

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 424**

[Docket No. FWS-HQ-ES-2018-0006;  
Docket No. 180202112-8112-01;  
4500030113]

RIN 1018-BC88; 0648-BH42

**Endangered and Threatened Wildlife and Plants; Regulations for Listing Species and Designating Critical Habitat**

**AGENCY:** U.S. Fish and Wildlife Service, Interior; National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Commerce.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (collectively referred to as the “Services” or “we”), revise portions of our regulations that implement section 4 of the Endangered Species Act of 1973, as amended (Act). The revisions to the regulations clarify, interpret, and implement portions of the Act concerning the procedures and criteria used for listing or removing species from the Lists of Endangered and Threatened Wildlife and Plants and designating critical habitat.

**DATES:**

*Effective date:* This final regulation is effective on September 26, 2019.

*Applicability date:* These revised regulations apply to classification and critical habitat rules for which a proposed rule was published after September 26, 2019.

**ADDRESSES:** Public comments and materials received, as well as supporting documentation used in the preparation of this final regulation, are available on the internet at <http://www.regulations.gov> in Docket No. FWS-HQ-ES-2018-0006.

**FOR FURTHER INFORMATION CONTACT:** Gary Frazer, U.S. Fish and Wildlife Service, Department of the Interior, Washington, DC 20240, telephone 202/208-4646; or Samuel D. Rauch, III, National Marine Fisheries Service, Department of Commerce, 1315 East-West Highway, Silver Spring, MD 20910, telephone 301/427-8000. If you use a telecommunications device for the deaf

(TDD), call the Federal Relay Service at 800/877-8339.

**SUPPLEMENTARY INFORMATION:**

**Background**

On July 25, 2018, the Services published a proposed rule in the **Federal Register** (83 FR 35193) regarding section 4 of the Act and its implementing regulations in title 50 of the Code of Federal Regulations (CFR), part 424, which sets forth the procedures for the addition, removal, or reclassification of species on the Federal Lists of Endangered and Threatened Wildlife and Plants (lists) and designating critical habitat. In the July 25, 2018, **Federal Register** document, we provided the background for our proposed revisions to these regulations in terms of the statute, legislative history, and case law.

In this final rule, we focus our discussion on changes from the proposed revisions based on comments we received during the comment period and our further consideration of the issues raised. For background on the statutory and legislative history and case law relevant to these regulations, we refer the reader to the proposed rule (83 FR 35193, July 25, 2018).

In finalizing the specific changes to the regulations in this document, and setting out the accompanying clarifying discussion in this preamble, the Services are establishing prospective standards only. Although these regulations are effective 30 days from the date of publication as indicated in **DATES** above, they will apply only to relevant rulemakings for which the proposed rule is published after that date. Thus, the prior version of the regulations at 50 CFR part 424 will continue to apply to any rulemakings for which a proposed rule was published before the effective date of this rule. Nothing in these final revised regulations is intended to require that any previously completed classification decision or critical habitat designation must be reevaluated on the basis of these final regulations.

This final rule is one of three related final rules that are publishing in this issue of the **Federal Register**. All of these documents finalize revisions to various regulations that implement the Act.

**Discussion of Changes From the Proposed Rule**

In this section we discuss changes between the proposed regulatory text and regulatory text that we are finalizing in this document regarding the foreseeable future, factors for delisting, and designation of unoccupied critical

habitat. We also explain a revision to the regulatory definition of “physical or biological features.” We are not modifying the proposed regulatory text for the section on prudent determinations of critical habitat or the proposed revision to 50 CFR 424.11(b). We are finalizing those sections as proposed.

*Foreseeable Future*

We proposed that the framework for the foreseeable future in 50 CFR 424.11(d) provide that the term foreseeable future extends only so far into the future as the Services can reasonably determine that the conditions potentially posing a danger of extinction in the foreseeable future are probable. The Services will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species’ life-history characteristics, threat-projection timeframes, and environmental variability. The Services need not identify the foreseeable future in terms of a specific period of time, but may instead explain the extent to which they can reasonably determine that both the future threats and the species’ responses to those threats are probable.

The Services received numerous comments stating that many of the terms and phrases in the proposed framework are vague and unclear, and that the proposed framework impermissibly raises the bar for listing species as threatened species. Some commenters suggested in particular that “likely” should be used instead of “probable,” to avoid confusion and to ensure that the provision is consistent with the statutory definition of “threatened species.” In response to these comments and upon further consideration, we have revised the framework to provide that the term foreseeable future extends only so far into the future as the Services can reasonably determine that both the future threats and the species’ responses to those threats are likely. The Services will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species’ life-history characteristics, threat-projection timeframes, and environmental variability. The Services need not identify the foreseeable future in terms of a specific period of time.

We have removed the phrase “conditions potentially posing a danger of extinction in the foreseeable future,” and are replacing it with “both the future threats and the species’ responses to those threats.” In light of the public comments received, we determined that

this particular phrase, as originally proposed, could be read incorrectly to imply that “conditions” could include something other than “threats,” and that “conditions” affecting the species need only be “potential conditions” and not actual or operative threats. In addition, we concluded that the phrase “posing a danger of extinction” could conflate the concept of the foreseeable future with the status of the species, instead of indicating that the foreseeable future is the period of time in which the Services can make reliable predictions about the threats and the species’ responses to those threats.

We have also replaced the word “probable” with the word “likely.” While we had intended “probable” to have its common meaning, which is synonymous with the term “likely,” we have determined that it is most consistent with the statutory definition of “threatened species” to instead use the term “likely.” We have deleted the term “probable” and replaced it with the term “likely” to avoid any confusion on this point and to address public comments. We clarify that by “likely” the Services mean “more likely than not.” This is consistent with the Services’ long-standing interpretation and previous judicial opinions.

#### *Factors Considered in Delisting Species*

We are making one minor change to the proposed regulatory text for 50 CFR 424.11(e). We have replaced “will” with “shall” in the first sentence of this provision to make it consistent with the language in other sections of 50 CFR 424.11. While we have not made any other changes, we note that when we use the term “status review” in the context of evaluating extinction or not meeting the definition of a “species,” this review may not necessarily involve an evaluation of the species’ status relative to the five listing factors in section 4(a)(1) of the Act. As is our common practice, if the Services determine the entity does not meet the statutory definition of a “species,” the status review would conclude at that point. Likewise, if the Services determine an entity is extinct, there would be no need for the Services to evaluate the factors affecting the species as part of a status review.

We received many comments expressing concern over removing the terms “recovery” and “error” from the regulatory text because of a perception that the basis of the Services’ actions would not be clear. As is the Services’ current practice, we will continue to explain in proposed and final delisting rules why the species is being removed from the lists—whether due to recovery,

extinction, error, or other reasons. These revisions do not alter, in any way, the Services’ continued goal of recovery for all listed species.

#### *Not Prudent Determinations*

We proposed that 50 CFR 424.12(a)(1)(v) provide that after analyzing the best scientific data available, the Secretary otherwise determines that designation of critical habitat would not be prudent.

We note that this formulation could be misconstrued to suggest that the Secretary may make a determination irrespective of the data, provided the Secretary first analyzes the data. This interpretation, although grammatically possible, was not our intent and is not permissible under the Act. However, given that numerous comments expressed concern about expanding circumstances when the Services may find critical habitat designation to be not prudent, we decided to reorder 50 CFR 424.12(a)(1)(v) to provide that the Secretary otherwise determines that designation of critical habitat would not be prudent based on the best scientific data available.

#### *Designating Unoccupied Areas*

We proposed that 50 CFR 424.12(b)(2) provide that the Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied would be inadequate to ensure the conservation of the species or would result in less efficient conservation for the species. Efficient conservation for the species refers to situations where the conservation is effective, societal conflicts are minimized, and resources expended are commensurate with the benefit to the species. In addition, for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable likelihood that the area will contribute to the conservation of the species.

The Services received numerous comments that the term “efficient conservation” is vague and would introduce a requirement not contained in the statute. We also received numerous comments that the reasonable likelihood standard was not defined and is unclear. In response to these comments and upon further consideration, we revised 50 CFR 424.12(b)(2) to provide that the Secretary will designate as critical habitat, at a scale determined by the Secretary to be appropriate, specific areas outside the geographical area occupied by the species only upon a determination that such areas are

essential for the conservation of the species. When designating critical habitat, the Secretary will first evaluate areas occupied by the species. The Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied would be inadequate to ensure the conservation of the species. In addition, for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

We have removed the proposed language regarding “efficient conservation.” Therefore, we will only designate unoccupied critical habitat if we determine that occupied critical habitat is inadequate for the conservation of the species. Public comments indicated that the “efficient conservation” concept was confusing and that implementation of this provision would be inordinately complex and difficult.

We have also revised the proposed language by replacing “reasonable likelihood” with “reasonable certainty.” Although “reasonable likelihood” and “reasonable certainty” both convey the need for information beyond speculation but short of absolute certainty, we find that the latter requires a higher level of certainty than the former. We intend the phrase “reasonable certainty” as applied to designation of unoccupied critical habitat in this final regulation to preclude designations of unoccupied critical habitat based upon mere potential or speculation—either as to the contribution of the area of unoccupied critical habitat to the species’ conservation or as to the existence of one or more of the physical or biological features essential to the conservation of the species. At the same time, we do not intend to require that designations of unoccupied critical habitat be based upon guarantees or absolute certainty about the future conservation contributions of, or features present within, unoccupied critical habitat. In light of the public comments that the “reasonable likelihood” language was undefined and unclear, and could allow too much discretion to designate areas that would not ultimately contribute to species conservation, we concluded that the language of this final rule better reflects the need for high confidence that an area designated as unoccupied critical habitat will actually contribute to the

conservation of the species. We consider the phrase “reasonable certainty” to confer a higher level of certainty than “reasonable likelihood,” meaning a high degree of certainty, but not to require absolute certainty.

The Supreme Court recently held that an area must be habitat before that area could meet the narrower category of “critical habitat,” regardless of whether that area is occupied or unoccupied. See *Weyerhaeuser Co. v. U.S. FWS*, 139 S Ct. 361 (2018). We have addressed the Supreme Court’s holding in this rule by adding a requirement that, at a minimum, an unoccupied area must have one or more of the physical or biological features essential to the conservation of the species in order to be considered as potential critical habitat. We note that we do not in the rule attempt to definitively resolve the full meaning of the term “habitat.”

First, the language and structure of the statute support this interpretation. By its very terms the Act requires that areas designated as critical habitat be habitat for the species: “The Secretary . . . shall . . . designate any *habitat* of [a listed] species which is then considered to be critical habitat” (section 4(a)(3)(A)(i) of the Act (emphasis added)). Moreover, paragraph (C) of the statutory definition of “critical habitat” at section 3(5) makes clear that “critical habitat shall not include the entire geographical area which can be occupied by the [listed] species.” The phrase “can be occupied” in the definition demonstrates that all critical habitat—both occupied and unoccupied alike (the use of “can be” instead of “is” demonstrates that the provision is not limited to occupied habitat)—must be habitat because the only way that an area “can be occupied” is if it is habitat. Further, the use of the present tense—“are essential”—in section 3(5)(A)(ii) indicates that for an unoccupied area to qualify as “critical habitat,” it must currently be essential for the conservation of the species. The Services interpret this requirement to mean that there is a reasonable certainty both that the area currently contains one or more of the physical or biological features essential to the conservation of the species and that the area will contribute to the species’ conservation. A reasonable reading of the statutory definition of “unoccupied” critical habitat would find that areas that do not contain at least one of the features essential to life processes of the species or will not contribute to the conservation of the species cannot be essential for conservation.

Second, the legislative history supports the conclusion that

unoccupied habitat must contain one or more of those physical or biological features essential to the conservation of the species. While the 1973 Act did not define “critical habitat,” the Services’ 1978 regulations did define “critical habitat” as “any air, land, or water area . . . and constituent elements thereof, the loss of which would appreciably decrease the likelihood of survival and recovery of a listed species . . . . The constituent elements of critical habitat include, but are not limited to: physical structures and topography, biota, climate, human activity, and the quality and chemical content of land, water, and air. Critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion.” 43 FR 870, 874–875 (Jan. 4, 1978).

In response to the Tellico Dam decision by the Supreme Court, *Tennessee Valley Authority v. Hill*, 437 U.S. 153 (1978), Congress amended the Act in a number of ways, including by providing a statutory definition of “critical habitat.” Notably, Congress did not adopt the Services’ regulatory definition. Congress was concerned that the agencies’ “regulatory definition could conceivably lead to the designation of virtually all of the habitat of a listed species as its critical habitat.” H.R. Rep. No. 95–1625, at 25 (1978). The House “narrow[ed]” the definition and told the agencies to be “exceedingly circumspect in the designation of critical habitat outside of the presently occupied areas of the species.” *Id.* at 18, 25. Additionally, the Senate Report noted there is “little or no reason to give exactly the same status to lands needed for population expansion as is given to those lands which are critical to a species’ continued survival.” S. Rep. No. 95–874, at 10 (1978).

The Senate Report recognized the potential value of designating unoccupied habitat to expand populations, but questioned how broadly it could be used. *Id.* at 9–10 (“The goal of expanding existing populations of endangered species in order that they might be delisted is understandable”; “This process does, however, substantially increase the amount of area involved in critical habitat designation and therefore increases proportionately the area that is subject to the regulations and prohibitions which apply to critical habitats”). The Senate specifically criticized designations of critical habitat that include land “that is not habitat necessary for the continued survival” of the species, but is instead “designated so that the present population within

the true critical habitat can expand.” *Id.* at 10.

Thus, we conclude that Congress intended that the test be more demanding for designating unoccupied critical habitat than for occupied habitat. All the courts to address this issue have agreed with this general principle. *E.g., Home Builders Ass’n v. U.S. Fish & Wildlife Service*, 616 F.3d 983, 990 (9th Cir. 2010) (“Essential conservation is the standard for unoccupied habitat . . . and is a more demanding standard than that of occupied critical habitat.”); *Cape Hatteras Access Pres. All. v. U.S. Dep’t of Interior*, 344 F. Supp. 2d 108, 119 (D.D.C. 2004) (“it is not enough that the area’s features be essential to conservation, the area itself must be essential”). As the Act and its legislative history makes clear, Congress intended that unoccupied critical habitat be defined more narrowly than as areas contemplated for species expansion. H.R. Rep. No. 95–1625 pp. 18, 25 (1978); S. Rep. No. 95–874, at 9–10 (1978). We have concluded that requiring that areas contain one or more features that the species needs furthers this congressional intent.

Note that, although the Conference Committee changed the definition of “critical habitat” so that it was no longer modeled after the 1978 regulatory definition as closely, Congress did not call into question the rest of that definition, which focused uniformly on aspects of habitat that were analogous to the concept of “essential features”: “Critical habitat” means any air, land, or water area . . . and constituent elements thereof . . . . The constituent elements of critical habitat include, but are not limited to: Physical structures and topography, biota, climate, human activity, and the quality and chemical content of land, water, and air.” 43 FR 870, 874–875 (Jan. 4, 1978). Moreover, areas outside the occupied geographical range are not likely to be “essential for the conservation of the species” unless they contain at least one of the features that are essential for survival and recovery of the species.

