

010 Authority and Purpose

Amend the second sentence in the second paragraph on this page as follows: "It is the intent of this chapter to provide NEEDED procedural requirements as necessary to comply with the statutory requirements TO PROTECT THE PUBLIC 'S STATE-WIDE INTEREST while providing latitude for local government to ADMINISTER THEIR LOCAL SHORELINE PROGRAM IN COMPLIANCE WITH THESE GUIDELINES."

☒ Ecology respectfully declines this suggestion. The provisions of section 010 are consistent with the provisions of the Shoreline Management Act and with Ecology's view of the proper relationship between local government and the state in implementing the Shoreline Management Act.

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Delete the reference to Part III in the last paragraph.

☒ It is Ecology's intent to adopt Part III and therefore no change is appropriate or necessary.

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The last sentence states that Part V addresses the requirements of the state Ocean Resources Management Act. However, Part V states that this section is unchanged. WAC 173-26-360 needs to be updated and language referring to development in state waters of the Washington Coast for offshore oil drilling must be deleted, in view of the Legislature's ban on such drilling in state waters.

☒ Ecology chose not to amend the provisions of WAC 173-16-064 implementing the Ocean Resources Management Act and as such no changes to those provisions were filed other than their location in the WAC organization system. Any proposal to amend the provisions would require a new filing which Ecology does not find to be necessary at this time. The provision of statute concerning off shore drilling for oil overrides any provision of the WAC that may appear to authorize such use.

020 Definition section

Add definition for "Enhance" which is used throughout Part B and not in Part A. Add definition for "Shoreline restoration": This specific comment addresses the general tone

of the Draft Rules, that is, that there is no indication of or allowance for beneficial actions. The definition of "Shoreline modifications" could include "shoreline restoration," however, Ecology considers only construction of physical elements, grading, or application of chemicals, etc. to be shoreline modifications.

☒ "Restoration" is defined in Section 020(39). Where terms such as "enhance" are not defined specifically, the dictionary definition applies. Also, see the newly added sections 230(3)(g) and 330(3)(g), which address "shoreline habitat and natural systems enhancement projects."

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Add definition for "Wetland" and the area under jurisdiction of the Shoreline Management Act.

☒ The definition of "Wetlands" is found in the Shoreline Management Act at RCW 90.58.030(1)(h) and in WAC 173-22-030(19).

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Add definition for "Development" to make clear that development either does or does not include maintenance and repair of existing structures or uses.

☒ "Development" is defined in the Shoreline Management Act at RCW 90.58.030(3)(d) and in the Shoreline Management Permit and Enforcement Procedures at WAC 173-27(030)(6). As clarified in WAC 173-27-040(1)(b), normal maintenance and repair is exempt from SDP requirements [90.58.030(e)], but that is not an exemption from compliance with the act or the local master program.

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Current Shoreline rules contain a specific definition of appurtenances for residences to include necessary utilities. Please include a definition of appurtenant structures. Alternatively, a definition of accessory utilities may also suffice.

☒ The provisions of WAC 173-27-040 addressing appurtenances to a single-family residence are not being repealed or amended by the provisions of this proposed rule.

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Throughout this section several words are used that may be difficult to apply to a physical condition because there are no

quantitative values associated with them. They are qualitative and will not provide the necessary guidance to local governments and will lead to conflicts. For example the terms "significant" and "substantial" could mean a whole range of values. These terms need clear definitions.

☒ While we recognize the qualitative nature of some terms, it is not possible to define every term in a manner that would be appropriate for all uses. The definitions provided by a dictionary are adequate in most cases. Note, however, that Ecology does provide guidance on how to interpret some of the terms in this comment, for example, see definition of "significant ecological impacts" (Section 020-47).

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It would be helpful if all words in the text that are defined in WAC 173-26-020 were italicized.

☒ The Office of the Code Reviser dictates the format of the formal WAC and use of italics for defined words is not part of their system. The suggestion is a good one and will be considered for inclusion in informal re-publications of the WAC by Ecology.

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After "meanings" add the following: "except in the case of commercial forest uses where the definitions under the Forest Practices Act & the Forests & Fish Report will apply."

☒ The provisions of Sections 240(3)(e) and 340(3)(e) clarify the extent to which the Forest and Fish Report applies.

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For definitions of "ecologically intact," "mitigation", "substantially degrade" and "water dependent use" should include a provision, as was in the definition of "feasible," stating where the burden of proof lies. Section (200)(2)(e) on mitigation needs more detail on where the burden of proof lies.

☒ Burden of proof is a matter of law established with the Shoreline Management Act and depends in part on the circumstance in which the issue arises. A change to the definition in regard to these terms could not change these requirements and could confuse the matter.

O20(2) Adaptive Management

The proposed rule establishes a standard of “adaptive management” that erodes existing regulatory certainty. The application of this concept, if abused, could violate the vested rights doctrine articulated by the courts. This management approach also conflicts with the GMA goal of achieving predictability in the permitting process. Placing “Adaptive Management” back into WAC 173-26 will significantly impact local government and utility resources by removing decision making capabilities from local elected officials and boards. By definition, “Adaptive Management” will subject local jurisdictions to continual monitoring of shoreline functions, in-water functions and regulatory up-dating. “Adaptive Management” will require perpetual updating of local shoreline plans and continual review and approval of local shoreline plans by DOE. In essence, this definition will allow the DOE to change rules, procedures and process at will, without local public review and approval.

☒ Sections 200(2)(b) of Path A encourages local governments to undertake local monitoring and periodically update master program provisions to improve shoreline management practices over time. Ecology does not believe that responding to new information will violate due process requirements because any change to a local SMP in response to adaptive management must go through a formal public amendment process. Any changes to the state SMP guidelines in response to adaptive management must be in accordance with public involvement requirements of the APA and the SMA. The timetable for periodic updates in Section 300(2)(b) is consistent with RCW 90.58.060(3), which requires Ecology to evaluate the effectiveness of current guidelines every 5 years.

O20(2)

Your definition of adaptive management fails to include an essential element. Permitted activities or projects allowed to go forward must be based on best available science. Merely providing for future change while allowing for current impacts not only is inconsistent with the Act, but also will result in adverse impacts any time a project proponent or local government feels that there is inadequate information to make an informed decision. Current considerations by DCTED includes language that require environmentally conservative conditions be placed on development activities in the face

of uncertainty. We support that approach. Your definition is silent in this regard.

Please define adaptive management further to clarify the extent to which local governments must protect the resource. In O20(2) the rules define “adaptive management”, however the rules offer no regulatory timeline or indication of how adaptive management works in practice.

☒ For Path A, section 200(2)(a) addresses the use of scientific and technical information relevant to this comment. For Path B, see section 300(2)(b), which identifies a program to minimize environmental risk and collect necessary scientific data.

O20(2)

The “science” referred to in the document is of paramount importance as it drives the reasoning behind the rules. (a) Where did the information come from? (b) Why is there not a panel comprised of experts and those who must comply with the rules established so that as best science changes, we can change the rules to do the most good and get rid of the rules that don’t?

☒ Ecology staff has gathered scientific materials relevant to the guidelines since inception of the project in 1995, consulted Ecology and other agency staff with expertise in specific relevant areas and consulted outside experts to the extent feasible. Review committees convened through the process have also included persons with expertise in relevant fields.

O20(2)

This definition does not correspond with the definition of this term in the Forest and Fish Report.

☒ Sections 200(2)(a) and 300(2)(b) describe adaptive management activities that can be accomplished as part of SMA implementation. These activities are different than those of the Forest and Fish Report and so the definition is different, but not necessarily contradictory.

O20(7) Bank Full Width

This definition does not correspond with the definition of this term in the Forest and Fish Report.

☒ The proposed definition incorporates the language in the forest practices rule, WAC 222-16-010 for bank full width and depth but adds some explanatory language.

O20(7)

Bank full width and depth are defined here, but this will likely not be a call that most local government staff will be able to make. For streams with well developed floodplains, this might be an easy call, but terraces can be confused with floodplain. In the case of not well developed floodplain, identification must be done with indicators. There should be some guidance given to explain the indicators and to recommend technical assistance.

The definition as written is confusing and does not adequately describe what bank full width is, or how to measure it. The current text strays into a discussion of channel migration, which should be moved to the definition for ‘channel migration zone’.

The introduction of the terms BFW and CMZ seems to be an attempt to expand the starting place where shoreline restrictions begin to address the inadequate buffers and setback requirements in the SMPs of a few jurisdictions. It is not appropriate for all jurisdictions to be forced to adopt new and complicated terms to correct situations involving few jurisdictions. It would be more appropriate to identify inadequate buffers and setbacks through Critical Area Ordinance Updates under GMA and when the jurisdictions are defending the relationship of shoreline vegetation and development setbacks to ecological value in updating their master programs.

☒ Ecology recognizes that Bank Full Width (BFW) and Channel Migration Zone (CMZ) are new terms in the context of Shoreline Management and may present technical challenges with regard to their application by local government on the ground. Ecology intends to develop technical guidance on identification of these terms. Preliminary consultation with the experts that will help in developing the technical guidance indicates that identification adequate for the purposes of the planning required by the guidelines is feasible at a reasonable cost.

O20(7)

The term BFW should be eliminated from Path A requirements. Jurisdictions should have the option of deciding whether they want to use this term, which has never been defined by state law. To properly establish BFW requires field visits and hydrologic modeling. Such hydrologic modeling of flow data from the 1.5 to 2 annual flood series is very costly, time consuming, and an engineering-intensive activity. When more information is available regarding state funding to inventory BFW and to perform hydrologic models, then jurisdictions could make an informed decision of whether to use this term as part of its SMP.

✘ Path A only requires collection of information that is “reasonably available,” and then only the general location of bank full width, CMZ and flood plains. This will not require detailed delineations as the commentor suggests. The intent of these requirements is to make sure local governments are gathering the information necessary to do effective planning.

020(7)

Since BFW is almost synonymous with the OHWM used in existing shoreline master plans (except in very specific instances), why add the cost and confusion of training field staff on how to distinguish between and identify the new measurement of annual flow? Distinctive vegetation management areas and lists of allowable uses associated with OHWM and BFW would further complicate implementation.

✘ Bank full width (BFW) is used in two places in Path A. The first is the requirement to identify its general location [200(3)(c)(vii)]. The second is in section 220(5)(c), where ecological functions are linked to a vegetated area of one SPTH measured from bank full width. For some streams, BFW is nearly the same as OHWM, but for some it is not. Depending on channel morphology, setbacks from BFW make more sense because BFW can be more easily identified during permit review and it represents a line of relative slope stability.

Path B uses BFW for measuring the vegetation conservation area where there is no CMZ. This is appropriate because where there is no CMZ (typically high gradient streams) BFW is the limit closest to the stream where trees can grow to maturity.

020(8) (CMZ)

The proposed rule establishes a CMZ that encompasses the “likely” lateral extent of a stream over the past one hundred years, along with floodways and associated wetlands (p. 2). It is unclear why this definition is necessary, or why requirements and standards for land use within a CMZ occur in the document, since the scope of a CMZ appears to extend beyond the jurisdiction of the SMA.

The proposal to use the CMZ definition as movement within the last 100 years is going to the extreme. This is an overwhelming restriction on land use whether it is used for farming, housing or any activity dealing with natural resources including mining. This would have a far-reaching impact on the local government tax

base if these lands cannot be used for their current designation. Is Ecology prepared to purchase all the properties located within this zone that would be impacted? This appears to be a serious “take” of private property. This proposal would wipe out a large portion of the City of Yakima and the City of Union Gap, which are located on the historic flood plain. Most of the immediate areas surrounding these two cities are in the historic flood plain and modern dikes and freeways protect all this area.

✘ Ecology believes scientific evidence shows effective management of ecological functions in CMZ’s is critical to maintain fluvial geomorphologic processes that are in turn necessary to reduce flood hazards, erosion and habitat loss. It is true that in some cases a CMZ may extend beyond the jurisdiction as defined by the SMA. However, under state law, no requirements in the rule can apply to portions of the CMZ that are found outside the statutorily defined jurisdiction.

The last paragraph of the rule includes a number of exceptions made for urban areas with channel constrictions.

020(8)

The proposed rule establishes a Channel Migration Zone (CMZ) around every river that includes where the river has been located (or likely may have been located) over the last 100 years. Many farms in Washington will be designated as CMZs (pp. 2-3). Areas with diked tidelands that are subject to a river’s 100-year flood plain or have a hydraulic connection that allows proposed, threatened or endangered fish species to pass through a dike or other constricting structure are included in the river’s Channel Migration Zone (CMZ) (p. 3). Within the CMZ, existing and ongoing agricultural practices are allowed, provided that no new restrictions to movement of the river channel occur (p. 53). Repair and maintenance of an existing legal use are also allowed in the CMZ, provided that they do not adversely affect threatened or endangered species. Farms that are designated in the CMZ may not be subdivided or developed if the use will require “structural flood hazard reduction measures” (p. 53). We ask DOE to specifically delineate the Best Available Science which mandates the implementation of each of the restrictions on farming found in the rule.

✘ These provisions respond to the reality that some existing legal uses occupy CMZ’s. While the overall goal is to continually improve ecological conditions to protect habitat and human activities, there are other considerations

besides habitat restoration. The sources of Ecology’s requirements include The Fish And Forest Report, An Ecosystem Approach To Salmonid Conservation, Integrated Stream Bank Protection Guidelines, and others.

In 220(3)(c)(i), Ecology has added a new exception to the prohibition on new development or new uses in shoreline jurisdiction that will require structural flood hazard reduction measures within the channel migration zone. The exception states:

“Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measure includes appropriate habitat restoration associated with the river or stream. It is the intent of this provision to allow measures that protect property at the same time as restoring ecosystem-wide processes where scientific and technical information demonstrate that this may be accomplished.”

This provision allows for protection of eroding agricultural lands within the CMZ, where appropriate.

020(8)

Use of the term CMZ throughout the document presents the implication that all areas within a CMZ are also within SMA jurisdiction. Where a CMZ extends beyond the limits of the floodway, wetlands, and applicable areas extending landward for two hundred feet, a portion of the CMZ may be outside SMA jurisdiction.

