 27th day of June, 2017

Sherry Raymond

Sherry Raymond, Mayor

ATTEST:

Dale E. Novobielski, Clerk-Treasurer

APPROVED AS TO FORM:

Robert Noe, City Attorney

ORDINANCE NO. 2019