We acknowledge that the reference to “physical or biological features” in the definition of “critical habitat” only occurs in the portion addressing occupied habitat. Nevertheless, given that Congress intended that a higher standard apply to the designation of unoccupied critical habitat than to the designation of occupied critical habitat, the Services conclude that it furthers congressional intent to require that those areas contain one or more of the physical or biological features that are essential to the conservation of the

species. This interpretation retains the 1978 regulation's focus on physical or biological features and furthers the objective Congress referenced when it adopted the definition of "critical habitat" that included both occupied and unoccupied habitat: Allowing for the possibility of protecting areas that are reasonably certain to contribute to the conservation of the species while limiting the designation to areas where the species can survive.

We note that the Services have not previously taken the position that unoccupied habitat must contain physical or biological features that are essential to the conservation of the species. In fact, in litigation FWS has sometimes argued the contrary. *E.g.*, *Weyerhaeuser Co. v. U.S. FWS*, No. 17–71 (S. Ct.); *Bear Valley Mutual Water Co. v. Jewell*, 790 F.3d 977 (9th Cir. 2015). Although our previous interpretation was reasonable, we have revisited our interpretation in light of the recent *Weyerhaeuser* decision, which held that critical habitat must be "habitat." Given the ambiguity of the language at issue, we may interpret it in any manner that is a reasonable construction of the Act and consistent with controlling court decisions.

#### *Physical or Biological Features*

We received a number of comments in response to our invitation for recommendations on whether the Services should consider modifying the definition of "physical or biological features" at 50 CFR 424.02. We adopted this regulatory definition in 2016 to provide an interpretation of this term, which appears in the Act's definition of "critical habitat," that was simpler and closer to the statutory text than the prior approach we had followed since 1984. The prior approach had involved identification of "primary constituent elements," which is a term not used in the statute and which we found led to significant confusion.

We defined the term "physical or biological features" at a general level in 2016, with the expectation that the Services would first identify the physical or biological features that support the species' life-history needs, and then narrow that group of features down to a subset of those features that meet all the requirements the statute imposes for features that could lead to a designation of occupied critical habitat. Thus, once physical or biological features had been identified, the Services would apply the language from section 3(5)(A) of the Act. That language layers on additional qualifiers, including that the features "are essential to the conservation of the species" and

"may require special management considerations or protection." Further, the statute limits designation of occupied habitat to "specific areas" on which one or more of those features are found.

Many commenters expressed concern that the definition should be more clearly limited only to those features that could, in the context of the statutory requirements, actually lead to designation of a specific area as critical habitat.

We have decided in the interests of clarity to make minor modifications to the existing definition to provide that physical or biological features essential to the conservation of the species are the features that occur in specific areas and that are essential to support the life-history needs of the species, including but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

We find that the changes we are making, which we detail below, are helpful to emphasize the key statutory language and make clear that only those features that are essential to the conservation of the species can lead to a designation of occupied critical habitat (assuming the requirement that the features may require special management considerations or protection is also met). First, in order to bring such clarity directly into the regulatory text, we have found that we should identify the term more specifically. The full term used in the statutory definition of occupied critical habitat is "physical or biological features . . . essential to the conservation of the species," and therefore we are modifying the defined term to read "physical or biological features essential to the conservation of the species."

Second, we incorporate the statutory requirement that essential features be found on specific areas by qualifying "features" with the new phrase "that occur in specific areas." We note that the use of the word 'on' in the statute has been interpreted by the Services to mean 'in' when used in conjunction with specific areas. Therefore, "features found on specific areas" is synonymous with "features found in specific areas."

Finally, instead of referring to the broader group of features that "support the life-history needs" of the species, and in keeping with further focusing the scope of the defined term, we have added language specifying that these are the features which are "essential to support the life-history needs" of the species. We retain the rest of the language of the current definition, which makes clear that, in identifying the essential physical or biological features, the Services are to articulate those features with the level of specificity previously associated with "primary constituent elements" (an issue we discuss further in response to comments, below).

#### **Summary of Comments and Responses**

In our proposed rule published on July 25, 2018 (83 FR 35193), we requested public comments on our specific proposed changes to 50 CFR part 424. We also sought public comments recommending, opposing, or providing feedback on specific changes to any provisions in part 424 of the regulations, including but not limited to revising or adopting as regulations existing practices or policies, or interpreting terms or phrases from the Act. In particular, we sought public comment on whether we should consider modifying the definitions of "geographical area occupied by the species" or "physical or biological features" in 50 CFR 424.02. We received several requests for public hearings and requests for extensions to the public comment period. Public hearings are not required for regulation revisions of this type, and we elected not to hold public hearings or extend the public comment period beyond the original 60-day public comment period. We received more than 65,000 submissions representing hundreds of thousands of individual commenters. Many comments were nonsubstantive in nature, expressing either general support for or opposition to provisions of the proposed rule with no supporting information or analysis. We also received many detailed substantive comments with specific rationale for support of or opposition to specific portions of the proposed rule. Below, we summarize and respond to the significant, substantive public comments sent by the September 24, 2018, deadline and provide responses to those comments.

#### *Comments on Presentation of Economic or Other Impacts*

*Comment:* Most commenters disagreed with removing the phrase "without reference to possible economic

or other impacts of such determination” and our proposal to present the economic impacts of listing determinations. Many stated that this change violates the intent of the Act and cited the Act and its legislative history in support of their statements. Furthermore, a commenter also stated that the Services are prohibited by the Act from compiling and presenting economic data on the listing of a species as a threatened or an endangered species, citing the conference report language from the 1982 amendments to the Act: “economic considerations have no relevance to determinations regarding the status of species and the economic analysis requirements of Executive Order 12291, and such statutes as the Regulatory Flexibility Act and the Paperwork Reduction Act, will not apply to any phase of the listing process.” Many commenters also questioned how the Services could compile such economic information and not have it influence their decision whether to list a species as a threatened or an endangered species, noting that the statute and legislative history are clear that listing decisions are to be based solely on the best scientific and commercial data available. In contrast, several commenters stated that providing the economic impacts of listing species shows transparency to the public and local, State, and tribal governments, and could be useful for planning purposes. Commenters noted that making this information available does not mean that it will be used in the decisionmaking process, but it would provide important information about the impacts of implementing the Act.

*Response:* In this final rule, the Services remove the phrase “without reference to possible economic or other impacts of such determination.” As discussed in the preamble to the proposed rule, we acknowledge that the statute and its legislative history are clear that listing determinations must be made solely on the basis of the best scientific and commercial data available. Moreover, the listing determination must be based on whether a species is an endangered species or a threatened species because of any of the five statutory factors. However, the Act does not prohibit the Services from compiling economic information or presenting that information to the public, as long as such information does not influence the listing determination. Similarly, the statements Congress included in the legislative history focus on ensuring that economic information would not affect or delay listing determinations, but do

not demonstrate an intention to prohibit the Services from compiling information about economic impacts. For example, the legislative history for the 1982 amendments to the Act describes the purposes of the amendments using the following language (emphases added): “to prevent non-biological considerations *from affecting* [listing] decisions,” Conf. Rep. (H.R.) No. 97–835 (1982) (“Conf. Rep.”), at 19; “[listing and delisting] decisions *are based* solely upon biological criteria,” Conf. Rep., at 20; “economic considerations *have no relevance to* [listing] determinations,” Conf. Rep., at 20; “to prevent [critical habitat] designation *from influencing* the [listing] decision,” H.R. Rep. No. 97–567, at 12. Because neither the statute nor the legislative history indicates that Congress intended to prohibit the Services from compiling economic information altogether, we removed the language at issue.

*Comment:* Some commenters stated that Congress intended that “the balancing between science and economics should occur subsequent to listing” and pointed to statements in the legislative history and in the court’s decision in *Alabama-Tombigbee Rivers Coal. v. Kempthorne*, 477 F.3d 1250, 1266 (11th Cir. 2007): “While ‘economic analysis’ is meant to ‘offer[ ] some counter-point to the listing of species without due consideration for the effects on land use and other development interests,’ Congress wanted ‘to prevent [habitat] designation from influencing the decision on the listing of a species,’ and for that reason intended that the ‘balancing between science and economics should occur subsequent to listing through the exemption process.’ House Report at 12 (emphasis added); cf. Senate Report at 4.”

*Response:* The commenters’ characterizations of the legislative history and the court’s decision in the *Alabama-Tombigbee* case are not accurate. In that case, FWS listed two fish without concurrently designating critical habitat, and the court concluded that Congress did not intend to prohibit designating critical habitat subsequent to the final listing decision. The court based its reasoning on the statute and legislative history: The requirement to complete final listing determinations within 1 year of listing proposals, the removal of the requirement to propose critical habitat concurrently with proposed listings, the addition of authority to make not-determinable findings for critical habitat, and the quoted language in the legislative history demonstrating Congress’s intent to keep consideration of economic factors (part of the critical habitat

designation process) separate from listing decisions. Thus, the court in that case was analyzing not whether compilation of economic information *must* come after the final listing decision, but whether compilation of economic information during the critical habitat designation *may* come after listing decisions. As a result, the decision in *Alabama-Tombigbee* and the legislative history that the court quoted in that case are an unsuitable comparison to the regulatory change the Services proposed. And, more fundamentally, the mandate that the Secretary “shall, concurrently with making a [listing] determination . . . , designate any habitat of such species which is then considered to be critical habitat” is qualified by the “to the maximum extent prudent and determinable” language. Therefore, Congress authorized, but did not require, the Services to designate critical habitat after the final listing decision, and the Services continue to publish final critical habitat designations (whenever designation is prudent) concurrently with final listing decisions unless they are not determinable at the time of listing.

*Comment:* Some commenters stated that the Services’ comparison to the Environmental Protection Agency’s (EPA’s) practice of conducting cost-benefit analyses under the Clean Air Act’s National Ambient Air Quality Standards is irrelevant and pointed to differences between the Act and the Clean Air Act. Specifically, the Clean Air Act directs the EPA to compile economic information and has a follow-on process (development of State implementation plans) that the economic information informs. Other commenters stated that EPA’s process for completing a regulatory impact analysis (RIA) of the ambient air quality standards under the Clean Air Act is not comparable to the Services’ process for listing a species under the Act. These commenters stated that the costs associated with ambient air quality measures are more easily estimated, and that costs associated with listing a species do not necessarily have an economic value and assessing their “worth” or “value” would be very difficult. Some commenters also noted that EPA typically does not “make reference” to the impact analysis in their rules proposing or adopting air standards.

*Response:* While the Services recognize that there are differences between the statutory frameworks of the Clean Air Act and the Act, the EPA example illustrates that it is possible for an agency to compile and present

economic data for one purpose while not considering it in the course of carrying out a decision process where consideration of economic data is prohibited. Nothing in the Act precludes the agencies from compiling or disclosing information relating to the economic impacts for purposes of informing the public. With regard to whether EPA “makes reference” to its impact analyses in its rulemakings adopting national ambient air quality standards, we note that the commenter’s observation highlights an ambiguity in the existing regulatory language that we are removing. The commenter seems to equate “reference” to economic impacts to mean “making reference to,” *i.e.*, “citing,” the information in agency determinations or giving such considerations significance in the decisionmaking. However, the term “reference” can be construed more broadly as an instance of simply referring to something as a source of information, *i.e.*, to use or consult, which could be done in passing. It is not our intention to “make reference” to economic information in our listing determinations either by citing it or by considering it.

*Comment:* Some commenters noted that the Act does not expressly authorize compiling or referring to economic information regarding listing determinations. Some noted that it would not be appropriate to attempt to do so to inform critical habitat designations (citing *Arizona Cattle Growers’ Ass’n v. Salazar*, 606 F.3d 1160, 1173 (9th Cir. 2010) (holding that analysis of the impacts of designation of critical habitat is separate from analyzing impacts from listing)).

*Response:* The Act does not expressly authorize compiling economic information, and the statute does not prohibit compiling the information in order to inform the public. We rely on our inherent authority to administer our programs in the interest of public transparency in concluding that the Services have discretion to compile such information regarding a particular listing if they choose.

*Comment:* Several commenters asserted that the Services’ reasoning for deleting the “without reference to economic or other impacts of listing” phrase contradicts their interpretation and reasoning from when they adopted the previous regulations following the 1982 amendments to the Act, which added the word “solely.” They cited to the Services’ proposed rule, which stated: “Changes made by the Amendments were designed to ensure that decisions in every phase of the listing process are based solely on

biological consideration, and to prohibit considerations of economic or other non-biological factors from affecting such decisions. . . . This new paragraph is proposed to implement the requirement of the Amendments that determinations regarding the biological status of a given species not be affected or delayed by any consideration of the possible economic or other effects of such a determination.” 48 FR 36062 (Aug. 8, 1983).

*Response:* The preamble to the 1984 final rule originally adopting the existing language is illuminating. After the language was proposed in 1983, a commenter had recommended that the “without reference to possible economic or other impacts of such determination” not be included in the final language, but the Services responded that “no substantial change” would result from adopting such a recommendation. 49 FR 38900, 38903 (Oct. 1, 1984). At the time, the Services felt that including the language would more clearly express Congressional intent and reflect the guidance in the Conference Report to the 1982 amendments, but also made clear their understanding that the legal effect of the 1982 amendment adding the word “solely” was to insure economic or other impacts were not “considered” by the decision-maker “as part of the identification and listing process,” *id.*, and to prevent such considerations from “affecting decisions regarding endangered or threatened status” or being “taken into account in deciding whether to list a given species.” *Id.* at 38900.

The statutory amendment requiring that listing determinations be based solely on the best scientific and commercial data did not address whether the Services could prepare information for the public on other aspects of the implications of their decisions. On its face, the statutory amendments merely required that the Services not take such matters into consideration in determining whether a species meets the definition of a threatened species or an endangered species. Some members of the public and Congress have become increasingly interested in better understanding the impacts of regulations including listing decisions. Therefore, we find it is in the public interest and consistent with the statutory framework to delete the unnecessary language from our regulation while still affirming that we will not consider information on economic or other impacts in the course of listing determinations.

*Comment:* Several commenters opined that removing the existing regulatory language “without reference

to possible economic or other impacts of such determination” would signal that the Services’ commitment to abide by the will of Congress to base listing decisions solely on the best scientific and commercial data has weakened. Some commenters suggested that the Services’ motives were suspect given that the regulation has been in place since 1984 with no indication that implementation was problematic. Some claimed that removing the regulatory language was inconsistent with the Supreme Court’s holdings in *T.V.A. v. Hill*, 437 U.S. 153 (1978).