The proposed rule defines Channel Migration Zone (CMZ) as the “lateral extent of likely movement along a stream reach with evidence of active stream channel movement over the past one hundred years. ... The CMZ shall include floodways and wetlands.” In many areas of Washington, the CMZ includes entire cities or valley floors. Nowhere does the SMA grant DOE regulatory authority over such an expansive area. “Floodways” are defined as “those portions of the area of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity.” (RCW 90.58.030 (1)(f)(g)) Although the CMZ concept is used by the National Marine Fisheries Service and US Fish and Wildlife Service to determine critical areas under the ESA, the DOE does not have the authority to extend the definition of “shorelands” beyond the statutorily defined area.

The inclusion of wetlands implies that any wetland hydraulically connected to the water body would be included as part of the channel migration zone, even though this wetland is physically disconnected, and never was or never will be within the 100 year flood plain.

✘ Ecology agrees that SMP regulations and guideline provisions apply only within SMA jurisdiction, as stated in the applicability sections. Therefore, only shorelands and wetlands regulated under the SMA are regulated under these guidelines (see section 220/320(2)(a)). This guideline does not alter the extent of Shoreline Management Act jurisdiction. (See RCW 90.58.030(2)).

Ecology revised the definition of CMZ to remove the mandate that floodways and associated wetlands must be in the CMZ because automatic inclusion of these features is inconsistent with the other part of the definition.

020(8)

No one appears to know whether the CMZ is the entire Skagit River floodplain, whether properly functioning conditions can ever be achieved with our diked riverfront and deteriorated wetland, or what constitutes new development that "increases flood hazard".

✘ The CMZ is not necessarily the flood plain. The standard method for measuring physical parameters of streams and channel migration zones, the Washington State Forest Practices Act Board Manual for Emergency Rules (03/2000), identifies two methods of delineating CMZs. The second approach is based on average erosion rates and provides a CMZ delineation that addresses concerns of bank stabilization and natural river processes. Ecology will prepare guidance materials related to CMZ delineation and management. Even if PFC cannot be achieved in the near term it is important not to further reduce ecological conditions.

020(8)

The definition of CMZ states: "... the lateral extent of likely movement along a stream reach with evidence of active stream channel movement over the past one hundred years ... A time frame of one hundred years was chosen because aerial photos and field evidence can be used to evaluate movement in this time frame." A blanket 100 year timeframe ignores the fact that the most prevalent species of trees along streams reach maturity between 30 to 50 years. Further, a blanket 100 year limitation does not address situation in which there is only recent historical data available.

In addition, residential or commercial structures within the CMZ should be considered in artificial channel constraints. It is unclear why this is contained in the definitions given that the CMZ extends beyond shorelines jurisdiction.

✘ The CMZ definition is congruent with the definition in the emergency rules of the FPA, which provides methodologies for defining CMZ. Thirty to fifty years is generally not sufficient to establish mature trees.

The question relating to residential or commercial structures within the CMZ is a management issue, not a definition issue. Management provisions that address CMZ should account for existing residences and businesses.

020(8)

The definition of CMZ does not adequately take into account flood control systems, improvements and structures designed to stabilize stream banks. The very restricted exception, regarding certain shorelands with legally existing artificial channel constraints or in the case of structures designed to withstand the 100-year flood, is unreasonably limited and inadequate. The definition should provide for the consideration of any legally existing structure that affects or controls stream flow in determining the lateral extent of likely movement of a stream channel. If such structures exist and if they actually affect flow, there is no reasonable basis to exclude them from consideration. To do otherwise would unjustifiably expand the CMZ and artificially extend the coverage of the regulation. Similarly, the partial exclusion of "natural" and "rural conservancy" environments from even this exception is also unwarranted. Legally existing structures are found in these environments and there is no logical basis to exclude their consideration in fairly determining the extent of a channel migration zone and, as a consequence, the coverage of the regulation.

✘ The CMZ definition is congruent with current science regarding conditions necessary to maintain fluvial functions that are in turn necessary to reduce flood hazards, excessive erosion and loss of habitat. Ecology partially excluded "urban" environments that have been channelized from the CMZ because, without this exception, heavily developed portions of many jurisdictions would be within the CMZ.

Repair and maintenance of existing legal uses in "natural" and "rural conservancy" environments are allowed, as described in Section 220(3)(c)(i). Also, Ecology's final rule makes provision for protection of eroding agricultural lands

within the CMZ [see 220(3)(c)(i), last bullet].

Ecology chose the specific exception to be consistent with the Forest and Fish Report, which excludes from the CMZ areas behind permanent dikes or levees that are constructed to a continuous elevation exceeding the 100-year flood stage, or are structures that support a public right-of-way or conveyance route, etc.

020(8)

The comments made with respect to diking districts and drainage districts appear to be compatible with the standards set forth at page 66, WAC 173-26-240(3)(a), which declares: "New Shoreline Master Program provisions should not apply retroactively to existing agricultural uses. Existing and ongoing agriculture includes, but is not limited to... etc.." The concern of District commissioners is that regulations greatly expand the role of the Shoreline Management Master Program in those lands which are not protected to 100-year flood protection. Under the definition of "Properly Functioning Conditions" ("PFC"), power to decide how to manage a dike, ditch, drain, or flood protection work could easily be transferred to local or state authorities overseeing the SMP and away from District commissioners elected with responsibility for collecting taxes to provide drainage and flood damage reduction.

✘ The CMZ determination does not alter Shoreline Management Act jurisdiction. If agricultural lands currently behind flood protection works in rural areas (such as portions of the Skagit County floodplain that are not protected by a levee designed to withstand the 100-year flood) are not currently in jurisdiction, nothing in this rule will add new regulatory requirements to those areas.

Concerning a transfer of power from special districts to local or state governments, local governments must encourage participation in SMP preparation under the SMA and provisions of sections 200(3)(b) and 300(3)(b). Special districts have the opportunity to help shape local SMPs.

020(8)

To the extent that PFC equals pre-European Settlement Conditions, there is a direct conflict between the districts functioning as engineered and the PFC concept. Almost none of the Skagit Valley flood plain has 100-year flood protection. Virtually all of the land designated Agriculture NRL in the Comprehensive Plan of Skagit County has protection between the two-year level and the 50-year flood protection

level. The use of channel migration zones to define the area of jurisdiction under the Shoreline Management Act and the adoption of a vague "Properly Functioning Condition" standard will bring new opportunities for persons not directly affected by diking and drainage functions to impose their ideas of environmental purity on people who live and work in the Districts. The proposed regulations need to consider the flood protection and the internal drainage activities of diking and drainage districts to be legitimate activities essential to the proper functioning condition of shorelines of the state.

✘ The provisions for flood protection are addressed in 220(3). Ecology has added the following sentence to the definition of restoration in 020(38): "Restoration does not necessarily imply returning the shoreline area to aboriginal or pre-European settlement conditions." This rule does not extend Shoreline Management Act jurisdiction. It is clear that fluvial processes must be maintained to reduce downstream flood hazards and excessive erosion and sediment deposition.

020(8)

You need to be clear that the rule is not talking about legally approved or 100-year compliant levies, because there are communities (city of Okanogan, for example) that has a levy that protects it from most floods, but it is not approved as a 100-year levy. And if the definition in the summary makes it clear that's the only thing that would provide the exemption from the channel migration zone, then the definition contained in the guidelines is a little more broad, and I'd like to see the broader definition included in whatever the final might be.

✘ The 100-year compliant levee is the standard for shorelands in or meeting the criteria for the "natural" and "rural conservancy" environments, which are areas **outside** UGA's and municipalities. Cities and other areas that *don't* meet the criteria for natural or rural conservancy environments have a much broader exception for "areas separated from the active channel by legally existing artificial channel constraints that limit bank erosion and channel avulsion."

Note that existing legal uses are not affected and section 220(3)(c)(i) allows repair and maintenance of existing uses, provided that such actions do not cause significant ecological impacts. In addition, Ecology added a provision to the final rule to clarify that farmers can build new structures to protect farmland from erosion, under certain conditions (see 220(3)(c)(i) last bullet).

020(8)

The SMA should apply to all of the 100 year floodplain. It is stated in this section, " all areas...separated from the natural channel by legally existing structures designed to withstand the 100 year flood shall not be considered within the CMZ. A tributary stream or other hydraulic connection allowing PTE species passage draining through a dike or other constricting structure shall be considered part of the CMZ." If it is the intent of the State to recover PTE species this language will impede a major element of salmon recovery in the state. A significant portion of historical salmon habitat has been cut-off by culverts and flood control structures. Improving access is a major element of most salmon recovery strategies. This language is a disincentive to landowners to improve salmon access. Why would a landowner allow passage of PTE if it results in additional significant restrictions with what they do on their land? The definition of CMZ will discourage landowners from voluntarily reconnecting habitat through dikes or other constricting structures since by doing so, the "dike or constricting structure shall be considered part of the CMZ." DOE should delete this provision and limit the proposal to coverage of statutorily authorized areas.

Areas within diked tidelands and many irrigation ditches are most likely within the 100-year flood plain or have a hydraulic connection that could allow proposed, threatened or endangered species passage through the dike, headgate or other constricting structure. Therefore, these areas would most likely be included in the Channel Migration Zone. Within this zone current agricultural practices are allowed, provided there would be no new restriction to movement of the river channel or there would be no adverse impact on a proposed, threatened or endangered species. It seems unlikely that under the guidelines any current agricultural practices would be allowed in such zones.

The final sentence of the definition describes tributary streams as being part of the CMZ, but upstream portions of these streams may also be outside SMA jurisdiction.

✘ Ecology understands there is some confusion over the last sentence in the definition which states that "A tributary stream or other hydraulic connection allowing T&E species fish passage draining through a dike or other constricting structure shall be considered part of the CMZ." This language is derived from the Forest and Fish Report definition of CMZ. The intent is to deal with the connection, not the entire

tributary. Ecology will clarify this in technical assistance materials concerning CMZ delineation.

Nothing in the definition of CMZ can change the statutorily defined Shoreline Management Act jurisdiction.

020(8)

The concept of CMZ's should be revisited in the context of the water bodies which are regulated under the SMA, especially establishing buffer width measured from the edge of the CMZ. Much of this concept appears to be drawn directly from the Forests and Fish report. If Ecology and NMFS would examine the science underlying riverine processes - i.e. as summarized in Spence et. al. (An Ecosystem Approach to Salmonid Conservation)—the agencies would find that, unlike the smaller streams that make up the majority of stream habitat in Commercial/Industrial forests, the riverine processes that occur in large, low elevation river systems and are under SMA jurisdiction, exhibit distinctly different types of riverine function in the CMZ. The importance of riparian vegetation in maintaining water temperature in these systems is dramatically reduced, the microclimatic regime is entirely different due to the large canopy opening provided by the river itself, the Large Woody Debris recruitment and retention processes are dramatically different, and the natural disturbance frequency (i.e. overbank flood frequency and rates of meander movement) are significantly different, etc. While it may be appropriate to transfer the body of science regarding riparian function to CMZ function in smaller water bodies, the different scale of these much larger water bodies render this transfer inappropriate. The body of science which looks at the dynamics of these large, lowland systems is very small. Clallam County has already implemented this concept within the Critical Areas Code and protection standards. Several of the CMZ's in the County are over 1000 feet wide, with the majority being over 500 feet wide. While it is appropriate to regulate these areas to reduce flood hazard, the need for bank protection, and as wildlife habitat, scientific literature which would evaluate the potential effects of land use on the adjacent terraces is either unavailable or nonexistent. In some cases, terraces are more than 1100 feet from the river itself. A smaller buffer from the edge of the CMZ is more legally defensible and fits more closely with CMZ function on these larger river systems.

This term continues to be too broad, and the concept is too vague and too difficult to interpret to be of value. A true "channel migration zone" is the width of a river valley floor, where the stream migrates from one

side of the valley to the other over time. Sometimes the cut is quite fast and far from "expected" as the DOE definition says it should be. We expect that no two scientists will ever agree on the boundary of any specific "channel migration zone." We recommend not using this term and removing "channel migration zone" from the draft, even though it's apparently in vogue right now, and instead recommend continued use of the "tried and true" concept of "ordinary high water mark."

The term CMZ should be eliminated from the Path A requirements. Other options should be available to jurisdictions to provide flexibility in establishing land use policies for active or dynamic channel areas where development would be in jeopardy and those which are stable. (e.g., see Rosgen's *Classification of Natural Rivers*). The definition of CMZ states "the lateral extent of likely movement along a stream reach with evidence of active stream channel movement over the past one hundred years." Since many shorelines have been manipulated, the CMZ of the past 100 years may not adequately predict where the CMZ may be in the future. In addition, the definition of CMZ seems to imply a relationship between the CMZ and 100 year flood plain (see *Shoreline Modifications Section* (page 145 f)), but fails to define the relationship (see definition of BFW). At a minimum, the last section of the definition of CMZ should be deleted from Path A. The CMZ would likely be influenced by legally existing artificial channel constraints that limit bank erosion and channel avulsion without hydraulic connections within natural and rural-conservancy environments. It is arbitrary to ignore these structures solely based on a shoreline designation.

✘ Ecology's geohydrology consultants do not believe that the CMZ is, as defined here, the entire valley floor. It is highly unlikely to be that extensive. Given the parameters of the definition, a reasonable prediction of movement can be accomplished and applied for the purposes established. The OHWM is not a reasonably comparable standard as it encompasses an insufficient area to maintain sustainable ecological functions or reduce flood hazards. Ecology is developing guidance materials that will assist local government in identification of the CMZ.

While Spence, et al., do acknowledge that the LWD function varies with the channel size (p.54, Spence), they point to the need for management of a riparian zone along the entire river corridor. (See section 14.2.3 of referenced document, "An Ecosystem Approach to Salmonid Conservation.") Ecology believes the rule is flexible enough to allow local

governments to establish appropriate buffer widths along different stretches of a river, based on the analysis required under sections 200 (3)(d) and 300 (3)(d).