*Response:* Removing the phrase does not signal any difference in the basis upon which listing determinations will be made. As we have affirmed in several instances through the proposed and final rules, the Services understand and appreciate the statutory mandate to base listing determinations solely on whether a species is an endangered species or a threatened species because of any of the factors identified in section 4(a)(1) using the best scientific and commercial data available. Removing this phrase from the regulation, which could be construed to not allow the Services to inform the public of the economic implications of the Services’ listing decisions, will not violate any direction of Congress or holdings of the Supreme Court. Rather, we are responding to strong and growing interest by some members of Congress and the public for increased transparency regarding the economic impacts of regulations. We note that the *T.V.A.* decision was decided in the particular context of compliance with section 7 after a species had been listed and has no direct bearing on interpretation of the Act’s listing provisions. *T.V.A.* was also decided before Congress amended section 4(a)(1) to include the term “solely,” so its holding has no relevance to the interpretation of this term in the statute.

*Comment:* One commenter suggested that it was unnecessary to delete the “without reference to economic or other impacts” language if the Services’ intent is merely to be able to inform the public of the impacts of listing. The commenter agreed that Congress did not prohibit doing so, as long as the listing determinations are not influenced by such information, but noted that the Services had not pointed to any situation where the existing language had presented a hurdle to providing desired public information. Rather, the commenter asserted, maintaining the existing language in the regulations would provide a daily reminder to Service staff about the importance of cabining consideration in listing

determinations to only the factors authorized under the Act.

*Response:* We believe that the removal of the phrase will more closely align the regulatory language to the statutory language. Because the prior language could be read to preclude conducting an analysis merely for the purposes of informing the public, it is more transparent to delete the phrase.

*Comment:* Many commenters asked for more information regarding when the Services would conduct an economic analysis for listing determinations, how the Services would estimate potential economic impacts, what criteria would be considered, and whether economic benefits of a particular species, which can be difficult to quantify, would be considered. Some commenters expressed concern that cost/benefit analyses would be skewed toward only accounting for potential costs. Another commenter suggested our impacts analysis include an analysis of the negative impacts to other species, as management for a listed species could be a contributing factor for the endangerment of a non-listed species.

*Response:* The Services are not creating a framework or guidelines for how or when the presentation of economic impacts of listing, reclassifying, or delisting species would occur as part of this rulemaking. We remain committed to basing species' classification decisions on the best available scientific and commercial data and will not consider economic or other impacts when making these decisions.

*Comment:* Many commenters questioned how the Services would comply with the statutory timeframes if we conducted economic analyses on the listing determination. Commenters stated that the Services have not explained how they will deal with this additional workload. They also expressed concerns about the amount of time and effort it would take to gather the necessary economic or other impact information and stated that this added work would slow the number of listings that could be done under current budget conditions. Such a delay, the commenters stated, could make the Services more vulnerable to deadline litigation.

*Response:* The Services intend to comply with statutory, court-ordered, and settlement agreement timelines for classification determinations. The Services are equally committed to public transparency in the implementation of the Act. Additionally, we recognize the uncertainty of budget cycles and appropriated funding. Therefore, we

will continue to prioritize our work according to the requirements of the Act and remain flexible to work on other actions as funding allows.

*Comment:* At least one commenter suggested that the Services should affirmatively declare that information regarding the economic or related impacts of a potential listing can be considered in making listing determinations, in light of the statutory reference to the best scientific "and commercial data" available.

*Response:* We decline to do so.

*Comment:* Some commenters stated that even though the Act does not expressly prohibit presenting information regarding economic impacts, doing so will contravene Congress' intention that listing decisions should be purely a biological question immune from political concerns. They asserted that presenting analysis of economic impacts even merely to inform the public would open the Services to pressure to avoid listings where there are significant social, political, or economic implications. They noted that the provisions regarding designation of critical habitat expressly authorize consideration of economic and other impacts, demonstrating that Congress consciously chose not to authorize such for listing decisions. They cited the decision in *Northern Spotted Owl v. Hodel*, 716 F. Supp. 479 (W.D. Wash. 1988), as an example where the court set aside a decision not to list a species on the grounds that it was "arbitrary and capricious or contrary to law," predicting that such litigation and adverse results would be more common if the proposed change is finalized.

*Response:* Congress did not authorize the Services to consider the economic impacts of listing decisions. Therefore, the Services have expressly confirmed their intention that all listing determinations must be based solely on the best scientific and commercial data available. While the commenter is correct that the *Hodel* decision was unfavorable for FWS, resulting in remand of the determination not to list the northern spotted owl, the basis for the decision was the court's view of the sufficiency of the scientific support and explanation for the FWS' decision, rather than a direct consideration of whether economic considerations had impermissibly played a role in the determination.

*Comment:* The Services cannot rely on the Regulatory Flexibility Act (RFA) as providing authority for presentation of economic impact information of listing determinations because the Services have taken the position that the

RFA is not applicable to listing determinations. *See, e.g.,* Endangered and Threatened Wildlife and Plants: Final Rule to List the Taiwanese Humpback Dolphin as Endangered Under the Endangered Species Act, 83 FR 21182, 21186 (May 9, 2018).

*Response:* We do not rely on the RFA as a basis for presentation of economic impacts of classification determinations (H.R. Conf. Rep. No. 97-835, at 20 (1982)). The Services may elect to provide a presentation of economic impacts of particular listing decisions to inform the public of those costs. The Act does not preclude the compilation and presentation of those impacts to the public.

#### *Comments on the Foreseeable Future*

*Comment:* Commenters stated that if the intended goal of the proposed foreseeable future framework is to continue to follow a 2009 opinion from the Department of the Interior (M-37021) for interpretation of "foreseeable future," as the Services indicate in the proposed rule, then there is no need to make the proposed revision to the regulations. Some commenters recommended that the Services simply base the "foreseeable future" on the best available data and not proceed with the proposed regulation, which does nothing to clarify how the Services will determine the foreseeable future.

*Response:* Although listing determinations must be based on the best available scientific and commercial data, the Services also must be able to determine the likelihood of a species' future state, and in some circumstances the best available data may not be sufficient to go beyond speculation. In these cases, the data are insufficient to allow the Services to foresee the future threats and the species' response to those threats so as to be able to determine that a species is likely to become endangered in the future. To give meaning to the phrase "foreseeable future," the Services are providing a consistent explanation of this term, and we find that it is appropriate to do so in our implementing regulations. While the two Services have both applied the principles articulated in a 2009 opinion from the DOI Office of the Solicitor when interpreting the phrase "foreseeable future," including a foreseeable future framework in our joint implementing regulations gives the public more transparency, provides the Services with a shared regulatory meaning for this important term, and makes it clear that both agencies will adhere to the same framework.

*Comment:* Numerous commenters supported the Services' effort to clarify

the meaning of the term “foreseeable future”; however, most of these commenters also stated that one or more of the terms used in the proposed “foreseeable future” framework, such as “potential,” “probable,” “reasonably,” “reasonably determine,” and “reliable,” are vague, unclear, or could be misinterpreted. Commenters specifically requested that one or more of these terms be clarified or removed, because they give the public little understanding of what criteria the Services will use to evaluate the foreseeable future. Various commenters were concerned that the proposed foreseeable future language could allow for speculation, prevent or undermine the Service’s ability to rely on the best available science, result in a less streamlined process, or invite political interference with listing decisions.

Several commenters recommended that the terms “potentially” and “reasonably” be omitted, because those terms could be misread and dilute the statutory standard of “likely.” A commenter stated that “reasonably” could be misconstrued to suggest a reasonable basis is sufficient, rather than the affirmative finding of “likely” actually required by the Act. Another commenter noted that a standard that relies on a mere “potential” for future conditions to pose a danger invites speculation about future circumstances, and, as the Services acknowledge, they should “avoid speculating as to what is hypothetically possible.” 83 FR at 35196, July 25, 2018.

Other commenters recommend specific edits, such as replacing “reasonably determine” with “scientifically determine,” and removal of the term being defined (*i.e.*, “foreseeable future”) from the proposed definition of “foreseeable future.”

*Response:* We appreciate the many comments regarding the wording of the proposed “foreseeable future” framework. We agree with the comments that including the term “foreseeable future” as part of the definition of this term is somewhat circular and therefore not appropriate, so we have revised the language to remove this circular phrasing. We have also removed the phrase containing the word “potentially” as explained further in response to the comment below. However, we are not defining the terms “reliable” and “reasonably determine,” because these terms are commonly used and should be interpreted as having their everyday meaning. The regulatory framework is consistent with how these terms are used in the M-Opinion (M-37021, January 16, 2009), which states, in a footnote, that “the words “rely” and

“reliable” [are used] according to their common, non-technical meanings in ordinary usage. Thus, for the purposes of this memorandum, a prediction is reliable if it is reasonable to depend upon it in making decisions.” As a concluding statement, the M-Opinion also states that “reliable” does not mean “certain”; it means sufficient to provide a reasonable degree of confidence in the prediction, in light of the conservation purposes of the Act.” We find that these statements make it clear how the Services intend to interpret these terms and conclude that further attempts to define words within the “foreseeable future” framework are not necessary.

Lastly, we find that the framework’s term “reasonably” does not dilute or establish an incompatible, lower standard for the affirmative finding of “likely” required by the statute. The foreseeable future framework acknowledges that we must make a ‘reasonable determination,’ based on the best available data. In other words, in the context of determining the foreseeable future, our conclusions need not be made with absolute certainty, but they must be reasonable, and must not be arbitrary or capricious. We also decline to replace the phrase “reasonably determine” with “scientifically determine,” because the foreseeable framework does not in any way alter the requirement that the Services rely on the best available scientific and commercial data when interpreting the foreseeable future and listing species as threatened. We fully intend to continue to apply the best available data when making conclusions about the foreseeable future.

*Comment:* Several commenters stated that the foreseeable future should not be based on general “conditions” and requested that we clarify that the word “conditions” refers to threats and species’ responses to those threats. Commenters stated the statute does not allow for broader consideration of any “conditions” that are not encompassed within the five factors defined by Congress. Another commenter also stated that the use of the term “conditions” in the context of the proposed regulatory framework suggests that the Services will only examine the environmental conditions affecting a species (*i.e.*, the threat factors) and not the corresponding response of the species when determining the species’ future population status. The commenter noted that it is well established that a species cannot be listed merely because there is an identified threat (*e.g.*, *Ctr. for Biological Diversity v. Lubchenko*, 758 F. Supp. 2d 945, 955 (N.D. Cal. 2010); *Defenders of*

*Wildlife v. Norton*, 258 F.3d 1136, 1143 (9th Cir. 2001)). The commenter stated that by referencing conditions “potentially posing a danger of extinction,” the Services are not incorporating the appropriate level of certainty with respect to whether the “conditions” will occur and the corresponding relationship to the future status of the species. The Services are also raising the possibility that a “benefit of the doubt” standard could erroneously be applied during the listing determination (*Bennett v. Spear*, 520 U.S. 154, 176 (1997); *Greater Yellowstone Coal., Inc. v. Servheen*, 665 F.3d 1015, 1028 (9th Cir. 2011)).

*Response:* As some commenters point out, the Act requires listing determinations to be based on whether a species is an endangered species or threatened species because of one or more of the five factors in section 4(a)(1), and it is the Services’ long-established practice to refer to these factors in listing determinations. The “foreseeable future” framework in these final regulations does not supplant those five factors or the statutorily required status review. Rather, use of the word “conditions” was intended to capture the full range of possible natural and manmade threats that may be affecting a particular species and that would be considered under section 4(a)(1). However, we now find it is more clear to simply use the word “threats,” rather than “conditions,” and thus have made this revision to the final regulatory text. In addition, after further consideration of the proposed language, we find that the phrase “potentially posing a danger of extinction” could be interpreted as implying that the Services would rely on a “benefit of the doubt” standard for determining the existence of a threat or consider the mere possibility of threat occurring sufficient when assessing a species’ future status. This was not our intention, and we acknowledge that the statutory requirement to use the “best scientific and commercial data available” is intended “to ensure that the Act not be implemented haphazardly, or on the basis of speculation or surmise.” See *Bennett v. Spear*, 520 U.S. 154, 176–77 (1997) (construing substantially identical requirement in section 7 context). Thus, we have removed this phrase from the final regulatory language to eliminate this source of confusion.

*Comment:* A large number of comments addressed the Services’ use of the word “probable” within the proposed foreseeable future framework. Several commenters stated that the use of the word “probable” introduces more

ambiguity to an already ambiguous framework and that it is unclear, for example, what degree of probability and certainty are required to be considered “probable.” Several commenters specifically requested that the Services clarify that the term “probable” means “likely” in this particular context, and others requested use of the word “likely” in place of “probable” to reflect the statutory standard. Some commenters stated that the word “probable” implies that the Services will rely on too low of an evidence threshold and that the word “probable” should be replaced with “clear and convincing.”

The majority of commenters who addressed this issue stated that use of the word “probable” would set too high of a bar for threatened listings, provides the Services greater latitude to reject listings, and contravenes Congress’s intent that the Act “give the benefit of the doubt to the species” (H.R. Rep. No. 96–697, at 12 (1979)). The commenters also argued that the proposed regulation would be inconsistent with the statements expressed in the M-Opinion (M–37021, January 16, 2009). Multiple commenters indicated specifically their view that the proposed framework is much narrower than that expressed in the 2009 M-Opinion, which does not use the term “probable,” and that the Services did not adequately explain their reasoning for departing from the standards expressed in the M-Opinion. Commenters further noted that the “probable” standard would undermine the Secretary’s duty to list species that are primarily threatened by climate change. Others stated that it would prevent the application of the Act’s requirement to rely on the “best available scientific and commercial data” and that the Services cannot interpret the foreseeable future in a way that sets an arbitrary threshold for how much science is required before a species can be listed as threatened. Multiple commenters recommended that if the Services wish to adopt a definition in line with the M-Opinion, they should adhere more closely to the 2009 Solicitor’s opinion or publish it as a draft joint policy for notice and comment, which would accord with the Services’ past practice of publishing joint policies to interpret the Act’s key phrases such as “significant portion of the range” and “distinct population segment.”

Some commenters provided discussions of other reasons why use of a “probable” standard would be inappropriate. A group of commenters stated that use of the term “probable” implies that the Services may only

consider threats that have a 50 percent or greater chance of occurring during a particular time period and that the Services have not explained how they would reliably quantify the percentage of likelihood of threats to species. These commenters also noted that it would be unlawful and arbitrary to discount several threats that may be, say, 40 percent likely but that would be extremely dangerous to the species and that such an approach would be contrary to the Services’ longstanding precautionary approach. *Cf.* 48 FR 43098, 43102–43103 (Sept. 21, 1983) (FWS guidelines for reclassification from threatened species to endangered species status based on magnitude and immediacy of threats). Other commenters pointed out the only way to assess what is “probable” requires quantitative methods such as statistical prediction and modeling. Several commenters stated that this approach is flawed in that it does not take into account the severity of the threats or the different types or levels of uncertainty associated with various threats.

Lastly, we received comments suggesting that because the Services used both terms—“likely” and “probable”—in the proposed regulatory framework, the inconsistent terminology suggests that different meanings are contemplated. Other comments noted that, to the extent that the Services intend “probable” to require any greater likelihood than the statutory term “likely” from the definition of “threatened species” at 16 U.S.C. 1532(20), it would be an impermissible interpretation of the statute, and that neither “likely” nor “probable” can permissibly be interpreted to require the probability of extinction is “more likely than not.”

*Response:* For maximum clarity and consistency with the statutory language, this final rule uses “likely” in place of “probable” in the relevant sentence of the provision describing the “foreseeable future.” We are making this change to avoid any unintended confusion. We further clarify that “likely,” in turn, means “more likely than not.” This interpretation is supported by case law (*e.g.*, *Alaska Oil and Gas Association v. Pritzker*, 840 F.3d 671, 684 (9th Cir. 2016); *Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 944 (D. Or. 2007); *WWP v. FWS*, 535 F.Supp.2d 1173, 1184 & n.3 (D. Idaho 2007). Our foreseeable future framework does not depart from the standards expressed in the 2009 M-Opinion that forms the basis for the framework (M–37021, January 16, 2009); rather, it is fully consistent with that opinion.

Our replacement of the term “probable” with “likely” within the foreseeable future framework should also eliminate concerns that the Services are impermissibly raising the bar for listing species as threatened to something beyond a threshold of “likely” or allowing that classification determinations could be based on anything other than the “best scientific and commercial data” standard. We must rely on the “best scientific and commercial data,” available, but that data may or may not indicate whether something is likely. To determine an event is likely, we must be able to determine that it is more likely to occur than not after taking the “best scientific and commercial data” into account. We will continue to apply the best available scientific and commercial data in making our listing determinations as required under the Act.

We appreciate the recommendation to develop and publish a more detailed policy based on the M-Opinion. However, at this time, we expect that the regulatory framework that we revise in this final regulation after considering public comment, in combination with the supporting text of the existing M-Opinion that further explains the background and reasoning for this longstanding approach, will provide adequate guidance to the Services.

*Comment:* Some commenters stated that when concluding that a species should be listed, the Services must specifically find “that both future threats and the species’ responses to those threats are probable.” In contrast, other commenters questioned the Services’ proposal to assess the foreseeable future based on both “future threats” and the “species’ responses.” These commenters said this would involve a combined evaluation of both time and impact and instead recommended that the Services separate the concept of foreseeable future from its analysis of the potential threats that the Service can concretely determine will affect the species during that time period. Others cautioned that we should evaluate the species’ response at the population level because threats faced by one segment of the population do not necessarily result in a negative response by the population as a whole.

*Response:* This regulation takes the position that “the foreseeable future extends only so far into the future as the Services can reasonably determine that both the future threats and the species’ responses to those threats are likely.” This approach is consistent with the M-Opinion (M–37021, January 16, 2009). It is not sufficient for us to determine that a particular threat is likely; we must

also conclude that the manifestation of that threat is likely to result in a response from the species. By “species’ response” we mean a change in the species’ status after encountering the adverse effects of the threats. We cannot separate the forward-looking analysis of threats from the forward-looking consideration of how those threats are expected to affect the species. To do so would essentially prevent an evaluation of the species’ status in the foreseeable future.

With respect to consideration of threats operating in the foreseeable future that affect only a portion or some individuals within the species (*i.e.*, species, subspecies, or DPS) being evaluated for listing, we agree with the commenter that during a status review we must consider how that threat is affecting the particular species at a population or higher level. Listing decisions are ultimately based on a synthesis of all relevant data regarding the status of the species and the threats, taking into consideration how those threats may vary spatially or temporally across individuals or populations of that species.

*Comment:* Several commenters referred to the Council on Environmental Quality’s (CEQ’s) implementing regulations for the National Environmental Policy Act (NEPA regulations) at 40 CFR 1502.22, which present discussion of reasonably foreseeable significant adverse impacts. The commenter noted that the NEPA regulations do not define “reasonably foreseeable,” but requested that the Services adopt a regulatory definition for foreseeable future rather than apply a subjective, case-by-case approach for defining foreseeable future. Commenters specifically requested we adopt the following “accepted legal definition” or something similar: “A consequence is reasonably foreseeable if it could have been anticipated by an ordinary person of average intelligence as naturally flowing from his actions.” The commenters stated that a definition along these lines would inject reasonable consideration of common sense into decisions that have such profound impacts on the human environment.

*Response:* As requested by the commenters, we reviewed the regulations at 40 CFR 1502.22, which address situations in which a Federal agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information. The CEQ NEPA regulations, as noted by the commenter,

do not provide a definition for the term “reasonably foreseeable.” Overall, we did not find these regulations useful in refining or revising the foreseeable future framework. The Act has a very different purpose and imposes different mandates on the Services than NEPA. Whereas NEPA directs agencies to engage in a process to consider a broad range of potential impacts as a means to guide the agencies in choosing among possible actions, the Act directs specific actions and imposes a mandate that decisions be based on the best available information. We have not adopted the commenters’ proposed alternative definition.

*Comment:* Many commenters stated that they supported the Services’ attempt to clarify the term “foreseeable future” in the proposed regulations, and many agreed with the proposed qualitative framework in which the foreseeable future would be determined on a case-by-case basis using the best available scientific and commercial data for the particular species. However, some of these commenters stated that the foreseeable future should still be defined in terms of a specific period of time or range of years (*e.g.*, 20–25 years) so that the reasonableness of this particular aspect of threatened listings can be assessed in a meaningful way by the public. In contrast, many other commenters stated that the same time period should be applied as the foreseeable future for all species, because the information on foreseeability is not species dependent. We also received a specific recommendation to use a definition for the foreseeable future that is already in place and used by many indigenous people—the next seven generations of human life.

*Response:* Using a predetermined number of years or period of time (*e.g.*, seven generations) as a universally applied “foreseeable future” for all listings would be arbitrary and would preclude the Services from relying on the best available data. Although some threats might manifest according to certain consistent timeframes, the species’ likely response to those stressors is uniquely related to the particular plant or animal’s characteristics, status, trends, habitats, and other operative threats. Furthermore, when multiple threats affect a particular species, these threats may have synergistic effects that are also unique to that particular species. Therefore, we do not intend to specify a particular timeframe to be applied universally to all species. However, we will continue to provide information regarding the particular timeframes used

when evaluating threats and a species’ risk of extinction to the extent possible in all listing decisions. Providing such information facilitates the public’s ability to evaluate the reasonableness of the Services’ listing decisions.

*Comment:* Multiple commenters recommended that the Services adopt a more quantitative approach in determining the foreseeable future to reduce uncertainty and litigation and increase transparency and consistency. Many of these commenters also recommended adopting certain quantitative approaches, such as: Defining risk of extinction and uncertainty in a manner similar to approaches used by The Intergovernmental Panel on Climate Change; identifying timeframes over which certain threats (*e.g.*, wind-energy development) or certain population trends for specific taxonomic groups (*e.g.*, salmonids) are foreseeable; and using previous listing decisions to identify any consistent patterns in the time horizons used for certain types of threats or taxa.

*Response:* When quantitative methods are available and consistent with best practices, we use them along with other available data and methods. However, the ‘best available data’ standard under the Act does not necessarily require use of quantitative methods and data, and we are not specifying particular quantitative methods in the regulations we are finalizing in this document.

*Comment:* Several commenters stated that to assess the danger of extinction, and thus be able to list a species as threatened, the Services must first identify the extinction threshold for that species and the likelihood of reaching that point in the future. Commenters noted that NMFS has explained previously that “[a] species is ‘threatened’ if it exhibits a trajectory indicating that in the foreseeable future it is likely to be at or near a qualitative extinction threshold below which stochastic/depensatory processes dominate and extinction is expected.” (NMFS, Interim Protocol for Conducting Endangered Species Act Status Reviews at 12 (2007).) Commenters also stated that in cases where the Services lack the data or ability to identify future population trends, assess the impact of population declines on the species’ overall population status, or establish an extinction threshold, it is not possible to determine or foresee the likelihood of future extinction for purposes of the listing determination. A commenter noted that Congress explained that the threatened classification was included to give effect to the Secretary’s ability to

forecast population trends (S. Rep. No. 93–307 at 3 (July 1, 1973)).

*Response:* The Services do not need to identify an extinction threshold or the likelihood of reaching that threshold in the future in order to determine whether a species meets the definition of a threatened species. Rather than wait for such data and analyses to become available, the Services are required to apply the best available data to make a determination whether the species meets the definition of a “threatened species” or an “endangered species” as a result of any of the factors outlined in section 4(a)(1) of the Act. Secondly, predicting extinction thresholds requires certain data regarding population parameters and environmental variables, and it requires the use of appropriate models. Modeling extinction thresholds is often not possible with the nature or type of data available.

*Comment:* A commenter recommended that the Services formally define “in danger of extinction” and apply the definitions and analysis in the remanded memorandum that FWS filed with the United States District Court for the District of Columbia in *In re: Polar Bear Endangered Species Act Listing and § 4(d) Rule Litigation*, No. 08–mc–00764–EGS, Doc. No. 237 (Dec. 22, 2010) (“Polar Bear memo”).

*Response:* FWS developed the Polar Bear memo after the court in that case held that the definition of “endangered species” under the Act is ambiguous and ordered the agency to provide on remand an additional explanation for the legal basis of the agency’s decision to list the polar bear as a threatened species. To develop the Polar Bear memo, FWS surveyed the history of the agency’s listing determinations in light of the text of the Act and the applicable legislative history and encapsulated FWS’s overall, general understanding of the phrase “in danger of extinction” as “currently on the brink of extinction in the wild.” Polar Bear memo at 3. FWS noted that it does not employ its general understanding in a narrow or inflexible way and that a species need not be likely to become extinct to be “on the brink of extinction.” *Id.* The memo also described four categories of circumstances in which FWS had found species to be “currently on the brink of extinction in the wild.” *Id.* at 4–6.

Although the Polar Bear memo is not binding and does not have the force of law, see *Alliance for the Wild Rockies v. Zinke*, 265 F. Supp. 3d 1161, 1180–81 (D. Mont. 2017), it remains a statement by FWS as to what may constitute “in danger of extinction.” FWS stated explicitly in the memo that it applied

only to the listing decision for the polar bear. Polar bear memo at 1 n.1. FWS’s general understanding, the historical survey of its listing decisions in the memo, and the associated discussion in the Polar Bear memo can still serve as a useful starting point for analyzing whether a species is in danger of extinction.

As the Polar Bear memo noted, FWS has not promulgated a binding interpretation of “in danger of extinction,” due in part to the contextual and fact-dependent nature of listing determinations. *Id.* at 3. The Services continue to conclude that codification of FWS’s general understanding of “in danger of extinction” is not necessary at this time.

*Comment:* We received comments expressing disagreement with the Services’ proposed framework for foreseeable future in that it allows for different “foreseeable futures” depending on the particular threat being considered. Instead, the commenter recommended that the Services select a single number of years or range of years in which to determine the future status of the species. The commenter stated that if the Services adopt varying foreseeable futures for the different listing factors for a single species, they are conceivably assessing whether that species is likely to become an endangered species based on fewer than all the listing factors. While the Act allows the Service to list a species based on a single factor, it does not allow the Service to disregard any of the factors in making the holistic determination whether a species has “become an endangered species.” In addition, the listing factors assess both positive and negative impacts on the status of the species. So being unable to assess certain listing factors at the end of a long foreseeable future for other listing factors means the Service is ignoring potentially beneficial conditions, for example, the existing regulatory mechanisms.

*Response:* We appreciate the commenter’s concern and clarify in this response that, although there may be different degrees of “foreseeability” with respect to particular threats and their impacts on the species, we ultimately base listing determinations on consideration of all of the available data and a review of all of the section 4(a)(1) factors. As stated in the M-Opinion, “Although the Secretary’s conclusion as to the future status of a species may be based on reliable predictions with respect to multiple trends and threats over different periods of time or even threats without specific time periods associated with them, the

final conclusion is a synthesis of that information.” (M–37021, January 16, 2009). The Services have been following this approach for nearly a decade, and courts have found it to be reasonable and appropriate (See, e.g., *In Re Polar Bear Endangered Species Act Listing and Section 4(d) Rule Litigation*, 709 F.3d 1, 15–16 (D.C. Cir. 2013)). The approach reflects the reality that there is a variation among the kinds and levels of information the Services typically have available when assessing specific threats. The approach allows the Services to comprehensively consider all that is known about the threats acting on the species, and the listing determination itself is based on a synthesis of that information. No information is disregarded merely because it relates to a time horizon that is different from that associated with other threats. As a matter of practice, the Services consider applicable data regarding both negative (e.g., poaching) and positive (e.g., enforcement efforts to reduce poaching) factors when making their listing determinations and will continue to do so under the “foreseeable future” framework being finalized in this rule.

*Comment:* A commenter stated that the discussion included in the proposed rule on data and use of models is unclear. The commenter specifically pointed to the statements in the proposed rule that the foreseeable future can extend only as far as the Services can reasonably depend on the available data to formulate a reliable prediction and avoid speculation and preconception, and that “in cases where the available data allow for quantitative modeling or projection, the time horizon presented in these analyses does not necessarily dictate what constitutes the ‘foreseeable future’ or set the specific threshold for determining when a species may be in danger of extinction.” The commenter said this seems to be contradictory, because if there is enough information to provide a reliable prediction that avoids speculation, based on quantitative modeling or projection, it seems that the Services should consider that as a “foreseeable future.” The commenter said this phrasing seems to indicate that models may show specific time periods, but that it can still be ignored. The commenter said all data and information should be reviewed and interpreted, including modeling.

*Response:* We agree that, if available and reliable, quantified studies or analyses should not be ignored, and our proposed rule was not meant to imply otherwise. Our intention with the particular language quoted by the

commenter was to indicate that the existence of a quantitative model or projection will not necessarily determine the foreseeable future in all cases or situations. A particular model or analysis may in fact be used by the Services to determine the period of time that can be considered the foreseeable future. However, this will not always be the case. In some instances, a model's time horizon may fall short of how far into the future the Services can foresee; and in other instances, a model may extend out to a point at which the model's predictions become speculative or highly uncertain. In both cases, the time period covered by the particular model would not dictate the time period for what the Services consider to be "foreseeable." In addition, even if a model is considered reliable, it may not be possible to limit the time horizon considered in the status review based on what one particular model or analysis indicates as a reasonable period of time. When we review a species' status over the foreseeable future, we must take all available data into account. In other words, while we fully agree that reliable predictions based on quantitative models should not be ignored, those quantitative models may not in themselves establish what constitutes the "foreseeable future" for the entire species or every threat. They may simply reflect possible, but not likely, outcomes.