020(8)

The acknowledgment of the importance of channel migration zones (CMZs) in these new rules is commendable. However the definition provided is unclear and does not recognize the full extent of the CMZ. Since this CMZ definition is limited to areas within the zone of "likely" lateral channel migration, it fails to include low terraces and floodplain fringes, which are of considerable ecological significance. Furthermore, the definition excludes areas landward of dikes and road causeways. Though disconnected and degraded, these areas frequently retain important ecological functions and should be fully protected and restored. We provide a more ecologically appropriate definition for channel migration zones. "CMZ: The area the stream channel could potentially occupy under present-day climate conditions, approximated by the 100 year floodplain, adjacent low terraces, river-adjacent bluffs and tributary alluvial fans that are locations of material recruitment to the active channel as it migrates across the floodplain over time. This area includes side channels and overflow channels that are critical rearing and refuge habitat for juvenile salmon. The CMZ can be mapped through interpretation of current and historic aerial photos, which are used to delineate past and potential channel migration routes based on clues from vegetation structure and composition."

✘ Ecology respectfully declines this suggestion, because flood terraces and floodplain fringes fall outside the technical definition of a CMZ. However, note that in some cases the guidelines may apply to habitat resources in these areas (see section 220(2)(c)(iv) addressing critical freshwater habitats.) Ecology also does not believe it is universally true that the CMZ is approximated by the 100-year floodplain, so a phrase suggesting that does not belong in the definition.

020(8)

The potential for channel migration at a given site depends on many elements of the physical environment. For example, Perkins (1993) considered the influence of bank materials, height and composition of river banks, the presence of levees and revetments, vegetation type and age, the location of abandoned channels and other potential avulsion sites, the location of depositional zones, and river and floodplain morphology. Wood in streams also influences the potential for channel migration and channel avulsion

and floodplain development. The proposed CMZ definition should be changed to specify the physical criteria by which likelihood of channel migration shall be determined, and require consideration of how that likelihood will be effected as the result of increased volumes of wood, deposition of sediment, and other aspects of the riverine environment that will change over time. A draft definition of a Channel Migration Zone submitted in our August 6, 1999 written comments should be used to create a new technically-based and scientifically supported definition of the CMZ. The proposed definition fails to specify any physical criteria upon which the delineation of CMZ boundaries shall rest. Apart from the inclusion of "floodways and wetlands, as defined under chapter 90.58 RCW," and exclusive of limitations imposed by the presence of "legally existing artificial channel constraints that limit bank erosion and channel avulsion without hydraulic connections" and "legally existing structures designed to withstand the 100-year flood," the sole criterion in the proposed definition for determining the boundaries of the CMZ along a stream reach that exhibits "evidence of active stream channel movement over the past one hundred years" is "[t]he lateral extent of likely movement." With that criterion at its core, the proposed definition is akin to describing the CMZ as the area that is not outside the CMZ. It is essentially subjective, and provides little, if any, practical guidance relevant to the issue at hand.

This definition encompasses "the lateral extent of likely movement along a stream reach with evidence of active stream channel movement over the past one hundred years," and includes "floodways and wetlands, as defined under chapter 90.58 RCW." The proposed definition not only restricts the extent of the CMZ to areas "with evidence of active stream channel movement over the past one hundred years", but further restricts to the portions of those areas where channel migration is "likely." The proposed CMZ definition excludes extensive areas where channel migration will occur, as it requires "evidence of active stream channel movement over the past one hundred years" as a precursor to any consideration of the physical conditions that actually influence potential for channel migration at a given site. Channel migration can disturb extensive portions of state shorelines unaltered by such disturbance for more than 100 years.

The first sentence provides a general description of an area that could experience channel migration, but without further explanation of the "lateral extent of likely movement" the entire valley floor could fit this definition eventually (in the absence of artificial channel constraints). One way to

define the CMZ more specifically would be to identify a time frame of likely future channel movement. Suggested rewording of the first sentence follows: "CMZ means the lateral extent of likely movement during the next 100 years along a stream reach with evidence of active stream channel movement over the past 100 years." The next 100 years is suggested as a future time frame because it is consistent with the time it takes to grow functional large woody debris. A different future time frame could be used, if appropriate. Without such a time frame or other qualifier, the proposed definition of the CMZ does not clearly identify what areas would be affected.

✘ Ecology's technical advisors believe that the sole criterion for determining the boundaries of the CMZ in the rule should be the lateral extent of likely lateral movement of the stream. At the same time, Ecology agrees that CMZs depend on many elements of the physical environment, including changing aspects such as delivery and routing of woody debris. Ecology will incorporate the considerations mentioned in this comment into guidance materials on identifying the CMZ.

020(8)

Ecology is defining CMZ areas as only those showing active stream channel movement over the past one hundred years. This is an extremely limited and short time frame. This definition should be changed to encourage the use of "best available science" to establish the extent of active stream channel movement rather than limit it to the past one hundred years. We do not agree that the CMZ should ignore areas separated from active or natural channels by existing artificial channel constraints. Since structures designed to withstand only a 100-year flood are obviously insufficient to control major storm events, the CMZ must include areas that would be flooded in events that exceed the 100-year criteria. Otherwise, the current CMZ definition contributes to a false sense of security and increased damage from flood events.

The definition inappropriately excludes areas behind existing artificial constraints. These constraints preclude many of the ecological functions that the guideline updates seek to protect and restore. All areas within historic CMZ, including estuaries, should be treated as within the zone until a scientifically valid plan demonstrates that precluding channel migration in some area does not significantly reduce the riparian function for the watershed.

✘ The exclusion of urban areas behind human made channel constraints

recognizes the fact that without such an exemption major portions of some cities and other developed areas would be in the CMZ. Including those areas would be impractical and would result in guidelines inconsistent with RCW 90.58.020. Also, the guidelines do require ecological restoration for many types of development on such shorelines, thereby improving ecological functions over time.

020(8)

In addition to including the definition of what the Channel Migration Zone is, there needs to be a section describing how the CMZ is determined or delineated. If such a description or explanation is going to be included in a separate document or process, such a document or process should be referenced here. If the methods are still being worked out for how to delineate a CMZ, there are a number of recent relevant studies with applicable methods, which we could provide separately. Noteworthy among them is FEMA's 1999 Riverine Erosion Hazard Areas study, which includes a number of case studies on river erosion and channel migration from throughout the nation and compares different methods used to map CMZs. The definition of CMZ is central to the interpretation and ultimate implementation of many of the principles and standards throughout these Guidelines.

The definition for "channel migration zone" (CMZ) is difficult to interpret. The second paragraph discusses areas separated from the "active channel" and "natural channel," but there is no description of what these channels are.

Will Ecology provide guidance to local agencies in mapping out these boundaries of jurisdiction? The definition is subject to interpretation and may not provide much predictability in anticipating ahead of time whether a proposed project is under CMZ shoreline jurisdiction. In addition, this new definition would encompass a much larger shoreline jurisdiction than currently exists that could greatly affect the current regulatory compliance process and cost for transportation projects.

✘ Ecology will prepare guidance materials to help local governments determine the CMZ. Local governments are expected to map the general location of CMZs up-front as part of the inventory and analysis steps of -200(3) and -300(3), so new SMPs should be able to provide predictability. Regardless of the size of the CMZ, the SMP can only regulate those portions of the CMZ that fall within the statutorily- defined shoreline jurisdiction.

020(8)

This definition does not correspond with the definition of this term in the Forest and Fish Report.

✘ The proposed guidelines definition is consistent with WAC 222-16-010 for forested areas but further clarifies the extent of the channel migration zone in urbanized areas and describes methods to determine the CMZ. This is necessary because of the Shoreline Management Act's applicability to the full range of forested, rural and urbanized shorelines.

020(8)

Please define channel migration zone further to clarify the extent to which local governments must protect the resource.

✘ Please refer to sections 173-26-220(3) and 173-26-320(3).

020(8)

I support the inclusion of CMZ - an important biological, hydrological concept.

✘ Comment noted.

020(10) Developed shoreline

PSE's interpretation of the developed shorelines definition indicates that if any existing structure exists in any shoreline designation, then this constitutes a developed shoreline, and as such the shoreline would not be eligible for future natural or conservancy designation as described later in this rule. This is an inconsistency that needs to be addressed.

✘ The criteria for assigning natural and rural conservancy environments does not include the requirement that areas be undeveloped (see section 210(5)(a) and (b)).

020(10)

Are shorelines where transportation facilities exist considered developed? We recommend providing further clarification by including transportation facilities in the definition.

✘ Transportation facilities would meet the definition of "permanent structures," so would be considered development. Many different types of development might be listed but Ecology believes that would be unnecessarily specific.

020(14) (Ecological Functions)

This definition is central to the understanding of the default Path A approach. The definition of ecological

functions is too broad and could easily be interpreted in ways contradictory to other parts of the master program. The definition could be read by some interests or jurisdictions as overriding other considerations within the rule relating to preferred uses, etc. These type of discussions often end up in court, where no one wants to go. The rule should be clear about the overall balancing concepts embodied within the SMA, and state that this definition is not to be read so broadly as to eliminate the key "balanced use" concepts of the Act itself.

✘ The definition of ecological functions is intended to be broad, because implementation of RCW 90.58.020 requires that the full range of ecological functions be considered. Note that a function is a process that "contributes to the proper maintenance of aquatic and terrestrial environments that constitute the shoreline ecosystem," so it does not include those processes that are inconsequential to the larger ecosystem. Section 170 speaks to the balance of Shoreline Management Act objectives. Other sections acknowledge the fact that development will continue to occur on shorelines.

O20(14)

The definition of ecological or shoreline functions refers to physical, chemical, and biological processes that contribute to the "proper maintenance" of the aquatic and terrestrial environments that constitute the shoreline ecosystem (p. 3). It is unclear how DOE determined that it has authority over chemical and biological processes, and exactly how DOE will determine when the aquatic and terrestrial environments are being "properly maintained."

✘ Ecological processes affect public health, the land and its vegetation and wildlife, the waters of the state and the aquatic life, which the SMA seeks to protect (see RCW 90.58.020). Ecology will determine how well local governments protect ecological functions when reviewing SMPs.

O20(14)

We believe that ecological functions shall include all functions necessary for properly functioning condition for all salmonid species, not just PTE species. As was argued before the Western Washington Hearings Board, (cases 96-2-0025 and 00-2-0018c) providing only some of the functions for salmon will not provide for protection or restoration of salmon stocks. As an analogy, providing adequate food, but no oxygen, would be meeting some of the requirements for humans, but would not be sufficient for survival. This notion of providing for a

limited number of functions is not based on any sound environmental principles, and will not sustain salmon stocks.

The term "ecological functions" must include all functions necessary for properly functioning condition for PTE species, not just under Part IV.

✘ The definition of ecological functions is intended to describe at the broadest level the processes important to maintaining the overall shoreline ecosystem, including habitat for all shoreline species. The guidelines call out PFC for T&E species in order to provide the certainty and monitoring necessary to address ESA mandates. The last paragraph of the definition indicates that PFC for T&E species is a subset of the broader term "ecological functions."

O20(14)

Please define ecological functions further to clarify the extent to which local governments must protect the resource.

✘ Please refer to sections 173-26-200(2)(c) and 173-26-300(2)(c).

O20(14)(a) Ecological functions: Riverine

With respect to Riverine Hyporheic functions, the definition for this new branch of research is very ambiguous. According to Dr. Jack Stanford, University of Montana, Flathead Lake Biological Station, the hyporheic zone is where "...river water penetrates the bottom (of a river bed) and saturates the alluvial bedding of the channel and floodplain down to the less porous bedrock, thereby creating complex groundwater (hyporheic) habitats..." By this definition, the hyporheic zone is not a specific region, but a complex braided network of paleochannels and connections of varying expanse. Delineation of this zone is difficult to assess, as the network may be located by macro invertebrates at one point containing a highly permeable paleochannel or saturation point, yet not existent a matter of a few feet away. . .

Delineation interpretations of this network have led to water rights decisions to include jurisdiction throughout an entire valley. The hyporheic network is elusive to delineate, with the science being a new branch of research. Peer review is limited, with published material rare. To adopt a definition based on unknown boundaries can have far reaching effects. While the hyporheic network may have valuable connection to ESA restoration, limitation of uses for the protection of functions of a yet indefinable system, the impacts could extend far beyond the defined limits of the SMA jurisdictions. It is important to the floodplain aggregate industry in that the needed resource is the material historically and pre-historically

deposited by these riverine systems. However, protection of functions of the zone could feasibly impact any use within ridge walls of any valley. Therefore, the definition should include some type of delineated jurisdictional limit.

✘ The guidelines do not require that the hyporheic zone be delineated, just that the functions be addressed where appropriate. The jurisdictional limit is set by the Shoreline Management Act and it is important to address those activities that may affect the hyporheic functions.

O20(14)(a)

In (14)(a) Riverine, before "birds" insert "plant species". The same comment applies to the "Marine" and "Wetland" sections.

✘ Ecology respectfully declines this suggestion. The definition encompasses processes that adequately address plant species. Also, see section 220 (5) and 320(5) regarding vegetation conservation.

O20(14)(a)

The habitat language (bullet four) is all inclusive but probably not very meaningful to the average planner. References to maintaining overhanging vegetation, natural substrate, driftwood, eelgrass beds and other natural features that provide ecological functions might be more meaningful.

✘ The definition is intended to be inclusive. More specifics are provided in Sections 200(2)(c); 220(2), (3), (5), and (6); and Sections 300(2)(c); and 320(2), (3), (5), and (6).

O20(14) (c) Ecological functions: marine

Subsection (14) defines "ecological functions" or "shoreline functions" to include wave attenuation in marine environments. It is unclear for what purpose this is included as a marine process contributing to the maintenance of the environment. Given how this definition is applied throughout the body of the proposed rule, it seems to preclude intervention to enhance wave attenuation (or any other ecological function), even when there is no overriding harm - perhaps even benefit - to the marine environment. The primary purpose of much coastal engineering effort is to enhance wave attenuation.

✘ Ecology does not believe the use of the term will preclude the use of wave attenuation structures where they are ecologically appropriate shore protection structures. Provisions for human-made

wave attenuation measures are found in sections 220, 230, 320, and 330.

020(14) (c)

Following “water quality”, delete rest of sentence and substitute “prevent or remove pollutants (including sediments, nutrients, and toxic waste) to achieve or maintain appropriate water quality standards.” This language tracks terminology used in the Clean Water Act and refers not only to removal but also prevention, a term which actually has more relevance here. Following “dynamic sediment processes” delete remainder of sentence and insert “maintain or recreate natural sediment transport mechanisms to maintain such features as spawning beds, eelgrass beds, and other critical habitat.” There are “dynamic sediment processes” which are not natural and which cause harm to critical habitat (e.g.- as a result of devegetation). The current language seems to encourage this.