*Comment:* Multiple commenters stated that foreseeable-future timeframes are very uncertain with respect to forecasted climate-change impacts and that additional clarifications or modifications to the proposed "foreseeable future" framework are needed. Various commenters stated that there is too much uncertainty associated with foreseeable futures that extend too far (e.g., 100 years) and that the foreseeable future should be shorter (e.g., 10 years, 25–30 years). Commenters, citing Congressional reports, stated that Congress intended the foreseeable future to be in the near future. Commenters provided various suggested approaches or parameters that would dictate how far the foreseeable future could extend, such as using three generation lengths for long-lived species, and considering threats in light of the biology of the species (e.g., long generation versus short generation lengths). Commenters stated that if predictions are too speculative, then the Services cannot give the species the benefit of the doubt and must acknowledge that listing the species is not warranted. Lastly, commenters requested that NMFS align its

procedures for determining foreseeable future with those of the FWS, particularly regarding incorporation of uncertainty in climate models and other elements.

*Response:* We acknowledge that levels of uncertainty can increase the further into the future that climate-change impacts are projected. The magnitude of this increase in uncertainty over time will vary from case to case depending on the available data for the particular issues at hand. Nevertheless, we must carefully consider the available data and the levels of uncertainty, make a reasoned conclusion, and explain that conclusion in a transparent way in our proposed and final listing determinations. Our regulatory framework for the "foreseeable future" does not undermine these requirements.

For these reasons, we do not agree that a predetermined period of years is appropriate in order to minimize uncertainty when making threatened species listing determinations. Including such a time limit in the foreseeable future regulation would be arbitrary and would preclude the Services from meeting the best-available-data standard required under section 4 of the Act. Furthermore, as noted in the M-Opinion, Congress purposefully did not set a timeframe for the Secretary's consideration of whether a species was likely to become an endangered species, nor did Congress intend that the Secretary set a uniform timeframe. Thus, we do not intend to specify one in the regulatory framework being finalized in this document.

We conclude that it is generally appropriate to consider the foreseeable future in light of the particular species' biology. This principle is explicitly embedded in the regulatory framework for the foreseeable future, which states: "The Services will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species' life-history characteristics, threat-projection timeframes, and environmental variability."

We agree that listing decisions cannot be based on speculation. As stated in our proposed rule, "the foreseeable future can extend only as far as the Services can reasonably depend on the available data to formulate a reliable prediction and avoid speculation and preconception." 83 FR 35195, 35196, July 25, 2018. Our "foreseeable future" framework is explicit in this respect, because it states that foreseeable future extends only so far into the future as we can reasonably determine that both the future threats and the species' responses

to those threats "are likely." However, we note that as long as that standard is met, we are not required to wait to make listing determinations until better or more-concrete science is available, and that the Act requires that we base our decision on the best available data. See, e.g., *San Luis & Delta-Mendota Water Authority v. Jewell*, 747 F.3d 581, 602 (9th Cir. 2014) ("best available" standard does not require perfection or best information possible) (citing *Building Indus. Ass'n v. Norton*, 247 F.3d 1241, 1246 (D.C. Cir. 2001)); *Alaska v. Lubchenco*, 825 F. Supp. 2d 209, 223 (D.D.C. 2011) (same); *Maine v. Norton*, 257 F. Supp. 2d 357, 389 (D. Me. 2003) (noting that the "best available" standard "is not a standard of absolute certainty"). By the same token, we acknowledge that the precautionary principle does not apply to listing determinations, so we do not list species merely as a precaution if there is not reliable evidence indicating that the species meets the definition of a "threatened species." E.g., *Center for Biological Diversity v. Lubchenco*, 758 F. Supp. 2d 945, 955 (N.D. Cal. 2010) (finding the "benefit of the doubt" concept does not apply in the listing context); *Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 947 (D. Or. 2007).

Lastly, as the two Services agree to these principles and have worked cooperatively to develop this rule, we find that the two Services have already largely aligned their approaches. Any apparent differences in outcomes stem from species-specific considerations rather than from having different interpretations of the statute.

*Comment:* A few commenters stated that, although a uniform "foreseeable future" time period should not be applied to all species, the Services must identify the period of foreseeability for each operative threat and the species' response to that threat. A commenter also stated the Services should be specific regarding what time period they are using for a particular decision and that, absent that information, their decisions will be extremely unclear, unpredictable, and difficult to review.

*Response:* We agree that status reviews and listing determinations should transparently discuss the time horizons over which any analyses were conducted, threats were evaluated, and/or species' responses were projected. However, it is not always possible or even necessary in every circumstance to define the "foreseeable future" as a particular number of years. As stated in the M-Opinion: "In some cases, quantifying the foreseeable future in terms of years may add rigor and transparency to the Secretary's analysis

if such information is available. Such definitive quantification, however, is rarely possible and not required for a ‘foreseeable future’ analysis.” (M–37021, January 16, 2009). Ultimately, although the Secretary has broad discretion to determine what is foreseeable, this discretion is exercised based on the best scientific and commercial data available and is subject to review in accordance with the applicable standards of the Act and the Administrative Procedure Act.

*Comment:* Multiple commenters stated that the Services must modify the definition of the “foreseeable future” such that healthy, viable species are not listed as threatened species. Another commenter stated that the Services should only rarely list currently viable, stable species as threatened so that their resources can be more appropriately focused on species already in need of conservation. Commenters also stated that the Services should not list healthy species, like polar bears and ice seals, based on speculation or on the possibility of a future threat. Multiple commenters stated that Congress intended that only species experiencing current threats that are affecting their population numbers may be considered for listing and stated that a species must already be experiencing the effects of a threat and be “depleted in numbers” to be considered for listing as threatened. Commenters also asserted that the Ninth Circuit’s interpretation in *Alaska Oil & Gas Assoc. v. Pritzker*, 840 F.3d 671, 683 (9th Cir. 2016) was an illogical result of the potential application of the Act to every species based on the possibility that climate-related threats may pose some effect at some remote future time. Commenters noted this Congressional intent is also reflected by the definition of “conservation” in section 3 of the Act, which they noted clearly does not apply to a healthy species that is not being affected by present threats to its existence because it would not be possible to “bring” that species “to the point” where the protections of the Act “are no longer necessary.”

*Response:* We agree that we cannot list a species as threatened due to speculation about future declines of that species; however, it does not follow that listing a species as threatened under the Act requires that a decline has already begun. If the best available scientific and commercial data allow us to make a reliable prediction (as opposed to speculating) that a not-yet-begun decline makes it likely that the species will become in danger of extinction, then that species meets the definition of a threatened species. In other words, the Services need not wait until a species

has reached a particular tipping point if the best available data indicate the threats the species currently faces will result in it likely becoming an endangered species within the foreseeable future. Furthermore, the Services cannot ignore the threats a species faces even if the species has not yet begun to decline. Some species may also exhibit nonlinear changes in their population levels. For example, some species are vulnerable, due to demographic factors affecting their abundance, productivity, or other reasons, to sudden ecological regime shifts, which can cause population collapse even though population declines had not been previously evident.

Lastly, we do not agree with the suggestion that the definition of “conservation” in section 3 of the Act reflects an intention by Congress that only species with declining abundances be listed under the Act. The Act defines “conserve,” “conserving,” and “conservation” as “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary.” A species that is properly listed due to reliable predictions of future declines can benefit from conservation methods and procedures that will forestall or ameliorate that decline. If successful, such conservation measures will eventually no longer be necessary, the species will no longer be “likely to become an endangered species,” and the species can be delisted. Listing a species as threatened due to future declines that are foreseeable is thus completely compatible with the definition of “conservation.”

*Comment:* Multiple commenters expressed concern that under the proposed “foreseeable future” framework the Services would consider climate change as a hypothetical and not a “probable” threat or would otherwise ignore the best available science on climate change. Commenters stated that under the proposed definition of “foreseeable future,” the Services could arbitrarily cite climate change as a justification to avoid species protections if none of the specific projections reaches the 50 percent “probability” threshold due to uncertainty stemming from environmental variability. They further stated that the regulations should instead be explicit that the best available science regarding the “foreseeable future” must include climate-change and ocean-acidification

projections as well as any studies regarding what those projections will mean for both specific species and larger ecosystems. The commenters stated that the Services must consider the associated ranges of probabilities and uncertainties as best science even though they do not present a single likelihood of any particular impact. Commenters further noted that oftentimes there is high confidence in the directionality of a climate trend or impact (e.g., sea-level rise), even when there is lower confidence in the rate or ultimate magnitude of the change, and that under the proposed definition of “foreseeable future” it would be possible to dismiss such projections by focusing on the uncertainty in rate instead of the certainty in trend.

*Response:* Consistent with our longstanding practice, in all classification decisions we will consider the best available science and evaluate impacts to the species that may result from changing climate within the foreseeable future. Also consistent with our standard practice and per the Act’s section 4(a)(1) factors for listing, we will consider what the particular climate-related predictions mean in terms of impacts on the species as well as impacts on the larger ecosystem. In reviewing and applying the best available data in our foreseeable future framework, we will also consider the ranges of probabilities and uncertainties associated with the available data, and we will not arbitrarily dismiss reliable aspects of various climate change predictions or projections (e.g., directionality) even if other aspects (e.g., rate of change) have greater levels of uncertainty. We will take all of the available climate change data into consideration when making a reasonable determination regarding the foreseeable future and the status of the species in the foreseeable future.

*Comment:* Numerous commenters expressed concern regarding how the Services will address uncertainty and reliability under the proposed foreseeable future framework when models are used. Commenters noted that models used to project future conditions are often flawed by the inclusion of too few factors, or the exclusion of factors that may be unknown or not fully known, and that models can be manipulated. Therefore, commenters recommended that explanatory language should state that models must be identified as such and data inputs used to construct them must be listed, and that model outputs do not constitute data in and of themselves. Other commenters stated that models often cannot provide reliable

predictions of future conditions at narrow geographical scales or on short time horizons sufficient to support specific conclusions about the future condition of species or habitat at precise locations. The commenters specifically noted that, in withdrawing their proposed rule to list the wolverine as threatened, the FWS recognized the significant disagreement and uncertainty regarding the accuracy of localized climate change projections for a species' habitat or population persistence (79 FR 47522, 47533; August 13, 2014). In contrast, other commenters stated the Services can rely on models even if they are not perfect, and that, under the proposed approach, species will impermissibly be left without protection until the science is developed enough to establish with "reasonable certainty" that they will be in danger of extinction.

*Response:* We agree that, when models are applied in a status review, we should provide detailed, explanatory language to describe the particular data sources and inputs used to construct the model. We will also strive to explicitly describe the assumptions, limitations, and relevant measures of uncertainty associated with the particular models. However, it is important to note that models can often provide useful and robust predictions even in the absence of certain variables or data. Thus, the Services may consider, among other sources of scientific data, models that are not "perfect" or do not indicate a "reasonable certainty" of a species being in danger of extinction. Indeed, nothing in the framework we have set forth for determining the "foreseeable future" we adopt is designed or intended to require "reasonable certainty" of a species being in danger of extinction in the foreseeable future before it may be listed as threatened. Models are analytical tools that can be applied to better understand complex datasets. We will continue to use various types of analytical tools, as appropriate and as transparently as possible, when conducting status reviews. We conclude that the requirement to use the "best available" data means that we cannot insist that information must be free from all uncertainty, and further agree that the Act's protections should not be withheld until a species' status has declined to the point that the future risk of extinction is certain.

With respect to the comment regarding the degree of spatial and temporal precision of models, we agree that models will not always support specific conclusions about the future condition of species or habitat at fine scales or in precise locations. As stated

previously, in reaching any conclusions regarding the foreseeable future or the extinction risk of a particular species, we will apply model results only to the extent that we have determined they are the best available data and they are relevant.

*Comment:* A few commenters stated that "professional judgment" is ambiguous terminology and there is no clear indication on when use of professional judgment is considered appropriate. Some commenters expressed concern that subjectivity and opinion would take the place of data where gaps exist in the available science, and one commenter noted that the use of best professional judgment does not relieve the Services of their statutory duty to make listing determinations "solely on the basis of the best scientific and commercial data available." One commenter recommended adopting guidance requiring that experts provide their credentials demonstrating their expertise and that their detailed recommendations be made available to the public.

*Response:* These comments refer to a discussion in the proposed rule regarding the types of data that may inform what is "foreseeable." Specifically, we stated that, depending on the nature and quality of the available data, "predictions regarding the future status of a particular species may be based on analyses that range in form from quantitative population-viability models and modelling of threats to qualitative analyses describing how threats will affect the status of the species. In some circumstances, such analyses may include reliance on the exercise of professional judgment by experts where appropriate." (83 FR 35193, July 25, 2018).

This discussion was intended to clarify that the data underlying any "foreseeable future" could take several forms and that it would not, for example, exclusively depend on quantitative analysis. Professional judgment is not used in place of the best available scientific or commercial data; it is used when there are gaps in such data that require scientific interpretation to address. We note that when professional judgment is applied, it should be done transparently and in accordance with applicable standards.

*Comment:* Multiple commenters raised concerns regarding what constitutes the "best available scientific and commercial data" in establishing a probable foreseeable future and requested we further clarify the term and its use. Several commenters stated it is imperative that the data considered

during the listing process be made available to the public, and that any assumptions made are disclosed in a transparent manner. One commenter stated that the FWS has inconsistently applied standards for what constitutes the best available science and suggested that, to avoid interference with the application of the best available data, the words "the Services" should be replaced with "the Services' biologists." We also received a request to insert the words "scientific and commercial" into the phrase "best available data" within the foreseeable future regulatory text. Lastly one commenter noted that the proposed rule fails to provide clarifying language regarding what constitutes "commercial data" and expressed concern that this could open the door to an over-reliance on the use of potentially biased and non-peer-reviewed data for listing and delisting decisions.

*Response:* Multiple requirements have already been established to guide the Services' use and application of the best available data and provide sufficient guidance on this topic. For example, the Information Quality Act (IQA, Pub. L. 106-554), agency policy directives for implementing the IQA (e.g., NMFS Policy Directive 04-108, June 2012, and FWS Information Quality Guidelines, June 2012; and the Office of Management and Budget's (OMB's) Final Information Quality Bulletin for Peer Review (M-05-03, December 16, 2004) guide the Services in ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the Services. In addition, the Services comply with the policy memorandum issued on February 22, 2013, by the Office of Science and Technology Policy regarding public access to federally funded research results. That memorandum establishes a set of principles to guide Federal agencies in providing access to and archiving results of Federal or federally funded research. Lastly, as a matter of practice, the Services' status reviews are subjected to both peer and public review before they are relied upon in a final listing determination. Overall, we find these existing requirements sufficient to ensure the quality, integrity, and accessibility of the data used by the Services in support of their listing decisions.

To ensure status reviews and listing decisions are transparently based on the best available scientific and commercial data, we fully disclose any assumptions made. The Services consider this to be a standard best practice. Additionally, the Services make available cited

literature that is used in listing rules and that are not already publicly available, taking into account issues of intellectual property law, copyright, and open access.