✘ The definition is intended to describe natural processes specific to shoreline areas. The suggested replacement language is written as essentially a regulatory goal, which is inappropriate in the definition. For water quality regulation, see sections 220(6) and 320(6).

020(14)(d) Ecological functions: Wetlands

The definition of wetland functions should be expanded to include wetland functions that society also recognizes other than ecological functions, such as open space, aesthetics, recreation and education. These should be specified in this rule, so that they can be protected under this Shoreline Master Plans.

✘ The definition is focused on ecological “functions” as distinguished from “values” such as open space and aesthetics. Those values are inevitably and appropriately part of the community discussion over SMP provisions in the comprehensive planning process.

020(15) Ecologically altered shorelines

Delete “influences or”; “significantly” appears throughout the Draft Rules without indication of the standards by which “significance” will be measured.

This definition does not address fully potential for beneficial impacts to the shoreline through correct remediation and reclamation actions, replacing historically lost functions. These functions could be the result of past human activities on the site-specific location or a result of cumulative

impacts through out the reach of the waterway. As the definition is worded, it connotes that any human impact or assistance is detrimental to natural functional values.

✘ The provision, like all use of the term “significant ecological impacts” require application of factual information and professional judgement in determining if the impacts are significant [see definition 020(47)].

020(15)

Inclusion of indirect human modifications creates an overly broad definition of “ecologically altered shorelines” in subsection (15). At present, shoreline vegetation may be modified as a result of adjacent land use, (revegetation for bank stabilization, for example), yet the resulting vegetation provides an ecological function similar to the climax riparian vegetation.

✘ The definition does not state that human alterations are either positive or negative.

020(16) Ecologically intact shorelines

The language allowing a case by case review of whether or not a shoreline is ecologically intact is too vague. Additional criteria should be established so that this assessment is based on the best available science and not subjective criteria by each individual government.

✘ The guidelines call for use of “scientific and technical information” in determining whether or not an area is ecologically intact.

020(16)

Define “majority”: Does it mean 51% or more? Who determines what shorelines are “ecologically intact”? We respectfully request joint determination by affected tribal and WDFW biologists.

✘ Majority means more than half. Opportunity for public comment on those determinations is statutorily required during the shoreline master program adoption process. Tribal and WDFW would be consulted during the inventory and assessment phase, as described in Sections 200 (3)(c) and (d).

020(16)

Delete the term “native” in the first sentence. Non-native vegetation may be present that provides critical ecological functions.

✘ Non-native vegetation may provide functions, but its presence is not a reliable indication that a shoreline is ecologically intact.

020(17) Ecosystem-wide processes

This definition includes brief descriptions of geologically short-term impacts such as channel course bank erosion and flooding. However, while addressing a wide array of short-term physical actions, it has a limited vision for longer-term geologic influences. While the folding of strata, formation of mountains, and consequent stream placement may not have impact on current ecological systems, processes occurring pre-historically and historically do. Such items as changing base levels due to natural damming by landslide action and, for estuarine systems, migration of mouth spits, to the point of damming and isolation of riverine systems. There are many more processes at work than the simple migration of sediment from headwater to the mouth. These processes have influenced habitat and species development and should be considered when contemplating current regulations and restrictions. Ecosystems react to alteration, adapting to it, or altering to new systems. It should be understood that no system is free from change. By their very nature, ecosystems, as with fluvial systems, are dynamic. To control it, forcing it to stay in one place may cause more damage than restoration.

✘ The definition includes all processes “that shape landforms within a specific shoreline ecosystem.” Those processes listed are only examples, and the wording clearly states that there may be others.

020(17)

In the first sentence, following “suite of” insert “naturally occurring”. Again, we do not want to encourage non-natural erosion from, say, devegetation. Marine sediment transport should also include vertical transport of sediment from feeder bluffs (i.e.-not just littoral drift and tidal related changes).

✘ Ecology agrees with this comment and has revised the final rule as follows: “Ecosystem-wide processes” means the suite of naturally occurring physical and geologic processes...”

020(17)

Ecosystem-wide processes does not seem to be a useful concept. Riverine fluvial is redundant. Tidal wave tsunamis? This section needs rewriting.

✘ Ecology agrees and has revised the final rule to delete the redundant word “fluvial” and insert a comma after “tidal.”

O20(18) Feasible

The proposed guidelines definition of “feasible” states that “the action provides reasonable likelihood of achieving the project’s primary intended use” and “in determining an action’s unfeasibility, the reviewing agency may weigh the action’s relative public costs and public benefits, considered in the short- and long-term time frames.” This definition fails to include any consideration of costs to the applicant, such as a private landowner. Considering that one of the SMA’s goals is to protect private property rights and a balance of shoreline uses, it is inconsistent to consider “public costs and public benefits” without also considering private costs. A much better definition is provided by Clean Water Act regulations, which defines “practicable” as follows: “The term practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” 40 CFR 230.3(q). This definition has stood the test of time, including the issuance of thousands of permits and ESA Sec. 7 consultations. The definition of “feasible” in the proposed guidelines will result in the differing standards for the same action. For example, consider the installation or repair of a bulkhead. Under Ecology’s proposed definition, the materials and methods required may be considered “feasible” only because there is no consideration of private costs. The same action would also require a federal Section 404 permit under which the definition of “practicable” would allow consideration of private costs both in the issuance of the permit and in ESA Section 7 consultation. DOE should delete the term “feasible” and adopt the term “practicable” in its place.

✘ Ecology has revised the rule to indicate that an action is only feasible if it “can be accomplished with technologies and methods that have been used in the past in similar circumstances or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results.” The fact that such technologies are proven in similar conditions means that the costs are not prohibitive, since they have been done before.

O20(18)

The definition of “Feasibility” under the guidelines conspicuously omits private costs and the concept of economic feasibility from the perspective of a non-governmental entity.

Economic, engineering, and environmental criteria need to be taken into consideration together to arrive at the best alternative for providing utility service to the customers. These terms regarding economic

and engineering criteria should be added to the definition of “feasible” criteria to be considered when making a decision.

Subsection (18) defines “feasible” in such a way that the determination of what is feasible appears to be left to the Department of Ecology (DOE). DOE lacks the necessary qualifications to determine feasibility. DOE’s role should be focused on commenting on ecological functions only, not engineering or other areas outside the agency’s area of expertise. Further, feasibility is often subjective because it inherently involves a balancing of cost, risk, impacts and so forth. This appears to exceed DOE’s expertise and statutory authority.

This definition allows Ecology great flexibility in regards to dictating project mitigation and/or preservation requirements. Requiring project mitigation and/or preservation that is “..likely to achieve intended results” can obligate an applicant to follow a path of untried and scientifically invalid mitigation, that the DOE deems appropriate. Placing the burden of proof upon an applicant to prove adherence to WAC 173-26 is “infeasible” is difficult at best and potentially impossible.

✘ The determination of what is “feasible” depends on the circumstances. In some cases it is Ecology, in other cases local government will make the decision. In general, the use of the phrase “where feasible” generally applies to conditions or requirements for development. In this case the local government makes the call. The definition does not preclude expert consultation.

Ecology believes economic and engineering criteria would be considered under subsection (a), which in the final rule states that “The action can be accomplished with technologies and methods that have been used in the past in similar circumstances.”

O20(18)

Adding to the definition: “For the provisions of Part IV, this evaluation shall give special consideration and precedence to protecting PFC (Properly Functioning Condition) for PTE (Protected, Threatened and Endangered) species”, virtually eliminates an applicant’s ability to prove “unfeasibility” for a project action based on WAC 173-26 rulemaking.

✘ The intent of the last sentence in the definition is to provide certainty that full consideration is given to the needs of species listed under the Endangered Species Act.

O20(18)

Subsection (18)(c) states that the action will not be considered feasible if it “precludes achieving the projects intended use.” Does this mean that a project which is inappropriate for a given site (e.g.- too large for the site) must be allowed on that given site regardless of the impact? We assume this is not your intent (alternative siting is identified as an option in sequenced mitigation provisions), but this section could be interpreted that way. It should be made clear that a particular project is not “precluded” if required to be scaled back in size or located on an appropriate alternative site. A site, for example, might be appropriate for a medium sized home, but not a large compound.

✘ Ecology has amended the final rule to read: “The action does not physically preclude achieving the project’s primary intended legal use.” Redesign and relocation are common mitigation actions, but it would be restrictive to single those out.

O20(18)

The definition of “feasible” in subsection (18)(a) limits the opportunity for adaptive management.

✘ It is unclear how this section restricts adaptive management since it does not preclude monitoring a proposed development.

O20(18)

This definition is in conflict with definition (30) “Mitigation. The definition for mitigation emphasizes that avoiding the impact altogether by not taking a certain action is the top priority. However, definition (18)(c) defines “feasible” as where “The action does not physically preclude achieving the project’s primary intended use.” The Shoreline Management Act is best served when avoidance of environmental harm including “not taking a certain action” is the top priority, rather than making the project’s primary intended use a requirement. Therefore, please delete part (c) of definition (18). In addition, this section allows the reviewing agency (undefined) to weigh the action’s relative public costs and public benefits without any further guidance or criteria or public participation process. Please delete this sentence as it is extremely unclear as to how this “weighing” is to be carried out.

✘ Ecology respectfully declines this suggestion. Feasible is used in the guidelines to qualify when an action is required. If Ecology were to accept the

suggestion to drop (18)(c) then the term would be meaningless in several cases.

020(18)

Again, special consideration and precedence to protecting PFC for PTE species must be a part of these requirements, not just in Part IV.

✘ The definition of “Ecological Functions” includes consideration of those functions necessary for T&E species. The last sentence adds emphasis to T&E species for Part IV because Part IV was developed specifically to garner ESA liability protection.

020(20) Flood plain

Flood plain is not synonymous with the 100-year floodplain.

The definition is too limited. Record keeping is not accurate enough to establish one hundred-year flood plain in most of Washington. In addition, RCW 90.58.100(2)(h) requires that Master Programs include an element “that gives consideration to the state-wide interest in the prevention and minimization of flood damage.” The state’s interest is not limited to a hundred-year flood plain. Due to the incredible population growth, sprawl, loss of forests and increase in impervious surfaces, current hundred-year flood plain designations do not adequately capture the risks to the public and property from relying on such measures. For purposes of the SMA, Ecology should adopt at least a 250 year flood plain definition.

Determination of floodplain should be from Best Available Science. Although sometimes the only reference is the flood ordinance regulation maps (FEMA), these tend to be conservative and often out of date.

In Whatcom County, much of the land currently zoned for development may be, if the SMA proposal is accepted, removed or classified as non-buildable as it will fall, under Path B, well within the 100-year (plus) flood plain. In some cases, this proposal will effectively remove several existing towns from all future development, as they will fall under the 100 year/plus guidelines.

✘ The 100-year flood plain is used for consistency with RCW 90.58.030(f).

The proposed rule does not prohibit all development in the floodplain and recognizes that some communities exist wholly within the 100-year flood plain.

020(21) Geotechnical report

“Qualified engineers” should be changed to “licensed engineers” — the Rules should rely on the state licensing authority to judge the qualifications of engineers.

Subsection (21) refers to “qualified engineers”. It should refer to “licensed engineers”. DOE should not be in the position of judging qualifications of engineers. Rather, this is the role of the state licensing authority.

✘ The word licensed might mean someone licensed for another profession. For example, a licensed electrical engineer may not be qualified to prepare a geotechnical report. Ecology clarified the definition in the final rule by adding the word “professional” before “engineer.”

020(21)

This broad terminology has created a few problems for this county while enforcing our critical area ordinance. It is broad enough that civil engineers without any specialization in geotechnical issues are able to complete the reports. If the state licensed engineers as geotechnical engineers, there wouldn’t be a problem. Several geotech firms have suggested to us that we use the following language to ensure reports are prepared by truly qualified geotechnical engineers: “Geotechnical reports shall conform to accepted geotechnical standards, and must be prepared by qualified geotechnical engineers or geologists who are knowledgeable about the regional and local geology, have the professional experience and certifications to perform geotechnical reports, and who are licensed, bonded and insured for the performance of such work.”

✘ Ecology has amended the sentence to read: “Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers (or geologists) who are knowledgeable have professional expertise about the regional and local shoreline geology and processes.”

Ecology believes this definition provides the type of consideration this comment suggests. It is within the authority of local government to require licensing, bonding and insuring where necessary and appropriate. To include such specific provisions in a statewide rule may have unintended consequences.

020(21)

Geotechnical engineers are not trained to specify mitigation of impacts on ecological function; this is not within the scope of geotech reports.

✘ Ecology agrees and has amended the final rule, replacing “geological and hydrological impacts” for “impacts.”

020(21)

The definition refers to relying on “qualified engineers or geologists”. It is well established that engineers have a profound bias toward engineering solutions and view geologic hazards as challenge rather than as areas to be avoided. Ecology must move away from relying on engineers for geotechnical reports and more to requiring an interdisciplinary approach. Please amend this section to include, “Geotechnical report” or “geotechnical analysis” means a scientific study or evaluation conducted by qualified EXPERTS USING AN INTERDISCIPLINARY APPROACH that includes Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified EXPERTS USING AN INTERDISCIPLINARY APPROACH INCLUDING ENGINEERS OR GEOLOGISTS, AND BIOLOGISTS who are knowledgeable about the regional and local shoreline geology, BIOLOGY and processes.”

✘ Ecology respectfully declines this suggestion, because the shoreline stabilization standards indicate that impacts must be evaluated and addressed. See section 230(3)(a)(ii)(G), which states the “project design should also specify mitigation of specific impacts to ecological functions.”

020(22) Grading

Insert “human” before “movement to distinguish grading by mass wasting.

✘ Ecology respectfully decline this suggestion because “grading” in this context implies a human activity.

020(22)

The definition of “grading” in subsection (22) is too broad and does not contain any boundaries as to what it means to alter “the natural contour of the land”. It should have some specifications of vertical height or slope or quantity of redistribution required.

Grading should mean the `mechanical’ movement or redistribution of

✘ Ecology respectfully declines these suggestions. The definition of grading is intentionally broad. Alteration of the natural contour is the appropriate standard for determining whether an activity is grading as any alteration may, in a given circumstance, result in a change in the environment. For specific activities, and consistent with the applicable policies of the guidelines, local government may establish appropriate

grading standards. Inclusion of the term “mechanical” in the definition is also inappropriate for the same reason.

020(24) In-stream Structure

The use of the term “utility service transmission” is not standard or common usage in the energy utility industry. Our facilities are generally characterized as “generation” (mentioned in the definition), transmission (for movement of bulk power or gas) and distribution. Utility services are typically extended to customers from a distribution system, which is fed by transmission facilities. These facilities are either above ground, supported by poles, or underground. If these facilities must be located within (or over or under) a streambed, they are not likely to “cause or have the potential to cause water impoundment or the diversion, obstruction, or modification of water flow,” except temporarily or in a de minimus way. The definition as written is not clear as to whether it pertains to crossings that are bored or drilled under a stream bed. Recommendation - Clarify whether the definition is intended to address these issues. Change or delete the reference to “utility service transmission” and clarify whether the definition applies to “trenched” or “open cut” utility lines. Also, at the appropriate point (perhaps under WAC 173-26-240(I) Utilities/WAC 173-26-340(I) Utilities), clarify that utility crossings of shoreline areas are both necessary and permitted

☒ Use of the term “utility service transmission” is intended to address all types of utility transmission facilities not just energy utilities. The definition is inclusive of any structure placed waterward of bank full width if it will or has the potential to impound, divert, obstruct or modify. The placement of utility pipelines has the potential to do so if not properly sited and conducted.

020(24)

It is important that shoreline and in-stream structures be designed so that they are compatible with specific stream type and channel or shoreline morphology. We support the described de-emphasis on rigidly engineered stabilization structures. The final report of the Coastal Erosion Task (dated 3/1/99) included 22 recommendations to Governor Locke. Many of the recommendations discuss the need for local governments (with assistance) to identify the extent of the dynamic zone and discourage development (including local infrastructure) in areas of erosion. Any changes to shoreline guidance should be consistent with the

planning recommendations included in the report. Ecology should revisit this document’s recommendations (see for example recommendation #21).

☒ Comment noted.

020(24)

In the definitions, “in-stream structures” falls under what a bridge would be. It’s also called a developed shoreline. It’s also called an ecologically altered shoreline, so depending upon which definition you want to make, it falls under different rules in different sections. In the shorelines modification part, if you want to talk about doing repairs to a bridge if it was damaged from a flood or whatever, it may or may not need a conditional-use permit. It may or may not get a letter of exemption, depending upon which ever municipality you’re talking to and many bridges cross jurisdictions, which can lead to great misunderstanding. We’ve already had one bridge failure this last winter which was partially attributed to a county shoreline agency trying to decide whether the design fix for the structure was either proper or not when they didn’t have the expertise to make the call. Consequently there was a delay in the repair that triggered the failure of the structure.

☒ It is true that different bridge development and repair activities in different settings could have different impacts and require different permit conditions. Exemptions are stipulated in the Shoreline Management Act and these guidelines cannot change them.

020(26) (Letter of Exemption)

An exempted action is exempt. The local government should not have the ability to condition any exempted action.

SFR’s are specifically exempted but Path B ignores this and requires a written letter of exemption or other certificate from local government.

☒ “Exemptions” provided for in the SMA are exemptions from the requirement to obtain a substantial development permit and are not exemptions from the applicability of the regulatory program of the SMA. The letter of exemption is a device local government has long used to demonstrate compliance with this requirement. That all “development,” as defined in the SMA, is required to comply with the SMA and the local SMP has been affirmed by the SHB and State Supreme Court. In *Hayes v. Yount* (87 Wn 2d 280, 1976) the Supreme Court stated that in the SMA, “the legislature and the

people of this state recognized the necessity of controlling the cumulative adverse effect of ‘piece-meal development of the state’s shorelines’ through ‘coordinated planning’ of all development, not only ‘substantial development’.” In *Hunt v. Anderson* (30 Wn App 437, 1981), the Supreme Court found that “All development and substantial development on the shorelines of the state must conform to the SMA,” and “it is immaterial whether a substantial development permit is required. The placing of a mobile home, the addition of a septic tank and drainfield, and the construction of a deck within the jurisdictional boundary of the SMA constitutes development.”

020(26)

What good are letters of exemption for single family residences and bulkheads, the two main culprits in the trashing of our shorelines?

☒ Letters of exemption provide a better method for local government and Ecology to track the impacts of these developments, and the effectiveness of mitigation for those impacts.

020(26)

Inclusion of conditions or other provisions on letters of exemption will help ensure protection of shoreline function. Although some jurisdictions have been conditioning exemptions, it has never before been clear if that is appropriate. This is a welcome improvement.

☒ Comment noted.

020(28) Marine

The definition of “marine” in subsection (28) is incomplete. Whether a water body is marine should reference the salinity of the water. Rivers can be tidally influenced without marine biota. For instance, the Columbia River is tidally influenced (change in river levels as a direct consequence of tide change) up through the Vancouver/Portland area. However, at this point, the river would not be considered a marine system. Marine system should be defined by salinity of the system. Based on the given definition, marine restrictions and regulations could extend far beyond a true marine system.

☒ The definition of Marine is adequate for the purposes of the Guidelines. It is intentionally inclusive of all tidal waters regardless of salinity as distinguished from lakes and rivers. It is understood there may be some overlap with riverine systems and that in some circumstances (e.g., the Columbia River) local

government may need to address salinity as a criteria for management policy purposes.

020(29) May

In looking through the 155 pages, I found only ten instances where the local agency was allowed, by the use of the term “may,” to make a decision in application of these rules. Seven of the ten dealt with whether or not we wanted to add additional regulations into this mix or incorporate parts of this into our regulations. There are very, very few instances where the local jurisdictions really have the authority to make a determination. All of the criteria and all of the guidelines are spelled out. And so it really removes any ability of ours to make reasonable choices for our citizens based upon circumstances that they face, which means that some of the anger and some of the frustration you’re getting at the public hearings, we’re going to get — we already get on a day-to-day basis by the people who are simply trying to get permits put through and simply trying to understand how this is all going to impact them. Citizens are going to be screaming at us because of the implementation of these regulations, which again gives us zero choice. We’re the ones who will be faced with the liability issues of lawsuits and such over the implementation of these.

✘ Ecology agrees that the rule is more prescriptive than the 1972 shoreline guidelines (173-16 WAC). However, there are opportunities for flexibility on the part of local governments in the rule, including many that are implicit and not stated. Ecology believes that the provisions taken as a whole are necessary and that with adequate public involvement in master program development, careful implementation of standards, and close cooperation between state and local governments, citizens will find the rules do allow reasonable accommodation of their interests while protecting important shoreline ecological functions.

020(30) Mitigation

Mitigation has been grossly overused. If regulators had the fortitude to properly interpret the SMA there probably wouldn’t need to be mitigation.

✘ Comment noted.

020(30)(a) Mitigation: Avoidance

This mitigation and mitigation sequence are the core to today’s mining industry. Reclamation is required at the local, county, and state levels. It is in the operator’s best

interest to provide a reclamation that is beneficial to both society and the environment. Bond systems implemented and regulated by the Washington DNR already ensures completion of reclamation. Most operations budget reclamation money out of current operations to ensure successful enhancement of the property during and after development of the aggregate resource. Therefore, by its very nature, aggregate operations fulfill this definition. As for the first of the sequence, as described previously, aggregate is a site-specific resource and must be pursued where it is located in the environment.

✘ The mitigation sequence is congruent with the SEPA definition. If the project cannot be located elsewhere, the next steps in the sequence would then apply. (See sections 240(3)(h) and 340(3)(h) for mining provisions.)

020(30)(e) Mitigation: Compensation

Compensatory mitigation remains as a significant impact to shoreline resources. Based on a long history of mitigation failure, the mitigation sequencing provisions cannot be expected to supply replacement functions where impacts from permitted activities exist. The Tribe supports a comprehensive overhaul of mitigation activity authority. A watershed based mitigation strategy should be developed in any location where permitted shoreline activities that disrupt shoreline function and habitat are likely to occur.

✘ Ecology cannot require a watershed-based mitigation strategy in this rule. However, the comprehensive inventory and analysis steps of sections 200(2)(c) and 200(3)(d)(i) encourage regional or watershed efforts to characterize the shoreline ecological system and develop regulations that protect shoreline processes. In some cases, this will likely result in something similar to a watershed-based mitigation strategy. In addition, Ecology is developing a separate rule that will allow establishment of watershed-based wetland mitigation banks.

020(30)(e)

Change: “Mitigation” or “mitigation sequencing: means the process and methodology used to avoid, reduce or compensate for theproposal, after it has been determined that the impact is unavoidable. Mitigation requires that avoidance be determined to be infeasible first and (e)Compensatingor providing ecologically comparable resources Using the term ecologically comparable rather than substitute resources makes it clear that the

restoration cannot be some other form such as upland restoration.

Subsection 30(e) would seem to allow off-site, out of kind mitigation which has no scientific merit. Would it be appropriate, for example, for a project which destroys saltwater wetlands critical for listed salmon to be allowed if freshwater wetlands are created in another jurisdiction? Following “substitute resources” insert “which provide the same or greater ecological functions and which are in close proximity to the resources which have been harmed by the development.”

✘ Since avoidance is the first priority the language accomplishes the objectives in the comment. The definition of mitigation in the shoreline guidelines is consistent with the definition of mitigation in SEPA rules (WAC 197-11-768).

020(30)(e)

The rule, in numerous places, authorizes permits for activities that adversely impact habitat of PTE species and that otherwise would be prohibited, if the permit holder can satisfy the mitigation sequencing provision. For example, WAC 173-26-210 (4)(c)(ii)(E) states that “Uses that cause significant ecological impacts to critical saltwater and freshwater habitats should not be allowed. Where those uses are necessary to achieve the objectives of RCW 90-58-020, their impacts shall be mitigated according to the sequence defined in WAC 173-26-020.” The compensatory mitigation language in WAC 173-26-020(20) (e) parallels existing wetland mitigation regulations, which have been shown to fail at providing mitigation for adverse impacts. Based on this past history of mitigation failure, the mitigation sequencing provision cannot be expected to successfully provide replacement functions for those functions that are impacted by permitted activities. A more detailed mitigation and restoration program is needed to structure the discretion of local governments in authorizing mitigation and restoration activities.

✘ The guidelines significantly strengthen ecological protection and restoration goals by addressing cumulative impacts, requiring comprehensive analysis, and basing local SMP’s on a comprehensive strategy. Mitigation is only one aspect of this approach and includes “avoidance” as top priority.

020(30)(e) & (f)

Options (e) and (f) should be REMOVED from the list of options available for “mitigation sequencing” for the following reasons: (1) The shoreline rules emphasize that “alterations to wetlands shall be consistent with the policies of no net loss of wetland area and functions,

wetland rating, best available science...” (2) According to the best available science, as summarized in the U.S. Geological Survey’s Fact Sheet FS-246-96 (by Randy Hunt), “it is not widely accepted that mitigation projects are successful. Although the current wetland permit programs assume that wetland loss is being ameliorated, no long-term, interdisciplinary research shows unequivocally that a created wetland has fully replaced the lost function resulting from a wetland’s destruction. There is a concern that created wetlands do not provide in-kind compensation. Placing mitigation projects in areas distant from the destroyed wetland will result in the wetland functions being replaced in areas away from where they are needed and/or in areas that are not wetland deficient. Mitigation banking projects will not provide meaningful mitigation of the cumulative effects of widely distributed, small-acreage wetland loss.” Thus, the “best available science” currently tells us that new wetlands, of comparable ecological value to existing ones, simply cannot be created. The destruction of wetlands anywhere in the state should be prohibited, since they simply cannot be replaced.

✘ The mitigation definition is the same as that in the State Environmental Policy Act and congruent with other state policies. One of the prime objectives of the Legislature in the law authorizing amendments to this rule was to integrate with SEPA and GMA. It would be inconsistent with that objective to create a new mitigation scheme in this rule. That said, Ecology agrees that “compensatory” wetland mitigation projects have not had a high success rate. However, Ecology believes wetland mitigation banking is one approach that should help lead to more successful compensatory mitigation projects.

020(30)(f) Mitigation: Monitoring

Monitoring (listed as the final, lowest priority measure) should not be listed as a mitigation measure but rather should be a required element of all the other mitigation measures. Monitoring alone does not constitute mitigation, but where there are unavoidable impacts it should be a required component of actions taken to prevent further degradation of critical natural resources. Where avoidance of a potentially damaging impact cannot be avoided (first priority), landowners should be compelled to monitor whatever alternative mitigation measure they pursue to ensure that adverse environmental impacts do not result.

Option (f) should be removed because it is essentially covered by option (c). Other than “repairing, rehabilitating, or restoring the affected environment, no other possible “corrective measures” could be taken that

would be appropriate. Monitoring is not, by itself, mitigation. Subsection 30(f) should therefore be deleted. In its place should be a general requirement that all mitigation be monitored as appropriate.

✘ The definition of mitigation is consistent with SEPA rules (WAC 197-11-768). The guidelines call for monitoring and taking appropriate corrective action. This is an appropriate form of mitigation when impacts could occur over time. In practice, monitoring is not a step that can be taken in lieu of the other steps.

020(34) Priority habitat

The draft guidelines direct local governments to protect “priority habitats” and “priority species” but define those terms so broadly that virtually any undeveloped shorelines could qualify, at least in the minds of persons opposed to development. These provisions likely would lead to numerous appeals and other excessive costs for local governments and project proponents. If unique or special habitats are to be protected, they should be mapped in the master program rather than identified as after-the-fact responses to permit applications for specific projects.

✘ Local governments are required to obtain and use information on “priority habitats” in the early stages of master program development as part of the comprehensive inventory of shorelines (-200(3)(c)(iv) and (ix). The SMA requires balanced consideration of environmental protection and development.

020(34)

Definition must also include a reference to unique or endangered plants. That is, a habitat type in which the vegetation species itself is of unique or significant value.

✘ Habitats for threatened and endangered plant species are not specifically mentioned but would be covered under one of the attributes such as “unique or endangered species” or “high vulnerability to habitat alteration.” Habitat for T&E plant species are also addressed in critical area provisions (Sections 220 and 320).