We decline to specify in our regulations that the Services' biologists make any determination of what constitutes the best available data. The proposed wording change is both unnecessary and in conflict with the statute. In practice, it is the Services' biologists that gather, review, and synthesize the best available data, but as the statute clearly requires, the Secretary must make the ultimate determination regarding whether species meet the definition of a threatened or endangered species.

Likewise, we decline to make the requested insertion of the words "scientific and commercial" into the regulatory framework for the foreseeable future, which we had originally omitted for conciseness and readability. The addition of these words is unnecessary, because the Services are held to the requirement to rely on the best "scientific and commercial data" under section 4(b)(1)(A) of the Act. The regulatory foreseeable future framework does not alter this statutory requirement in any way.

We also decline to add clarifying language to the regulations regarding the term "commercial data," and we disagree that the absence of such language may lead to reliance on potentially biased and non-peer-reviewed data for listing and delisting decisions. The term "commercial data" is used in the statute and, as clearly indicated by the legislative history, this term refers to trade data such as commercial harvest and landings data. See H.R. Rep. 97-657 (H.R. Rep. No. 567, 97th Cong., 2nd Sess. 1982, 1982 U.S.C.C.A.N. 2807, 1982 WL 25083) at 20. While those data are not subject to a peer review process equivalent to the process applied to published scientific literature articles, the statute clearly allows the Services to consider them. When doing so, the Services apply their own assessment of the nature, quality, and limitations of the data, and use the data only to the extent appropriate. Furthermore, when commercial data are used, the Services discuss their application and interpretation of the data transparently and subject that interpretation to both peer and public review.

*Comment:* Some commenters noted that, while they generally support the proposed changes to the regulations regarding the foreseeable future, the general framework for making threatened determinations would

benefit from additional specific criteria. In particular, they requested that the framework require that the best available scientific and commercial data demonstrate that listing the species as threatened would have a measurable beneficial effect.

*Response:* The suggested change is not consistent with the statute. Section 4(a)(1) sets out the factors by which the Secretaries may determine a species is threatened or endangered. These factors do not include a category that allows for or requires consideration of the beneficial effect of the listing. Therefore, we have no basis for requiring that a species listing have some measurable benefit in order for that species to receive the protections of the Act.

*Comment:* Some commenters stated that the Services should provide additional clarification on how they will address future projections associated with a species' life-history characteristics and demographic factors, as well as divergent projections associated with each threat-projection timeframe. The commenters stated that the Services should further explain how species' responses will be predicted and should explicitly state that the adaptability and resilience of a species to each operative threat will also be considered. The commenters specifically noted that adaptability and resilience are important considerations when contemplating the risk of extinction in relation to loss of range. Another commenter stated that, while they appreciate that the proposed foreseeable future framework takes into account considerations such as the species' life-history characteristics, threat-projection timeframes, and environmental variability, they recommended adding additional considerations, such as changes in climatic characteristics, phenology, geographic ranges, and home range sizes of some species, which can be particularly informative in the face of global changes to climate for which the only reference condition is the past.

*Response:* As we indicated in the proposed rule, how we analyze and predict species' responses to threats will vary from case to case. For example, in data-rich cases, population viability analyses may be used to predict species' responses, whereas in data-poor situations, we will likely conduct a qualitative risk assessment. In all cases, species' likely responses to particular threats will be evaluated using the best data available for that species.

We can and do take factors such as climate, adaptability, resilience, phenology, and home-range sizes into account when assessing a species' status

into the foreseeable future. It is our longstanding practice to take such types of information into account, as appropriate, when conducting status reviews. The foreseeable future framework refers to several categories of considerations (*i.e.*, "such as life-history characteristics, threat-projection timeframes, and environmental variability") as examples of relevant factors that will inform how far into the future the foreseeable future extends for a particular species. The framework does not exclude other relevant considerations. Thus, we conclude that additional revisions to foreseeable future framework are not necessary.

#### *Comments on Delisting*

*Comment:* Several commenters agreed with the proposal that the criteria for determining whether a species qualifies for protection under the Act are the same whether the context is a potential decision to delist or the initial decision whether to list a species. Numerous commenters stated that the standard for delisting a species should be higher than for listing a species; thus, the Services have a higher burden in proving that a listed species has recovered such that it can be delisted than they have in listing the species in the first instance. Further, some stated that under the precautionary principle embodied in the Act, scientific uncertainty must be considered differently in the context of delistings and downlistings versus initial listings. Many commenters stated that the precautionary principle embodied in the Act necessarily means that, once a species is listed, a subsequent reversal of that conclusion must be specifically supported by evidence that explains why the species no longer meets the definition associated with its prior listing.

*Response:* The standard for a decision to delist a species is the same as the standard for a decision not to list it in the first instance. This approach is consistent with the statute, under which the five-factor analysis in section 4(a)(1) and the definitions of "endangered species" and "threatened species" in sections 3(6) and 3(20) establish the parameters for both listing and delisting determinations without distinguishing between them. The Services determine whether species meet the definitions of a "threatened species" or an "endangered species" based on the best scientific and commercial data available. We must consider the best available scientific data the same way regardless of whether it is in the context of delistings and downlistings versus initial listings. This interpretation is

consistent with the Services' longstanding practice and the decision in *Friends of Blackwater v. Salazar*, 691 F.3d 428 (D.C. Cir. 2012). That decision confirms that, when reviewing whether a listed species should be delisted, the Services must apply the factors in section 4(a) of the Act. 691 F.3d at 433 (upholding FWS's decision to delist the West Virginia northern flying squirrel because the agency was not required to demonstrate that all of the recovery plan criteria had been met before it could delist the species and it was reasonable to construe the recovery plan as predictive of the delisting analysis rather than controlling it). In that case, the court held that "Section 4(a)(1) of the Act provides the Secretary 'shall' consider the five statutory factors when determining whether a species is endangered, and section 4(c) makes clear that a decision to delist 'shall be made in accordance' with the same five factors." *Id.* at 432. Therefore, we have finalized the proposed change.

*Comment:* Some commenters stated that the only "standard" articulated in the proposed regulations is that the species "shall be listed or reclassified if the Secretary determines on the basis of the best scientific and commercial data available after conducting a review of the species' status, that the species meets the definition of an endangered species or a threatened species." Further, they stated that a decision to delist a species is not made against a blank slate. Rather, it is made in light of a prior factual determination by the Service. Therefore, the Services must explain and factually substantiate the departure from that prior determination. In making a new evaluation of a species' status, the Services cannot base their decision only on the available scientific and commercial data but must also consider their prior determination and substantiate the reasons for departing from their prior conclusions. An agency must provide "a more detailed justification" when it makes a decision that "rests upon factual findings that contradict" its prior findings. A failure to do so violates the Administrative Procedure Act.

*Response:* The Act defines "threatened species" and "endangered species" and directs the Services to make determinations regarding whether a species is threatened or endangered based upon the best available scientific and commercial data. This determination requires the Services to take into account all material in the record, including prior findings and the discussion of facts supporting those findings, and discuss how the newly available information has led to

different conclusions in a transparent manner.

The underlying obligation of the Services to articulate a rational connection between their decisions and facts in the record is the same regardless of the context of the determination being made (listing or delisting). Of course, where there is substantial information in the record that a listed species is likely to face a continuing threat, this responsibility is particularly acute. *See Greater Yellowstone Coalition, Inc. v. Servheen*, 665 F.3d 1015, 1030 (9th Cir. 2011) (holding that, in particular circumstance where strong evidence of continuing threat to species was documented in the record, the Act's policy of "institutionalized caution" required that FWS explain why delisting the species was appropriate in face of the uncertainty regarding the extent of the threat).

*Comment:* Several commenters stated that the removal of recovery as one of the reasons for delisting is in direct conflict with the main stated purpose of the Act and will allow the Services to delist species before they are recovered. They also stated that the Services have failed to adequately explain the purpose of removing the word "recovery" from § 424.11(d)(2). They noted the only reasoning provided in the proposed rule was to align with statutory definitions of endangered and threatened species. The Services did not explain how removing this word creates better alignment.

*Response:* We note that the Act does not use the term 'recovery' or 'recovered' when referring to removing a species from the list. Rather, a species is removed from the list when it does not meet the definition of an endangered species or threatened species. Furthermore, the Services do not agree that this change will allow species to be delisted before they are recovered. The Services will continue to use the best scientific and commercial data available to make determinations as to whether species meet the definition of an endangered species or a threatened species. If a review of a listed species indicates a species does not meet either definition, the Services will propose the species for delisting. Likewise if, following a review, a listed species is determined to still meet the definition of an endangered or a threatened species, the Services would not propose the species for delisting. Thus, this revision in no way conflicts with the intention of the Act.

The Services removed the reference to "recovery" from § 424.11(d)(2) because the existing regulatory language, which was intended to provide examples of when a species should be removed from

the lists, has been, in some instances, misinterpreted as establishing criteria for delisting. Although we are removing the word "recovery" from this section, the language will continue to include species that have recovered, because recovered species would no longer meet the definition of either an "endangered species" or a "threatened species." However, the Services reiterate that the goal of the Act and the Services is to recover threatened and endangered species.

*Comment:* Some commenters objected to the removal of recovery from § 424.11 and stated the proposed rule appeared to circumvent recovery plans and improperly make section 4(f) of the Act meaningless. Additionally, they stated that removing this provision disconnects recovery from species recovery plans that in turn guide State-level actions and are effective means to address recovery. They argued the Services should include a discussion of recovery and recovery plans as part of this change and consider if protections are in place to support continued recovery of the species into the future.

*Response:* This change does not make recovery meaningless. Section 4(f) requires the development of recovery plans for most listed species. Recovery plans are a key component in conservation planning and provide an important roadmap for a species' recovery. This provision does not undermine the importance or effectiveness of recovery plans. Recovery plans will continue to guide the Services' recovery efforts.

*Comment:* A commenter expressed concern that the proposed addition of new paragraph (e) to § 424.11 would circumvent the requirement that delisting decisions must be made based on the best science and data available at the time of the decision. The commenter argued that the proposed revisions would allow for delisting based solely upon achieving any recovery criteria identified at the time of listing, even if this occurs prior to the attainment of the plan's recovery criteria and without regard to current information.

*Response:* The Services are required to make delisting determinations based upon the best scientific and commercial data available at the time the determination is made. When the Services determine whether a species meets the definition of a "threatened species" or "endangered species," they will rely upon the best available data. The Services will continue to review all relevant information when making a delisting determination, including whether the recovery criteria have been achieved. Recovery plans provide

important guidance to the Services, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, but they are not regulatory documents. A decision to revise the status of a species or remove a species from the List is ultimately based on an analysis of the best scientific and commercial data available to determine whether a species is no longer an endangered species or a threatened species, regardless of whether that information differs from the recovery plan.

*Comment:* Some commenters suggested that the Services clarify that delisting decisions are not contingent upon the satisfaction of a recovery plan. Others requested that the proposed revision at 50 CFR 424.11 also explicitly specify that species should be considered for delisting when the original recovery objective (*i.e.*, target population goal) in the species' recovery plan is met.

*Response:* The Services conclude that further clarification in this regard is not necessary. As noted in the proposed rule, the Services' intention is to clarify that the standard for whether a species merits protection under the Act should be applied consistently whether the context is potential listing or potential delisting. Thus, delisting decisions are not contingent upon the satisfaction of a recovery plan for that species. This interpretation is consistent with the Services' longstanding practice and the decision in *Friends of Blackwater v. Salazar*, 691 F.3d 428 (D.C. Cir. 2012). That decision confirms that, when reviewing whether a listed species should be delisted, the Services must apply the factors in section 4(a) of the Act. 691 F.3d at 433 (upholding FWS's decision to delist the West Virginia northern flying squirrel because the agency was not required to demonstrate that all of the recovery plan criteria had been met before it could delist the species and it was reasonable to construe the recovery plan as predictive of the delisting analysis rather than controlling it). In that case, the court held that "Section 4(a)(1) of the Act provides the Secretary 'shall' consider the five statutory factors when determining whether a species is endangered, and section 4(c) makes clear that a decision to delist 'shall be made in accordance' with the same five factors." *Id.* at 432. The Services will delist a species when, based upon the best available scientific and commercial data, they determine the species no longer meets the definition of a threatened or endangered species.

*Comment:* Several commenters stated that removing the requirement that the data substantiate that the species is no longer endangered or threatened lowers the bar for delisting a species and will promote delisting species before they are actually recovered. Several commenters stated that the Services' proposed revisions to drop the requirement that data "substantiate" any delisting decision would strip listed species of the Act's protections and contravene the policy of "institutionalized caution" Congress adopted in enacting the Act. *Tenn. Valley Auth. v. Hill*, 437 U.S. at 194.

*Response:* The Services do not agree that removing this language will lower the bar for delisting species and allow them to be delisted before they have recovered. As required by the Act, the Services make determinations as to whether species warrant listing, including decisions to remove species from the lists of threatened or endangered species, based on the best scientific and commercial data available. The Services will not proceed with a delisting determination unless the best scientific and commercial data support that conclusion. Because the statutory standard for delisting is whether a species meets the definition of a threatened or endangered species based on the best scientific and commercial data available, it is not necessary to have a separate requirement that the data substantiate that the species is no longer threatened or endangered. Therefore, removing the requirement that the data substantiate that the species is no longer endangered or threatened does not contravene the policy of institutionalized caution because, before making a determination to delist a species, the Services are already required to assess the best scientific and commercial data available about the status of the species, threats it may face, the adequacy of regulatory mechanisms, and the effectiveness of any conservation efforts.

*Comment:* Some commenters stated that the Services inappropriately propose to be allowed to delist a species by simply reinterpreting data that were used to make the original listing determination.

*Response:* In proposing this change, the Services attempted to address any ambiguities in the regulatory text by simplifying this provision and returning to the underlying statutory standard. In order to delist a species, the Services must evaluate the best scientific and commercial data available at the time a determination to delist a species is made. They must review all information that is available and may not limit their

inquiry to the interpretation of data that were used to make the original listing determination. However, if the best available data supports reinterpreting the data used in the original listing determination, the Services may do so.

*Comment:* Several commenters stated that the proposed revision to the regulation addressing delisting based on extinction provides no rationale for weakening the informational requirements imposed by the current regulations. They stated that the language describing the period of time that must pass before a species can be delisted due to extinction should be retained because it allows for consistent implementation of the Act and provides clarity to the public. Additionally, some commenters stated that the proposed changes stating that evidence may include survey information is inconsistent with the precautionary approach that should be used when protecting imperiled species. Others stated that criteria should be developed for determining "extinction" or defining the term "extinct" for purposes of removing a species from the list due to extinction.

*Response:* The Services modified the text in this section because the Services' conclusion that a species is extinct will be based on the best scientific and commercial data available, as required under section 4(b)(1)(A). That decision may include, among other things, survey data and information regarding the period since the last documented occurrence or sighting of the species. We will make each determination on a case-by-case basis, considering the species-specific biological evidence for species extinction. We find it is more consistent with the statute to acknowledge this overarching obligation that all classification decisions must use the best available scientific and commercial data than to highlight only certain kinds of information as the current regulatory provision does. A determination that a species is "extinct" will be based on the best scientific and commercial data available, as required under section 4(b)(1)(A), according to the common understanding of the term.