020(35) Priority species

The term priority species is much too broad. State and federal fish and wildlife departments do not include vulnerable aggregations (Criterion 2) and species of recreational, commercial, and/or tribal importance (Criterion 3) within their definition of Proposed, Threatened, or Endangered (PTE) Species. Ecology should provide justification why Criteria 2 and 3 were included in their definition. The

proposed guidelines would make jurisdictions susceptible to legal challenges by entities who do not feel that jurisdictions are providing adequate habitat for vulnerable aggregations, recreational species (like bass/blue gill), or species of tribal importance. For Path A, Ecology should borrow the existing GMA definition of “Fish and Wildlife Habitat Conservation Areas” to ensure that there will not be a conflict between existing critical area ordinances and SMA guidelines.

✘ This definition is congruent with the Washington Department of Fish & Wildlife definition of priority species and habitats. The guidelines also refer to GMA critical areas as suggested [see section 220(2)].

020(35)

Should include maintaining species at harvestable levels, not genetically viable population levels, for relevant species. Genetically viable population levels is not defined nor are criteria provided.

Protective measures limited to sustain genetically viable population levels of priority species provides little opportunity to assure that there will be harvestable numbers of salmon available to sport and commercial fishers. In addition, it is unlikely that a quantitative analysis as to the number of fish necessary for genetically viability will be available on a project-by-project, or stream by stream basis. This definition insures that a low level of protection will be provided for priority species, and will be virtually impossible to enforce.

Criterion 3 stipulates a persistence of a species at a level much greater than genetically viable. Species of recreational, commercial and/or Tribal importance require levels commensurate with “harvestable levels.” Many of the on-going and existing recovery plans have stipulated recovery objectives that insist upon harvestable levels of fish. SMPs must be prepared to ensure this “bar” or standard is achieved, not merely a genetically viable level.

✘ Ecology respectfully declines this suggestion because including the phrase “maintaining species at harvestable levels” would be mixing a policy statement with a definition. The criteria will vary from species to species and will change with new knowledge.

The requirements for priority species are primarily directed toward species preservation comprehensively by setting requirements based on species habitat needs. See section 200(2)(c), 200(3)(d)(i), 220(2)(c)(iii)(B), 220(3)(c)(iii), 220(2)(c)(ix), 300(2)(c), and 300(3)(d)(i).

020(35)

There is a serious procedural flaw in the rule, since the Department of Fish and Wildlife could unilaterally amend its (priority) species list and in effect require any jurisdiction who adopted Path B to amend their SMP as well.

☒ Consistent with the requirements of RCW 90.58.080, the only time a local government is required to amend its SMP is if Ecology adopts new and updated “guidelines” rules.

020(35)(a) Priority species: Criterion 1

Why are “proposed” species included in this definition? Are they the same as “threatened” or “endangered”? What is the scientific basis for including them? The proposed guidelines incorporate by reference inappropriate standards in the definition of “priority species.” The inclusion of “proposed” species within the definition and its regulatory effect is inconsistent with the APA because proposed listings (state or federal) have not been adopted as required in RCW 34.05.365. This is also true for any other classification or listing of species other than species listed by duly enacted state or federal rules. Frequently, agencies and local governments confuse “proposed” species with “candidate” species, “species of concern” and other species lists that are not the subject of formally adopted listings under state and federal law. To clarify, only threatened, and endangered species actually listed by state or federal rule should be given regulatory effect via incorporation by reference.

Definitions (35) (36) and (37) provide definitions for “PTE,” “Priority Species,” and “PFC.” ESA 4(d) coverage only addresses “threatened” species. Since the intent of this draft rule update is to provide local agencies with the option of obtaining 4(d) coverage we do not see the need to address proposed species in the rule. On a similar note, “priority species” are also inappropriate to be treated the same as Federal Threatened and Endangered species since there is not always evidence that a priority species is in trouble. The only state categories that might deserve the same/similar attention as Federally listed Proposed, Threatened and Endangered species are the State Threatened and Endangered species. We suggest limiting the discussion to Federally listed Proposed, Threatened, and Endangered species and species listed by WDFW as Threatened and Endangered. Finally, throughout the body of the rules, there are numerous inconsistent references to priority species, threatened and endangered species, PTE, etc. Please edit the entire rules for consistency.

☒ The definition of “priority species” is in agreement with the Washington Department of Fish & Wildlife definition.

The rule uses the term priority species essentially in two ways. First, local governments are required to identify priority species needs and consider these while preparing SMPs. Ecology believes it is important to consider the broadest range of species that are identified of concern at the planning level. Second, there are specific standards that relate to preventing direct impacts to these species. Ecology believes it would not be acceptable under the policy of the SMA to allow direct impacts to priority species.

020(35)(a)

Definition should specifically mention threatened and unique plants, as well as any insect species that might be listed.

☒ Subsection (d) encompasses all federally listed threatened and endangered species, including plants.

020(35)(b) Priority species: Criterion 2

Criterion 2 does not list species, but places (habitats) where species aggregate, or the aggregations themselves. Additionally, these aggregations, such as the examples listed, are seasonal. The Rule should either place this specific criteria for “priority species” as written elsewhere, or list the specific species that are vulnerable because of their seasonal aggregation.

☒ Ecology has amended the rule to reflect that criterion 2 applies to the species, not their habitat. The language now reads: “Examples include heron colonies, seabird concentrations, and marine mammal congregations, ~~haulouts, shellfish beds, and fish spawning and rearing areas.~~”

020(35)(b)

In (35)(b), after “examples include”, insert “but are not limited to”.

☒ Ecology respectfully declines this suggestion because it would be redundant.

020(35)(b)

Subsection (35) defines “priority species”. In subsection (b), one of the factors for consideration is the tendency of a species or group of animals to congregate. This is a weak basis for determining whether a species is a priority species. In addition, subsection

(c) is overly broad in including species as a criterion 3 priority species.

☒ The criterion reads “vulnerable aggregates susceptible to significant population declines.” It is not intended to include all species that congregate.

020(35)(b) Priority species: Criterion 3

Why would Ecology want to include “nonnative” species as priority species, when the vast majority of nonnative species are invasive and predatory on the native ecosystem.

☒ Ecology included nonnative species to acknowledge benign species of recreational or commercial importance, such as Pacific Oysters, Manila Clams, or rainbow trout.

020(36) (PFC)

The guidelines rely upon the standard “Properly Functioning Condition” (PFC) as a standard with regulatory effect. However, this standard is a mere policy of the National Marine Fisheries Service that has never been subject to notice, comment, and critique. Because PFC has never been subject to public comment, the scientific validity and regulatory effect of the standard is poorly understood and should not be incorporated into these guidelines.

PFC is based on a survey of pristine conditions and is inappropriately applied to developed urban landscapes such as the Duwamish River, where natural PFC no longer exist and cannot feasibly be maintained.

The language of subsection (36) implies that “properly functioning condition” is only achieved when conditions support viable populations of proposed, threatened, or endangered species over the “full range of environmental conditions.” This is nearly impossible for most species and is not appropriate in urbanized areas.

The real zinger is the new concept of PFC. PFC must be protected where they exist and restored where they no longer exist. Under PFC where homes can’t be constructed outside the 200 ft vegetation management areas there are requirements for reduced building dimensions and prohibitions on non-native plants. This is pure and simple back-to-the-pre-European-pristine-nature condition. This concept is not even mentioned in the grossly inadequate DEIS. The management policy for urban & developed settings calls for restoration where it is feasible. Feasible includes “relative public costs and public benefits” without mention of the costs to the private applicant. Since the burden of proving infallibility is on the applicant it appears the government will regard as feasible whatever it takes to re-

nature urban shorelines as a condition of permits regardless of the applicant's cost.

There is no clear planning process established in the guidelines for PFC. In order for local policymakers and citizens to have meaningful input into the planning process, PFC must be defined a priori to the planning process. The rule lacks a clear mechanism (including process, funding, participation, approval from NMFS and USFWS) for development of standards, approval of those standards, or the adaptive management processes which will collectively achieve PFC. It is also noteworthy that local governments are not included in the process which will define PFC, even though they are expected to achieve PFC through the standards within the Shoreline Code and SMP. Can a local government proceed with planning in the absence of definitions of PFC? How will the formulation of PFC integrate with the planning process as a whole? In other words, how will Ecology and NMFS ensure that PFC is defined early in the process, or immediately after the inventories have been performed, so that the process proceeds with a set of defined goals to be met?

The concept of properly functioning conditions is still being developed, and is very controversial. It is very subjective and is dependant upon numerous factors including the scale and size of the area being considered. Defining ecological functions and PFC on a proposed site basis will create unreasonable restrictions and conditions upon project proponents. Additionally, there are specific detailed references to properly functioning conditions without offering credible scientific evidence to back the conclusions. At times, PFC and ecological functions, which are arguably separate and distinct description, are inappropriately used interchangeably throughout the draft rules.

This term is very broad and Ecology should ensure that it understands what the evaluation of the term in the field will entail and that the intended meaning is reflected in the proposed guidelines (see attached article called "PFC: What It Is and Isn't" by the National Riparian Service Team).

PFC goes beyond the intent of the SMA and beyond the "no take" or "shall not jeopardize the continued existence" of the listed species standards of the ESA.

✘ The definition is not meant to require that pristine conditions must be restored throughout the range of T&E species, as clarified in section 300(2)(c)(ii). Ecology does not believe PFC means pre-European settlement conditions, and has amended the definition of "restoration" to clarify that.

The optional Part IV of the rule requires that master program provisions must "contribute to the attainment" of

PFC where it has been impaired (-300(2)(c)(ii)). The goal is explicitly a long-term goal of improving conditions over the long term, not achieving pristine conditions in all places immediately.

It is true that Part IV of the rule requires new residential lots to be "configured in a way that a residence may be developed without causing significant ecological impacts to PFC..." There are many similar standards in Part IV. Section 300(2)(c)(ii) describes the overall methods for demonstrating conformance to the PFC standard. The process is part of the comprehensive planning requirement described in section 300(3), which includes public participation. The tasks in this section provide guidance to local governments in translating the physical needs of threatened and endangered species into master program provisions.

Ecology agrees that the definition is not specific enough to apply it. Ecology will prepare technical assistance materials in consultation with affected groups, so that local planning processes will be able to proceed with a set of defined goals.

020(36)

Quantifiable indicators have been compiled to characterize Properly Functioning Conditions (PFC) in the riparian zone. However, PFC criteria have not been developed for the nearshore and estuarine areas where the shoreline rule also applies. It is our expectation that measurable habitat attributes must be developed for these areas in order that this approach can be successful. It is the expectation of the Tribe that we will be involved in the development process for these PFC standards to assure they are adequate to preserve and restore habitat in these environments.

The habitat standard that is applied to Path B programs is PFC. Quantifiable indicators have been compiled to characterize properly functioning condition in riparian habitat. PFC criteria are under development but have not yet been finalized for urban, nearshore and estuarine habitats. Therefore, at this time we do not know how NMFS intends to define this key regulatory standard in urban, estuarine and nearshore marine areas. The urban, nearshore and estuarine PFC standards should be published for public comment as part of this current public review process to ensure that these PFC standards are adequate to preserve and restore habitat for listed species in these environments. In addition, however, this rule should also provide a pathway for adoption of these PFC standards, once they are finalized, that does not require additional formal rulemaking.

This would avoid a situation where the specific quantifiable measures are blocked or tied up in regulatory or legal processes while the overall SMA program moves.

The definition for Properly Functioning Condition (PFC), in addition to the current language, should include specific references to the NMFS definition, which is similar to that presented in section WAC 173-26-420 (2) (c) (ii) Ecological Functions.

Please define properly functioning conditions further to clarify the extent to which local governments must protect the resource. The rule allows local governments to designate areas with and without PFC without clear criteria. This will allow improper designations.

A number of times we came across the phrase "properly functioning condition for PTE species" which seemed out of context. We believe that properly functioning condition of shoreline functions and watershed processes provide habitat for PTE species as one output. These same shoreline functions and processes also provide other benefits such as shoreline stabilization, bedload transport, and flood attenuation. We would be concerned if the definition of PFC were reduced to a single species checklist.

✘ Ecology believes the language in section 300(2)(c)(ii), provides adequate guidance to local governments in translating the physical needs of threatened and endangered species into master program provisions. However, Ecology agrees that more detailed guidance will be helpful to implement these provisions and will prepare technical assistance materials after the rule is adopted.

The comment is correct in noting that PFC for PTE species is one subset of the full range of functions necessary for ecologically viable shorelines. Part IV focuses on the PFC for PTE species in order to provide substance and certainty to achieve an exception from "take." (See section 300(2)(c)(ii).)

This rule is written to respond to new science and information regarding such resource protection issues. This is one reason quantified standards are typically not included in the guidelines. Ecology will seek technical research and input when preparing guidance materials.

The tribes and others will be consulted during the preparation of technical assistance materials addressing these issues.

PFC is described in more detail, with methodology for using the term, in section 300(2)(c), because the term is only used in the optional Part IV of the rule and the definitions section applies to both Part III and IV.

020(36)

PFC should include a vegetation component.

✘ The last three bullets of section 300(2)(c)(ii) describe the vegetation component of PFC.

020(36)

This definition does not correspond with the definition of this term in the Forest and Fish Report.

✘ The definition has been arrived at in conjunction with resource agencies responsible for management of federally listed threatened and endangered species.

020(37) PTE species

Why are “proposed” species included in this definition? Are they the same as “threatened” or “endangered”? What is the scientific basis for including?

NMFS is overreaching by including “proposed” species. Path B should apply to listed species only. This is mission creep by NMFS.

The proposed rule supports additional regulation when a species is proposed to be listed as threatened or endangered. Unfortunately, the relevant language ignores the importance of a public comment period, which thereby raises a significant due process issue. Additional procedural clarification could nip in the bud any inchoate legal challenge based on a due process argument.

PTE species is defined to include state listed species as well as species proposed for listing as “threatened” or “endangered” under the ESA. Such overprotection is not required by the ESA, and it is doubtful that a requirement for such protection is necessary to obtain “take” immunity for local shoreline master programs. Although the protection of all valuable species is certainly a laudable goal, local jurisdictions should have the option to determine whether they have the resources and community support to pursue this goal. DOE should not use the “carrot” of protection from “take” litigation to extract additional measures — not required by the ESA — from local jurisdictions. In addition to unduly restricting the exercise of local discretion, such an action will undoubtedly deter local jurisdictions from selecting Path B, thereby reducing its effectiveness as a uniform means of ESA protection for Washington State. Enhanced protection measures could be offered as an option portion of Path B for jurisdictions that wish to impose added protection measures.

The guidelines should require properly functioning conditions (PFC) for all priority species rather than the “PTE” proposed, threatened, or endangered per state or federal

determination. At a minimum, include candidate species. The guidelines should serve to prevent future listings, extirpations, and extinction’s as well as address current listings. PTE species should include sensitive and species of concern: Why is candidate not used?

✘ Ecology has revised the rule to address these comments. Proposed species have been removed from the definition so that it now refers only to Threatened and endangered species. “Proposed” species are included in the definition of priority species and habitats. The purpose of this change is to provide an implementable set of regulations with regard to protection or restoration of properly functioning conditions for threatened and endangered species while assuring that planning for shorelines also takes into consideration any species proposed for listing. PFC criteria are not typically available for Proposed species and therefore specific regulations would be difficult to craft.

The final definition of T&E species at 020(53) reads: “Threatened and endangered species” or “T&E species” means those native species that are listed in rule by the Washington state department of fish and wildlife pursuant to RCW 77.12.020 as threatened (WAC 232-12-011) or endangered (WAC 232-12-014), or that are listed as threatened or endangered species under the federal Endangered Species Act, 16 U.S.C. 1533.”

020(38) Restoration

There needs to be some clarification of the definitions, particularly restoration. What does that mean? What is the goal or what do we intend to get at if it’s returned to pre-European settlement? As a person from another state agency said at a meeting a while ago to have our marine environments look 200 years in the future the way they looked two hundred years ago. I would like to suggest that he start by putting the Denny Regrade back and putting the baseball and football stadiums somewhere other than a flood plain or what used to be the flood plain of one of the best salmon-producing rivers in our state, which is no longer and will never be again. We need to make it understood to the public that the intent is not to return to pre-European times, but rather that we are accepting of development that’s out there today.

It must be that the gross unfairness of what “restoration” can mean is not understood by the authors of these regulations.

✘ Ecology has revised the definition to make it more clear that the intent is not to restore pre-European settlement conditions but rather to restore the performance of the shoreline as a

productive natural feature. The final definition reads: “Restoration” or “ecological restoration” means the significant re-establishment or upgrading of ecological shoreline functions through measures such as revegetation, removal of intrusive shoreline structures and removal or treatment of toxic materials. Restoration does not necessarily imply returning the shoreline area to aboriginal or pre-European settlement conditions”.

020(39) Restore

Many of the definitions in the proposed rule obfuscate rather than clarify pertinent issues. In general, DOE needs to pay more attention to details. The proposed rule needs more legal and definitional rigor. For instance, even a perceived “simple” word such as “restoration” is open to multiple interpretations. The verb “restore” could refer (1) to a specific time period in the past; (2) to a particular set of ecological attributes, or (3) to both a time period and ecological attributes. In common parlance “restore” means to return a site to the conditions that existed immediately before a development began. Alas, the proposed rule gives no guidance on what time period should be used in measuring any “upgrade” in shoreline ecological functions, which thereby creates unnecessary confusion.

✘ Ecology has revised the definition to make it more clear that the intent is not to restore pre-European settlement conditions but rather to restore the performance of the shoreline as a productive natural feature. The final definition reads: “Restore” means to significantly re-establish or upgrade shoreline ecological functions through measures such as revegetation, removal of intrusive shoreline structures, and removal or treatment of toxic sediments. To restore does not necessarily imply returning the shoreline area to aboriginal or pre-European settlement conditions.

Ecology does not believe it would be appropriate or practical to define restoration by defining a specific time period to restore to.

020(40) Riverine

The definition of “riverine” as written on page 8 does not include streams. There are several streams that meet the criteria to be a shoreline of the state.

✘ Ecology has revised the definition to add the word “streams.” The language now reads: “Riverine” means pertaining to a river or stream system, including associated lakes and wetlands.

020(41) Shall & 020(46) Should

Many provisions in the draft guidelines use the mandatory “shall,” which is binding on local governments. Even where the more permissive “should” is used, the draft guidelines put a high burden on local governments to justify not taking the action being recommended. This often is too heavy-handed in light of the SMA’s express direction for DOE and local governments to cooperate, with local governments having primary responsibility and DOE acting in a supportive role: “This chapter establishes a cooperative program on shoreline management between local government and the state. Local government shall have the primary responsibility for initiating the planning required by this chapter and administering the regulatory program consistent with the policy and provisions of this chapter. The department shall act primarily in a supportive and review capacity with an emphasis on providing assistance to local government and on insuring compliance with the policy and provisions of this chapter. [RCW 90.58.050]” And of course the term “guidelines” itself suggests leaving local government considerable flexibility and discretion. We believe the draft guidelines err on the side of being overly prescriptive and failing to recognize the roles and contributions of local governments.

Ecology made an exception to the English language to change the definition of “should” to mean “required”. I find this play on words misleading to the reader in the extreme.

“Should” means required unless . . . “If a required action is in some way contrary to the policies of the SMA it has no business being required. It is Ecology’s duty to examine these rules and remove any which do not comply with the policies and goals of the SMA.

By stating that “[s]hould means that the particular actions required unless there is a demonstrated, compelling reason . . . against taking the action,” DOE has created unnecessary ambiguity. Since “should” is linked with the term “compelling,” it is possible that a court might interpret the word “should” by applying a “compelling state interest” standard of analysis. (This standard is used, among other things, to analyze First Amendment claims.) The application of this standard essentially would transform the word “should” into “must,” because it would be virtually impossible to articulate a “compelling” reason. We therefore would suggest that a more balanced and workable approach would allow exceptions to a preferred course of action if there is a rational environmental basis for doing so.

✘ As noted a major responsibility of Ecology under the SMA is “insuring compliance” with the policies of the SMA. The use of “should” and “shall” as they are defined is intended to provide flexibility where it is appropriate while insuring that the policy of the SMA is honored in the process.

“Shall” is defined by Webster’s New Riverside Dictionary as a term used to express a directive or requirement. Shall is defined in the guidelines as meaning a mandate, an action that must be done. Should is defined, also by Webster’s, as a term used to express duty or obligation. In the guidelines should is defined as a particular action that is required unless there is a demonstrated and compelling reason, based on the policy of the SMA and the guidelines, against following the requirement. The definition and use of these terms in the guidelines is consistent with the Webster’s definition but are made specifically applicable to the context of the Guidelines. In drafting the guidelines, Ecology must encompass the wide variation in environmental, political, economic and social conditions that exist regarding shorelines across the state and must accommodate future changes in conditions and knowledge to the best of our ability to do so.

020(41) Shall & 020(46) Should

The first thing that bugs me in reading over the draft is the wording from the last draft. I remember some of the wording at the start would be “this should be set aside.” Now, it’s “shall.” That tells me that’s taking. Somebody from the Attorney General’s office told you that you’re probably in line with not portraying a takings issue. I wouldn’t be so sure of that. I know from the AG’s office that it’s a very fine line, and when you word statements in this current draft that read “should” to “shall,” that is taking it from somebody. The other thing and it deals with more complicated issues, it’s not the who or the how or where, but it’s why. Why do you want to do this? The legislature directed you to update the plan. But I also know that your agency wanted to put water meters on all the wells. So I’m trying to piece this together. Why do you want the water meters on the wells, and why would you want to control the property? I guess it comes down to who controls the water controls the people.

✘ For the reasons stated elsewhere in this responsiveness summary, we do not believe that implementation of these guidelines will result in any taking of private property. Regarding the comment concerning control of the water, we believe the guidelines provide appropriate guidance to meeting the policy objectives of the SMA. See RCW 90.58.020 for those objectives.

020(47) Significant ecological impact

The definition of significant ecological impact includes an action that could contribute to a measurable or noticeable reduction or harm to ecological functions. The guidelines appear to state that any noticeable harm, no matter how small, is to be considered significant. This could be interpreted to mean almost every action, depending on the perspective of the interpreter. Virtually every decision made by local planners could be challenged.

The definition is subjective and makes no attempt to quantify what is “reduction” or “harm”. The rule suggests that it is within DOE’s sole discretion to determine what is “harm”. Under the definition, placement of habitat structures and habitat restoration measures could create a significant ecological impact. Further, it appears that any impact could be considered “significant”.

The use of the term “could” in the language allows for a wide degree of interpretation. Many possibilities exist that could happen, but are not in reasonable assessment likely to happen. To allow restriction because of any possibility, no matter how remote, would be detrimental to society and the environment. The language should be adjusted to reflect a degree of assurance; that the action will most likely or probably cause reduction or harm. According to the SEPA process, as detailed in WAC 197-11-060 Content of environmental review (4) Impacts (a), “. . . provisions require the consideration of ‘environmental’ impacts. . . with attention to impacts that are likely, not merely speculative [emphasis added]. . .” One of the differences between the SEPA language and the proposed regulations is the removal of the “likely, not merely speculative” directive

✘ Ecology has revised the rule to clarify that impacts inconsequential to attaining the objectives of the Act or the vitality of the shoreline ecological functions or ecosystem-wide processes are not significant. Habitat improvement projects would most likely not be considered to create significant impacts. The final rule reads:

““Significant ecological impact” means an effect or consequence of ~~an~~ a human-caused action if any of the following apply:

(a) The action ~~measurably or noticeably reduces or harms an ecological function or ecosystem-wide process~~ degrades or changes an ecological function or ecosystem-wide process to such a degree that the ecosystem can no longer perform the function at levels within its natural range of variability or that the performance of the function falls outside the range needed to maintain the

integrity of other ecological processes in shoreline areas. As used in this definition, the normal range of variability does not include alterations caused by catastrophic events.

(b) Scientific evidence or objective analysis indicates that the action could cause ~~degradation or change reduction or harm~~ to those ecological functions or ecosystem-wide processes described in (a) of this subsection under foreseeable conditions.

(c) Scientific evidence indicates that the action could contribute to a ~~measurable or noticeable reduction or harm degradation or change to~~ ecological functions or ecosystem-wide processes described in (a) of this subsection as part of cumulative impacts, due to similar actions that are occurring or are likely to occur.

Significant ecological impacts do not include impacts that are inconsequential to attaining the objectives of the Act or to the protection and restoration of shoreline ecological functions or ecosystem-wide processes.”

020(47)

A complete definition delineating the meaning and bounds of “scientific” needs to be included in the regulations. In many cases, scientific includes regulator and public assumptions, with little or no basis in research of facts. Many other cases consist of conflicting research and interpretations from respected and knowledgeable scientists and professionals. While both studies may be viable and scientific credentials are beyond question, they derive different conclusions. Differing variables may include the amount of required reclamation and operator commitment between historic mining operations and current operating practices. The point remains that two views of scientific analysis are provided, with differing recommendations. Hence the need for clarification of definition.

☒ Section 200(2)(a) clarifies how scientific and technical information is to be used in developing SMPs. That section states that “Where information collected by or provided to local governments conflicts or is inconsistent, the local government shall base master program provisions on a reasoned, objective evaluation of the relative merits of the conflicting data.”

020(48) Significant vegetation removal

Clarify that viability of shoreline vegetation is important as it provides ecological functions. Allowing shoreline vegetation removal because

it is invasive or non-native invites misapplication of the intent of the definition of significant vegetation removal. Native or non-native, if vegetation removal impairs the ecological functions of the shoreline it should not be removed. Or at a minimum, substitute species should be in place before the non-native, or invasive species are removed. This definition needs to be modified: substitute for native the term hydrologically mature vegetation.

In the first sentence, delete “native”. Loss of non-native vegetation which provides important ecological functions has the same impact as loss of native vegetation.

☒ Ecology has removed the word “native” from the definition. Standards for vegetation conservation (sections 220(5) and 320(5)) prohibit removal of vegetation that would likely result in significant soil erosion or in the need for shoreline stabilization. This could in some cases apply to non-native species. However, the standards also note that vegetation conservation provisions should not preclude removal of noxious weeds. Ecology declines the suggestion to include the term hydrologically mature.

020(48)

A description of degree of certainty needs to be addressed. Research is being conducted on the viability of restoring ecological functions and values to riverine systems utilizing floodplain mining. However, as quoted in the DEIS, NMFS states that “...Altering these habitat parameters [in-stream and near-stream gravel mining] has deleterious impacts on in-stream biota and the associated riparian habitat (Sandecki, 1989)...”

☒ Ecology does not believe this level of detail belongs in the definition section. The requirements for vegetation conservation are stated in sections 220(5) and 320(5).

020(48)

Subsection (49), which defines “significant vegetation removal” appears to conflict with the Department of Natural Resources’ forest management practices.

☒ Significant vegetation removal is primarily associated with vegetation conservation provisions, which do not apply to Forest Practices under the state FPA. (See sections 220(5)(a) and 320(5)(a).) Conversely, the section on forestry practices does not use the term except as it pertains to conversions. See sections 240(3)(e) and 340(3)(e).

020(48)

As part of system maintenance PSE routinely conducts an integrated vegetation

management program on all our overhead electrical systems which includes an array of alternatives including tree trimming, tree removal, installation of tree wire, and application of chemical products, when appropriate. During emergency operations vegetation removal is necessary and critical to the safety of our workers and the restoration of power. All actions are conducted for safety of workers and the public as well as fire prevention, and for reliability of the electrical system. Currently, vegetation management within regulated shoreline jurisdiction is exempt as an allowable maintenance activity for a legally existing structure. Under this proposed definition the activities described above would not be allowed. The following sentence needs to be added to the existing definition to address this concern: “Routine and emergency vegetation management as part of utility corridor maintenance are excluded, providing adequate and appropriate vegetation replacement actions.”

☒ The comment raises a management policy issue, rather than a definition issue. It is not appropriate to exclude a high impact activity from regulation however it is appropriate to allow reasonable maintenance of existing facilities.

020(48)

Clearing of vegetation on one property might cause adverse impacts, but not necessarily cause a “significant” adverse impact. However, the cumulative effect of clearing vegetation on a series of adjoining properties could be significant. Therefore, we need to be able to deal with individual properties. This proposed definition would not make this possible. We suggest deleting the second use of the term “significant” in the first sentence: “Significant vegetation removal means the . . . or other activity that causes “significant adverse impacts . . .”