*Comment:* Some commenters supported the provision related to delisting due to extinction, but requested that the Services add another section to this provision that would state that, when a species that was extinct in one area is reintroduced into an area, the reintroduced species can be managed to protect the new ecosystem that developed in the absence of the extinct species.

*Response:* The Services decline to add the proposed section. There are other

provisions of the Act, such as section 10(j), that govern the introduction of populations back into areas where they no longer exist, and that issue is therefore beyond the scope of the regulations implementing section 4 of the Act.

*Comment:* Some commenters requested the Services add the term “extirpated” in addition to “extinct.” They suggested this addition would be useful in cases where a particular species may be extirpated from a region or local area without being fully extinct from an adjoining State or region.

*Response:* The Services decline to add “extirpated” to this section of the regulations. This provision of the regulations, and the Services’ modifications to this section of the regulations, govern factors considered in delisting species. Extirpation of a population of a listed species from a particular area is not the equivalent of a species being extinct nor a valid reason to remove the species from the lists of threatened and endangered species.

*Comment:* Several commenters opposed the clarification that listed entities would be delisted if they do not meet the definition of “species” because they believe it is an effort to give the Services additional tools not to list species in need of listing and protection of the Act. Others argued that the proposed language would allow the Services to provide less or no protection to some populations within a larger species. And still others argued that, while it is true that new information could suggest a currently listed species is not a taxonomic species or subspecies, new science is not always definitive. Those commenters stated the proposed language could lead the Services to move prematurely to delist a species based on new information that may be inadequate, or later proved to be inaccurate, without any evaluation of whether the particular population in question is a threatened or endangered distinct population segment (DPS) of the new taxonomic subspecies or species into which the new evidence places it.

*Response:* This provision merely reflects the text and intent of the Act, *i.e.*, only “species,” as defined in section 3 of the Act, may be listed under the Act. If the Services determine that a group of organisms on the list does not constitute a “species,” then the listing is contrary to the Act, and the Services may initiate rulemaking procedures to delist the entity. We note that the Services may choose to consider whether there is an alternative, valid basis for listing some or all of the listed entity before finalizing a delisting. For

example, in some circumstances, for vertebrate species, if the constituent vertebrate populations constitute DPSs, they may be separately listed. This does not preclude the Services from considering whether a valid “species,” comprising some or all of the organisms covered by the delisted entity, warrants listing as a threatened or endangered “species.”

This provision would apply if new information, or a new analysis of existing information, leads the Secretary to determine that a currently listed entity is not a taxonomic species, subspecies, or a DPS. When, after the time of listing, the Services conclude that a species or subspecies should no longer be recognized as a valid taxonomic entity, the listed entity should be removed from the list because it no longer meets the Act’s definition of a “species.” In other instances, new data could indicate that a particular listed DPS does not meet the criteria of the Services’ Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act (“DPS Policy”; 61 FR 4722, February 7, 1996). In either circumstance, the entity would not qualify for listing under the Act.

Contrary to one of the comments, this provision would not allow some populations to be delisted while others remain listed if the combination of populations still meets the definition of a “species” and that species meets the definition of “threatened species” or “endangered species.” The courts have made clear that, before delisting any DPS of a listed species, the Services must consider how the delisting will affect other members of the listed entity. *E.g., Humane Soc’y of the U.S. v. Zinke*, 865 F.3d 585, 602 (D.C. Cir. 2017) (holding that the delisting of the Western Great Lakes DPS of the grey wolf was invalid because FWS had failed to consider “whether both the segment and the remainder of the already-listed wolves would have mutually independent statuses as species”); *Crow Indian Tribe v. U.S.A.*, 343 F. Supp. 3d 999, 1014 (D. Mont. 2018) (delisting of the Greater Yellowstone Ecosystem population of grizzly was invalid because FWS had failed to consider how delisting would affect the remainder).

The Services agree that new scientific data or information is not necessarily more definitive, and we acknowledge that scientific and taxonomic data are always evolving. Delisting a species following a determination that it no longer meets the definition of a species will only be undertaken after a rigorous review of the best available scientific

and commercial data, and a proposed and final rulemaking process.

*Comment:* Some commenters opposed the provision regarding delisting when an entity does not meet the definition of a “species,” because they are concerned the change would allow the Services to retroactively reanalyze original listing information and decide that a species, evolutionarily significant unit, or DPS no longer requires protection based on political factors.

*Response:* The Services’ determination that a species no longer meets the definition of a species must be based on the best available scientific and commercial data. Even under the current regulations (current 50 CFR 424.11(d)(3)), the Services have the ability to delist when the entity is found not to qualify as a listable entity. The Services do not intend the regulatory language change to allow for listing determinations to be based on anything but the statutory standard.

*Comment:* Some commenters opposed delisting a species when it does not meet the definition of a “species” because they believe it will increase litigation and result in continuous listings, delistings, and relistings by focusing on how a species is defined rather than the species’ status.

*Response:* Under the current regulations, we have authority to delist entities that do not meet the definition of a “species” under the Act, so the language does not change our requirements in this regard. Acting consistently with the Act in this way allows the Services to focus their resources on recovering species that are threatened or endangered. If a species, subspecies, or DPS no longer meets the Act’s definition of a “species,” it should be removed from the list so the Services can focus their resources on species most in need.

*Comment:* Some commenters opposed delisting based on a listed entity not meeting the definition of “species” because they argued many taxonomic changes have been made in recent years based solely on DNA information and analysis. They argued that, while DNA analysis is a good tool, it has limitations and is still subjective in regard to distinct species because our taxonomic system is subject to human error.

*Response:* As stated above, new information is not always definitive. The Services’ determinations identifying species, subspecies, and DPSs are not typically made solely on the basis of DNA analyses. Determinations that a listed entity does not meet the definition of “species” will be based on the best available scientific and commercial data.

*Comment:* Some commenters stated that delisting an entity when it does not meet the definition of “species” would allow the Services to forgo considering whether the taxonomic subspecies or species of which the Service now believes the entity to be a part must now be considered threatened or endangered in a significant portion of its range based on the status of that population.

*Response:* This provision will not allow the Services to delist one or more populations of a species or subspecies without considering whether the species or subspecies is threatened or endangered throughout all or a significant portion of its range. As discussed earlier, the courts have made clear that, before delisting a population of a listed species, the Services must consider how the delisting will affect other members of the listed species.

*Comment:* Several commenters objected to delisting a species when it does not meet the definition of “species” because they believe it would result in leaving highly imperiled populations at risk of a gap in the Act’s protections merely because of a taxonomic reclassification.

*Response:* Delisting a species when it does not meet the definition of a “species” under the Act would not leave imperiled populations that otherwise would merit listing at risk. This provision refers to taxonomic reclassifications. If a particular entity no longer meets the Act’s definition of a species, that entity would not qualify for listing under the Act.

*Comment:* Some commenters opposed delisting a species when it does not meet the definition of “species” because they believe it is unnecessary. They stated this type of taxonomic information would come out in a species assessment using the five factors. They argued the taxonomic proposal is duplicative, in that it singles out one issue for specific treatment, when it is already covered by the broader language of § 424.11(e)(2). Further, some stated that, in addition to the regulatory change, the Services should also consider adopting objective standards and criteria for the Services’ taxonomic determinations.

*Response:* The Services conclude that this provision provides a helpful clarification of the basis for delisting a species. Specifically, if an entity is not a “species” within the meaning of the Act, then, by definition, it cannot be a “threatened species” or “endangered species.” The Services will make their determinations based on the best available scientific information for determining whether a group of organisms is a species, subspecies, or

DPS. The Services joint DPS Policy (61 FR 4722, February 7, 1996) already provides sufficient criteria and standards when determining whether vertebrate species are DPSs. In order to be designated a DPS, vertebrate populations must be discrete and significant to the taxon as a whole.

*Comment:* Some commenters were concerned that recovery actions that mix genes of a DPS with other populations of the taxon, or significantly modify the distribution of the DPS, may inadvertently undermine protections of the Act. That outcome may occur if the proposed rule allows for the interpretation that a DPS for which recovery actions have modified genetic makeup or distribution is no longer discrete or significant and therefore does not meet the species definition required for protection under the Act.

*Response:* We understand the commenter’s concern; however, if a population or set of populations qualify as a DPS under the two criteria set out in the DPS Policy it is extremely unlikely that a situation such as described by the commenter would arise, and it is not the Services’ intention to create such situations. Secondly, if, through the process of recovery, a listed DPS begins mixing or interbreeding with other populations of that taxon such that it no longer met the DPS criteria, the Services could still evaluate whether that altered or larger entity is a “species” at risk of extinction and that warrants listing under the Act. As with any listing and delisting determination, the Services would base any such determination on the best available scientific and commercial data and after conducting a status review of the particular “species.”

*Comment:* Several commenters stated that the reference to data in error as a reason for delisting should be retained because it is important for the public to know when an error has been made. Other commenters stated its removal is unnecessary and was not justified by the Services. They also requested the following be added as a fourth factor for delisting as 50 CFR 424.11(e)(4): “The best scientific or commercial data available when the species was listed, or the interpretation of such data, were in error.”

*Response:* The Services have determined this provision is unnecessary because the other delisting factors being finalized in this rule, including whether the listed entity meets the definition of “species” or a determination that a species meets the definition of a “threatened species” or “endangered species,” adequately

capture instances in which a species was listed due to an error in the data, or in the interpretation of that data, at the time of the original classification. Furthermore, our delisting rules will clearly contain the rationale and justification for our proposed and final actions; if a species were listed in error, these rules would provide the requested transparency to the public. The Services had also rarely invoked the prior § 424.11(e)(3) due to confusion about when it should apply, so adopting a more simple structure that tracks the foundational statutory standards is appropriate and will result in more transparent and fulsome explanations of precisely why particular species are no longer found to warrant protection under the Act. We have therefore decided not to make the requested regulatory text change.

*Comment:* Some commenters stated that the revised § 424.11(e) creates an expedited delisting process whereby a 5-year status review automatically leads to delisting. They suggested the proposed changes would trigger that automatic process for delisting, but not for uplisting a species.

*Response:* Section 424.11(e) does not create an expedited or automatic delisting process following a 5-year review. Under the revised regulations finalized in this document, as is the case currently, no changes to a species’ listing status will be made except through a rulemaking that complies with the notice and comment procedures of the Act. This is true regardless of whether a species is considered for uplisting, downlisting, or delisting.

*Comment:* Some commenters suggested the introductory clause of proposed § 424.11(e) be revised to read, “The Secretary will delist a species if the Secretary, based on the best available scientific and commercial data available, including any information received in accordance with procedures set forth in § 424.15 or § 424.16(c), finds that:” They believe this change will help clarify that the public will continue to have a role in reviewing, commenting on, and providing information concerning proposed delistings.

*Response:* The additional language suggested by the commenter is not necessary. The procedures set forth in § 424.15 and § 424.16(c) relate to providing the public notice and an opportunity to review proposed regulations and other decisions such as identification of candidate species. As noted above, any determination by the Services to list, delist, or reclassify a species must be effectuated through the

rulemaking process, which provides the public the right to review and comment on those determinations before they are finalized.

*Comment:* Some commenters suggested the Services should expressly permit a species to be delisted in part of its range because doing so would allow the Services to better tailor the protections of the Act to a species' conservation needs by removing unneeded protections while retaining protections in other parts of its range.

*Response:* The Act authorizes the Services to list "species," which includes species, subspecies, or DPSs. With regard to vertebrate species, the Services may determine there are DPSs within a listed species or subspecies. The Services may then assess the status of those DPSs. Should any of those DPSs be determined not to meet the definition of a threatened or endangered species, they could be delisted under the Act after the Services consider how delisting the DPS would affect the listed species or subspecies. This approach permits the Services to better tailor protections and prohibitions of the Act to the listed DPSs that warrant protection.

*Comment:* Some commenters stated the delisting process should be streamlined to allow for easier removal of species once documentation shows they are no longer threatened or endangered.

*Response:* The process that must be followed to delist or reclassify a species is the same as must be followed in listing a species. The Services are required to assess the status of a species based on the best available scientific and commercial data, applying the five factors, and engaging in the mandatory notice-and-comment rulemaking procedures as noted above.

*Comment:* Some commenters requested that "will" be replaced with "shall" in the first sentence of § 424.11(e) to ensure the Services abide by the strict requirements of the Act.

*Response:* The Services have made this change to make this provision consistent with the other paragraphs of § 424.11.

*Comment:* Some commenters stated that the Services should add conservation plans and agreements as a factor to consider in delisting decisions.

*Response:* The Services consider conservation plans and agreements, as well as all other conservation efforts, in their decisions to list, reclassify, or delist a species. Section 4(b)(1)(A) of the Act requires the Secretary to make determinations solely on the basis of the best scientific and commercial data available after conducting a review of the status of the species and after taking

into account those efforts, if any, by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species when determining whether a species meets the definition of a "threatened" or "endangered" species.

*Comment:* Some commenters requested the regulatory text for the proposed delisting factors at 50 CFR 424.11(e) address these issues by being revised to add "reclassify." They requested that the text would read: "The Secretary will delist or reclassify a species if the Secretary finds that, after conducting a status review based on the best scientific and commercial data available. . . ."

*Response:* As noted in the heading of 50 CFR 424.11, this section addresses factors for listing, delisting, and reclassifying species. Paragraph (e) of that section pertains only to delisting species. Therefore, it would not be appropriate to reclassify a species if any of the three findings in 50 CFR 424.11(e) are made by the Secretary. Reclassification is covered in existing (and revised) 50 CFR 424.11(c).

*Comment:* Some commenters stated that the Services should develop criteria to inform the assessment of the "adequacy" of State or local regulatory programs when making a delisting or downlisting determination. To ensure that future delisting and downlisting decisions are fully explained, documented, and can proceed expeditiously, the Services should develop guidelines establishing the necessary criteria for the development, and the Services' review, of State and local regulatory mechanisms. They further requested the Services convene a working group that includes representatives of State and local governments and members of the regulated community to inform the development of the appropriate guidelines and that the Services make these guidelines available for public review and comment prior to adoption.

*Response:* The Services decline to adopt or develop criteria at this time. The Services may in the future consider developing such criteria, such as in guidance.

*Comment:* Some commenters stated the Act's five listing criteria are not particularly well suited to delisting. While they need to be addressed prior to delisting, they are focused on threats instead of recovery, and, therefore, do not provide a science-based recovery objective. They suggested the Services should provide recovery teams with additional clarity on how to identify recovery goals that are clear, consistent, measurable, and based on the best

available science, in order to ensure that the long-term health and viability of recovered species will be maintained after they are returned to State management.