☒ Ecology respectfully declines this suggestion. The definition is adequate to assure that significant impacts to the important ecological functions performed by vegetation will not result. Clearing of vegetation would be a significant impact for that site and the definition of significant ecological impacts includes consideration of cumulative impacts.

020(49) Site potential tree height (SPTH)

A clear, scientifically valid definition of site potential tree height (SPTH) is important for the development of effective vegetation conservation standards under WAC 173-26-320(5). The proposed definition relies on a standard of SPTH at 100 years, claiming that

this is the age at which native vegetation is “mature” in western Washington. While foresters and silviculturists may define tree maturity in terms marginal gains in raw material production (e.g. 60-100 years to “maturity”), native riparian forests of western Washington are only beginning to develop essential ecological functions at age 100. Douglas fir and western hemlock trees are still growing rapidly at age 100 and this growth only tapers off at approximately age 200-250. To ensure that the “full suite; of vegetation-related shoreline functions” is achieved, the SMP guidelines should utilize the following definition of site potential tree height. “The average maximum height attained by a tree within a specified time period, given particular site conditions. For the purposes of maintenance of natural riparian functions along river, estuarine, and marine shorelines, this period is 200-300 years (in western WA), or the time necessary for a riparian forest to reach full maturity and develop a multi-layered, multi-species community dominated by large overstory trees, snags, and standing and fallen LWD.”

The definition of a Site Potential Tree Height (SPTH) is erroneous. The definition in the proposed Guidelines is what would be the site index. Site index specifies the height at a certain age, in this case age 100. Trees can grow longer than 100 years and can grow taller at older ages, thus they have a potential to still affect habitat forming processes from greater distances than age 100 trees. The term “Site Index” may be a more appropriate term because it is a broader term, is utilized by the NRCS and other agencies, and is more appropriate for non-merchantable tree species (like cottonwoods). I recommend that for the west end of the Olympic Peninsula that the Sitka Spruce be considered the tree by which to judge the 100 year site potential height. Site-specific tree heights include Doug fir. Well, the last time I checked, Douglas fir doesn’t really grow very well along the river. You’re going to find alder and cottonwood.

Subsection (50), which defines “site potential tree height” for land west of the Cascades ignores the fact that many of the coastal shorelines do not support Douglas Fir or Western Hemlock. It makes no sense to base potential tree height on species that are not even present in the specific geographic area. Further, regenerated plantations and private lands not exhibiting native/virgin forests will be dependent on human introduced species, not native species.

The unvegetated marine shoreline environment is not addressed. This environment should either have guidance on tree height or should specifically excluded as a portion of the “West of the Cascade summit” description.

The site potential tree height should be based on the maximum height of the dominant species.

✘ The definition states that site potential tree height means the average height of the “tallest mature native species” that is capable of growing in the soils found at the site. Ecology has revised the definition to clarify that the relevant species will not always be those indicated in (a) and (b). This revision would allow Sitka spruce or other species to be used where it is appropriate. The final definition reads: “ (a):”West of the Cascade summit, the site potential tree height will generally be based on either Douglas fir or western hemlock, unless based on another species due to local conditions.” (b) For sites that historically supported cottonwoods as the largest tree, the site potential tree height is generally the average height, at age seventy-five years, of a black cottonwood tree growing under those site conditions.”

Ecology set a specific age, rather than “maximum height” because scientific studies show that growth period is sufficient to provide necessary ecological functions.

020(49)

The term is very broad and places jurisdictions in the position of having to calculate what type of trees would occur in shoreline areas where trees have been removed. This is also not the sole measure of health for all species and the riparian area. The vegetative buffers would differ based on whether it was determined by tree species that grew in the past, current tree species, or tree species that would be the climax vegetation for a particular soil type and water availability. In addition, does the buffer start from the highest tree along a shoreline or tree of highest concentration in an area? If cottonwood or willow species dominated the shoreline area and the upland area had conifer trees (with the ability to provide periodic recruitment of woody debris to the shoreline), on what species would the site potential tree height be based?

The definition addresses site potential tree height, the potential height of a tree to grow in the soils as defined by the NRCS. This does not take into account whether such trees actually have been historically present to the site (which could be defined by historical photography as required for channel migration). Alterations to hydrology historically and prehistorically, both manufactured and natural, will not alter the soil definition quickly, but will have immediate impacts to the vegetation. Therefore, while the soil actually may be classified to support such vegetation, the reality is that it never will under current circumstances.

✘ Ecology will prepare guidance materials on determining the site potential tree height. Note that the definition includes a provision for using cottonwood or willow if that is what the site historically supported.

Ecology believes that local government are capable of taking into account variables such as historic alteration of soils when determining the Site Potential Tree Height.

020(49)

This definition does not correspond with the definition of this term in the Forest and Fish Report.

✘ The Forest practices act rules do not specifically define site potential tree height but incorporate the concept of SPTH into the emergency Forest practices rules as quantified riparian management zone standards. The definition in the proposed SMA guidelines gives local governments greater flexibility to address a variety of conditions but is consistent with the basic concept of tying vegetation conservation to mature tree height that is implicit in both rules.

020(52) Substantially degrade

An action is considered to substantially degrade the environment if scientific evidence indicates that the action may contribute to harm or damage to ecological functions as part of a cumulative impact (p. 9): In other words, if “science” indicates that a development by itself does no harm, but might be viewed negatively if one considers all the development that already has taken place or that someday might occur, even “minimal” development (such as the construction of a single-family residence) could be deemed to substantially degrade the environment. We urge DOE to narrow the scope of this definition.

What you’re getting back to here is single-family residential. So any house that you can’t individually see an impact from, but we think that it may contribute over the long haul if you add them all together, to some impact that is substantial. You’re getting from an exempt, protected status under the SMA to a full regulation of single-family residential.

This definition is extremely broad. Every aspect of society can be attributed to causing cumulative damage to the environment. Every aspect of life, from the roads driven on to the foundation concrete in homes and buildings, has a connection to natural resource and the development of those resources. Therefore, responsibility for historical cumulative impacts should be born by society as a whole, not the single applicant. To single a sole

entity for responsibility, and thus permit denial, based on cumulative impacts is to create a social "scapegoat", avoiding responsibility and missing on potential social and environmental solutions.

☒ Ecology has revised the definition to tie it to significant ecological impact. The rule now reads:

"Substantially degrade" means to cause significant ecological impact. damage or harm to an area's ecological functions. An action is considered to substantially degrade the environment if: (a) The damaged ecological function or functions significantly affect other related functions or the viability of the larger ecosystem; or (b) The degrading action may cause damage or harm to shoreline ecological functions under foreseeable conditions; or (c) Scientific evidence indicates that the action may contribute to damage or harm to ecological functions as part of cumulative impacts.

The guidelines do require that SMP's address cumulative impacts consistent with the policy of the SMA. There is ample scientific documentation to justify this need. The guidelines do not prevent developments (including single family residences) that are "consistent with the control of pollution and prevention of damage to the natural environment."

020(52)

The current definition as written is too vague and subjective. Each proposed action will require rigorous scientific evaluation that could then get mired in extended debate over the interpretation of best available evidence.

☒ In general, the guidelines require a scientific evaluation of what areas are "substantially degraded" at the planning level. Ecology does not expect that each action will involve rigorous scientific evaluation.

020(54) Water-dependent use

What defines "water dependent use"?

Should be narrowed to ensure that only the portion of the use that must be on water is actually using shorelines. Such activities preclude natural and/or public uses of the shoreline, and SMPs should minimize this.

Where the legislature's use of this and related terms is limited to commercial and industrial uses, your proposed rules apply the concept to all uses, and does so in order to subvert the clear contrary legislative intent.

☒ The term is based on SMA policy (90.58.020), which declares that "uses

shall be preferred which are...dependent upon use of the state's shoreline."

Ecology's definition reflects shoreline management practice and decisions of the Shorelines Hearings Board of long standing. Ecology has long maintained that water-dependency designations should only be given to those portions of an operation that are demonstrably dependent upon the water or shoreline edge. Examples of water dependent uses are provided for clarity.

Sections 170 and 270 acknowledge that a balanced approach to shoreline management is required under the SMA, which requires "planning for and fostering all reasonable and appropriate uses."

020(54)

Water dependent uses should be clearer to include residential developments. As written it appears to include only commercial developments. The definition as written could be easily misinterpreted by local agencies.

☒ Under the SMA, residential uses are not "water dependent" uses, but are considered "priority" uses when "consistent with control of pollution and prevention of damage to the natural environment."

020(54)

Most uplanders wouldn't know a water dependent use if they tripped over it, so please stop micromanaging us. Let us make this simple. If you've got access to the water with your property, make the first floor of any building water dependent. Then let the market make its case. This will do more for supporting real water dependent uses because the cost of the land and building will be underwritten by those that can afford it more. Face it, most true water dependent users don't want and can't use second floor space, so why demand we owners put them there? If we are not very careful, in the next economic downturn we will all be faced with lots of empty restaurant space because it provided "public access" and the rule makers made it impossible to be creative.

☒ Ecology believes the suggestion to make the first floor of any building water dependent is overly prescriptive. The definition is consistent with current practice that has been applied for many years.

020(54)

Change: after "intake," delete "and"; after "sewer outfalls", add "and recreational boating facilities". This addition clarifies that recreational boating facilities are dependent on the water in order -to exist.

As appropriate, clarify that provision must be made for both service utilities and for utility crossings. Utilities can be very low impact uses within shoreline areas, and must occupy those areas. The guidelines should acknowledge those facts.

We recommend that bridges be included in the definition of "water dependent uses."

The definition should include stormwater outfalls as a water dependent use, consistent with the treatment of sewer outfalls.

The definition of "water-dependent use" should not include sewer outfalls. Dumping sewage into our water resources is not even a temporary solution to a waste disposal problem. Tertiary treatment plants must be required for all shoreline communities if our waters are to remain a stable basis for our culture and economy.

☒ Ecology respectfully declines these suggested additions to the list of examples in the last sentence of this definition. This list is non-exclusive list, and is simply meant to indicate the kinds of development that are generally considered "water-dependent." It is important to note that this is a definition, not a policy. Whether or not a specific use is allowed is determined by the policies of the guidelines and the local SMP.

020(55) Water-enjoyment use

This definition simply allows for continuing development of shorelines under the guise of providing public access. Many of these uses, such as "restaurants with water views" are of limited benefit to a small number of people, while the cumulative impact of their development will continue the degradation of a vital community resource: water.

☒ The comment does not address the definition but rather the policy regarding management of uses. The inclusion of uses now covered by the term Water-Enjoyment Uses reflects the provisions of 90.58.020 which gives priority to "development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state."

020(57) Water Quality

The definition of water quality should also include the WAC for the State Water Quality standards, since these standards were created to comply with the federal Clean Water Act.

☒ The definition is adequate for purposes of the guidelines. Ecology does

not believe anything would be gained by referencing water quality standards.

020(58) Water-related use

Please delete definition. The Shoreline Management Act consistently refers to giving preference to uses “which. . .are UNIQUE TO OR DEPENDENT UPON use of the state’s shoreline.” And furthermore warns that alterations to the natural conditions of the shorelines of the states, IN THOSE LIMITED INSTANCES WHERE AUTHORIZED, shall be given priority for “industrial and commercial developments WHICH ARE PARTICULARLY DEPENDENT on their location on or the use of the shorelines of the state.” RCW 90.58.020. Nowhere in the Shoreline Management Act is there any indication that development which find it to be “convenient” to locate in the shoreline, but can and should be located in uplands, should be given any priority. On the contrary, this type of economic “convenience” is specifically discouraged by the Shoreline Management Act. Ecology has crafted a category of abusive and damaging shoreline uses that has no legal basis in the SMA. Therefore, this definition must be deleted.

The first sentence in the paragraph following part (b) of this definition is unclear. It reads, “Water-related uses include manufacturers of ship parts large enough that transportation becomes a significant factor” We suspect that the language is supposed to mean something like, “manufacturers with large enough shipping costs that . . .” However, even correctly written, the sentence is not very informative, and we suggest that it be deleted.

☒ Ecology agrees that the SMA does not give priority to development that finds it simply convenient to locate in the shoreline, but does not believe the definition of “water-related” uses is an invitation for inappropriate shoreline development. The definition is based on SHB decisions of long standing.

The last paragraph in the definition is simply a list of examples of water-related uses.

105 Review by Ecology...

A jurisdiction should be allowed to “mix” as an option - adopt Path A for some of its area (such as the urban and residential, for example) and Path B for other areas (such as natural or forested shorelines).

☒ There is nothing in the provisions of 105 that would preclude an approach whereby a jurisdiction is split geographically and a portion of the

jurisdiction is addressed by a Part III compliant SMP and a portion by a Part IV compliant SMP.

105

Regarding the “Election by Local governments of intent to develop pursuant to Part IV”, we support local governments adhering to the requirements of Part IV and request that WAC 173-26-105 be deleted.

We are completely opposed to encouraging local governments to evade their responsibilities under the Endangered Species Act by way of the “default” approach. Therefore, please delete Part III from the final rulemaking.

There is no discussion in this section about compliance with other federal law including, but not limited to, the Endangered Species Act. While Part III may apply a different approach than Part IV, there is still an obligation for local governments to comply with federal law. At a minimum, WAC 173-26-170 (d) should be changed by replacing the word “should” with the word “shall” in the last sentence.

☒ The SMA is not the ESA and was not enacted for the purpose of implementing the ESA. Because of this, when asked by local government to identify what it would take to use the local SMP for ESA compliance, Ecology did so in a format that allows local government to choose whether or not to take that approach. Nothing in the SMA or the guidelines allows, purports to allow, or suggests that local government can evade its responsibilities under the ESA. Path B provides one method which local government can use to properly address the issue and thereby avoid the uncertainty, cost and time of individual negotiation with NMFS and/or USFWS.

Conversely, there are jurisdictions that do not have ESA listed species of fish in some or all of the water bodies covered by the SMA in their jurisdiction. There are also jurisdictions with listed species that will choose to apply tools other than, or in addition to, the SMP or which will choose techniques other than those prescribed by Path B to apply to protection of these species. For these jurisdictions, Path A provides the minimum standards for SMA compliance as required by the SMA.