*Response:* The Services decline to make revisions to these regulations in this regard. First, regarding the suggestion that section 4(a)(1) factors are not relevant to a delisting determination, the statute and case law are in fact clear that the section 4(a)(1) factors are intrinsically central to determining whether a species meets the definition of a "threatened species" or an "endangered species," whether the question is asked in the context of a potential listing or a potential delisting. [See discussion above and citation to the *Friends of Blackwater* case.] In response to the suggestion to provide guidance to recovery teams, the Services note that they rely on their Joint Interim Recovery Planning Guidance to provide guidance to recovery teams and others on developing recovery goals.

*Comment:* Some commenters stated the five listing criteria should be based on "known" data and information, instead of making assumptions in order to list a species.

*Response:* The Services are required to make listing decisions based on the best available scientific and commercial data. Those data are not required to be free from uncertainty. We are not required to wait to make listing determinations until better or more concrete science is available, and the Act requires that we base our decision on the best available data. See, e.g., *San Luis & Delta-Mendota Water Authority v. Jewell*, 747 F.3d 581, 602 (9th Cir. 2014) ("best available" standard does not require perfection or best information possible) (citing *Building Indus. Ass'n v. Norton*, 247 F.3d 1241, 1246 (D.C. Cir. 2001)); *Alaska v. Lubchenco*, 825 F. Supp. 2d 209, 223 (D.D.C. 2011) (same); *Maine v. Norton*, 257 F. Supp.2d 357, 389 (D.Me. 2003) (noting that the "best available" standard "is not a standard of absolute certainty").

*Comment:* Some commenters expressed agreement that the standard and criteria for delisting should be no more than that for listing. The standards should be the same but for one exception the FWS has previously recognized. The commenter stated that the prioritization to list [sic] foreign species should be greater than for domestic listed species because of the lack of benefits for foreign listed species in the negative effects in the balance.

*Response:* We assume the commenter to mean 'prioritization for delisting',

rather than ‘list’. The Services agree that the standards for listing and delisting are the same. The Act does not allow the Services to use different standards with regard to listing domestic and foreign species. FWS recognizes that the benefits of listing species that are not under U.S. jurisdiction may be more limited than the benefits that domestic species realize and allocates its funding to reflect this difference. With the limited resources that FWS allocates to foreign species, we prioritize those where listing can result in conservation, for example, species that are in trade across U.S. borders.

*Comment:* Some commenters noted that the proposed regulations include changes in paragraph designations and cross-references, but not in the substantive content of certain provisions, in particular new paragraphs (f) and (g). The commenter requested that these provisions be modified to better take into account State and foreign nation programs and species listings under the Convention on International Trade in Endangered Species (CITES) when making listing determinations.

*Response:* The Services decline to make this change. Those provisions sufficiently take into account State and foreign programs and CITES listings when making listing determinations under the Act and do not merit revision at this time.

#### Comments Regarding Not Prudent Determinations Comment

Several commenters thought the Services should retain as a basis for a not-prudent determination that designation of critical habitat for a species would not be beneficial to its conservation. Some noted that this approach would be consistent with legislative history and several court decisions that cited to the legislative history. See *Natural Resources Council v. U.S. Dep’t of the Interior*, 113 F.3d 1121 (9th Cir. 1997); *Conservation Council of Hawaii v. Babbitt*, 2 F. Supp. 2d 1280 (D. Hawaii 1998).

*Response:* The House Report for the 1978 amendments contains statements indicating that Congress intended for the Services to designate critical habitat except in those rare instances when critical habitat would not be “beneficial to” or “in the best interests of” the species. H.R. Rep. No. 97–1625, at 16–18 (1978). Consistent with this understanding of the authority to make not prudent findings, we identify in these revised regulations a number of specific circumstances in which we anticipate that it would not be prudent to designate critical habitat because it

would not benefit the species. This final regulation includes some circumstances that were already captured in the current regulations at § 424.12(a)(1)(ii) and some additional circumstances that we have identified based on our experience in designating critical habitat.

Basing prudence determinations on whether particular circumstances are present, rather than on whether a designation would be “beneficial,” provides an interpretation of the statute that is clearer, more transparent, and more straightforward. It also eliminates some confusion reflected in the courts’ decisions in the *NRDC* and *Conservation Council* cases. In those decisions, the courts remanded the not prudent determinations at issue because the FWS had not articulated a rational connection between the facts and the agency’s conclusion that designating critical habitat would not be beneficial for the species. 113 F.3d at 1125–26; 2 F. Supp. 2d at 1284. Although the courts held that FWS had failed to weigh the benefits and risks, or had failed to consider potential benefits beyond consultation benefits, the courts’ reasoning indicates that the decisions were based on the insufficiency or absence of any factual analyses of the specific data available. The court in *NRDC* also found that, in implementing the regulations that were in place at the time, FWS had erroneously applied a “beneficial to most of the species” standard instead of a “beneficial to the species” standard. Moreover, the decisions’ reliance on the legislative history statements equating “not prudent” with “not beneficial to the species” is undermined by the fact that ultimately Congress did not choose to include the “not beneficial to the species” language as a standard or limitation in the statute.

Further, we note that in both decisions the courts seem to have considered principles related to the discretionary process for weighing the impacts of critical habitat designation under section 4(b)(2) of the Act, which do not govern “not prudent” determinations. In part, this appears to be due to the courts’ interpretations of statements the Services had made regarding their intentions in applying the regulatory provisions. See 113 F.3d at 1125 (citing 49 FR 38900, 38903 (1984) (noting that the Services would balance the risks to the species of designating and the benefits that might derive from designation and would forgo designations of critical habitat where the possible adverse consequences would outweigh the benefits)). We now take the opportunity

to clarify the separate nature of “not prudent” designations and the discretionary analyses that we may elect to take under section 4(b)(2) of the Act. We intend these evaluations to address separate factors.

We emphasize that determining that a species falls within one or more of the circumstances identified in the revised regulations does not bring the prudence analysis to an end. As the courts in both *NRDC* and *Conservation Council* found, in determining whether or not designation of critical habitat is prudent, the Services must take into account the specific factual circumstances at issue for each species. 113 F.3d at 1125; 2 F. Supp. 2d at 1287–88. However, as we clarify below, this does not require the Services to engage in the type of area-by-area weighing process that applies under section 4(b)(2) of the Act.

*Comment:* Numerous commenters stated that the expansion of circumstances when the Services may find critical habitat designation to be not prudent is not consistent with the Act or congressional intent. Commenters expressed concerns that this change will result in numerous species being denied the protections afforded by critical habitat designations. They also stated that determinations that critical habitat is not prudent will be much more common under the proposed regulations than they have been in the past, and that this is a major change from the current regulation.

*Response:* It is permissible under the Act, as well as the current and revised regulations, for the Services to determine that designating critical habitat for a species is not prudent. See 16 U.S.C. 1533(a)(3)(A) (directing the Secretary to designate critical habitat for listed species concurrent with listing that species “to the maximum extent prudent and determinable”). The changes to the regulations are not intended to expand the circumstances in which the Services determine that designation of critical habitat is not prudent. Rather, the revisions are intended to provide clarity and specificity with respect to the circumstances in which it may not be prudent to designate critical habitat by replacing the vague phrase “not beneficial.” Congress recognized that not all listed species would be conserved by, or benefit from, the designation of critical habitat, but did not specify what those circumstances might be. While the statutory language allows us to forgo designating critical habitat in rare circumstances in which designation of critical habitat does not contribute to the conservation of the

species, the Services recognize the value of critical habitat as a conservation tool and expect to designate it in most cases. Therefore, the Services anticipate that not prudent findings will remain rare and would be limited to situations in which designating critical habitat would not further the conservation of the species.

*Comment:* Several commenters stated that the Services may only properly make a not prudent determination if there is specific information that a species would be harmed by designating critical habitat.

*Response:* Congress did not impose any such limitation on the Secretaries' authority to make not prudent determinations. The statutory language requires that the Services designate critical habitat "to the maximum extent prudent." The Services have long interpreted that language to apply to a broader range of circumstances beyond those in which a species would be harmed by the designation. Other circumstances occasionally may arise where a designation is not wise, such as when a designation would apply additional regulation but not further the conservation of the species. The current regulations (81 FR 7414; February 11, 2016, and at 50 CFR 424.12(a)(1)) allow for a determination that critical habitat is not prudent for a species if such designation would: (1) Increase the degree of threat to the species through the identification of critical habitat, or (2) not be beneficial to the species. The determination that critical habitat is not prudent for a listed species is uncommon, especially because most species are listed, in part, because of impacts to their habitat or curtailment of their range. Most not prudent determinations have resulted from a determination that there would be increased harm or threats to a species through the identification of critical habitat. For example, if a species was highly prized for collection or trade, then identifying specific localities of the species could render it more vulnerable to collection and, therefore, further threaten it. However, Congress did not limit "not prudent" findings to those situations; in some circumstances, a species may be listed because of factors other than threats to its habitat or range, such as disease. In such a case, a not prudent determination may be appropriate.

*Comment:* Several commenters suggested additional circumstances where designation may not be prudent, including when the economic and societal impacts outweigh the benefits to the species, when areas to be designated are already under Federal

management for other purposes, or when areas are covered by a habitat conservation plan under section 10(a)(1)(B) or other conservation plan.

*Response:* Under section 4(b)(2) of the Act, the Secretaries have the discretion to determine whether areas should be excluded from a critical habitat designation if the benefits of exclusion outweigh the benefits of inclusion, unless the exclusion will result in the extinction of the species concerned. A discretionary weighing analysis under section 4(b)(2) can involve economic or other impacts and land management of the areas concerned. We note that the "not prudent" determination and any section 4(b)(2) weighing are separate processes. Because of the specific reference in section 4(b)(2) to weighing of benefits, we conclude that Congress intended the prudency language to address other matters, as reflected in this final regulation.

As a result, we do not infer from the *NRDC* and *Conservation Council* decisions that, to determine whether or not it is prudent to designate critical habitat, the Services must undertake a balancing or weighing of benefits akin to the section 4(b)(2) analysis for determining whether or not to exclude specific areas from a critical habitat designation. We now take the opportunity to clarify the separate nature of "not prudent" designations and the discretionary analyses that we may elect to take under section 4(b)(2) of the Act. First, in making prudency determinations, the Services evaluate critical habitat designation *as a whole* for that species, while in making exclusion determinations under section 4(b)(2) the Services must evaluate *specific areas*. Second, as referenced earlier, unlike exclusion analyses under section 4(b)(2), the statute does not expressly require a balancing of benefits. Third, prudency determinations must be made at the time of listing based on the best scientific information available at that time, while exclusion determinations are only made if the Secretary first determines the boundaries of the areas that meet the definition of "critical habitat." Based on these differences, prudency determinations must address different factors, on a different scale, based on a different set of data, and usually at a different time from section 4(b)(2) analyses. Indeed, a "not prudent" determination precludes the need to undertake the process of identifying specific areas and considering the impacts of designation of such specific areas under section 4(b)(2).

*Comment:* Several commenters objected to the Services making a not prudent determination if areas within U.S. jurisdiction would provide only negligible conservation value to a species that occurs primarily outside the jurisdiction of the United States. Some expressed concern that "negligible" is vague and undefined. Some stated that this course of action is contrary to the plain language of the Act and does not consider the need for migratory or transitory areas that contribute to the conservation of the species.

*Response:* In our 2016 revision of these regulations (81 FR 7414; February 11, 2016), we noted in the preamble that the consideration of whether areas within U.S. jurisdiction provide conservation value to a species that occurs in areas primarily outside U.S. jurisdiction could be a basis for determining that critical habitat designation would not be prudent (81 FR 7432; February 11, 2016). For the purposes of clarity and transparency, we proposed to add this consideration directly to the regulatory text. In the preamble to our proposed regulations, we explained that we would apply this determination only to species that primarily occur outside U.S. jurisdiction and where no areas under U.S. jurisdiction contain features essential to the conservation of the species.

The dictionary defines "negligible" to mean "so small or unimportant as to be not worth considering; insignificant." In the context of "negligible conservation value" we mean that the conservation value of habitats under U.S. jurisdiction would be insignificant to the conservation of the listed entity. The circumstances when a critical habitat designation would provide negligible conservation value for a species that primarily occurs outside of U.S. jurisdiction will be determined on a case-by-case basis, and factors such as threats to the species or its habitat and the species' recovery needs may be considered.

Finally, if areas under U.S. jurisdiction are important to the species' conservation for migratory or transitory purposes, we expect that we would not make a determination that critical habitat is not prudent. Based on the Services' history of implementing critical habitat, we anticipate that not prudent determinations will continue to be rare.

*Comment:* Some commenters suggested that critical habitat carries substantive and procedural benefits aside from those arising from the obligation to consult under section 7, even if consultation through section 7 is the sole regulatory mechanism for

protecting critical habitat under the Act. These benefits include educating the public and State and local governments about the importance of certain areas to listed species, assisting in species recovery planning efforts, protecting against unanticipated Federal actions affecting the habitat that could be important in allowing the species time to adapt or demonstrate possible resilience to encroaching effects of climate change, or establishing a uniform protection plan prior to consultation. They cited the decisions in *NRDC and Conservation Council*, 113 F.3d at 1121; 2 F. Supp. 2d at 1280. They also noted that the Services acknowledged such benefits at the time of adopting the prior regulations, at 81 FR 7414–7445 (Feb. 11, 2016) (describing “several ways” that critical habitat “can contribute to the conservation of listed species”). In light of the myriad benefits of designating, the commenters assert that the threat of climate change actually emphasizes the importance of designating critical habitat rather than justifying creating an additional exception from designation where threats to habitat stem from climate change. They further urge that designation can still benefit a species even if section 7 alone cannot address all the threats to a species’ habitat.

*Response:* Although the direct benefit that the statute provides for designated critical habitat is through section 7 consultation, depending on the factual circumstances surrounding a given species, designating critical habitat may carry incidental additional benefits to the species beyond the protections from section 7 consultation. These regulatory revisions would not preclude us from designating critical habitat if any of the specific circumstances that the revised regulations identify, including climate change, is present—when we determine that designating critical habitat could still provide for the conservation of the species. However, through implementing the Act we have encountered situations in which threats to the species’ habitat leading to endangered or threatened status stem solely from causes that cannot be addressed by management actions identified through consultations under the destruction or adverse modification standard of section 7(a)(2) of the Act.

In those situations, a designation of critical habitat could create a regulatory burden, as well as divert resources away from listing and designating critical habitat for other species, without providing any overall conservation value to the species concerned. Examples would include species experiencing threats stemming from

melting glaciers, sea level rise, or reduced snowpack but no other habitat-related threats. In such cases, a critical habitat designation and any resulting section 7(a)(2) consultation, or conservation effort identified through such consultation, could not ensure protection of the habitat. The revised regulations identify this situation as a circumstance in which designation of critical habitat is often not prudent, but determining that a species falls within this category does not make a not prudent finding mandatory, nor is the list of circumstances in which designation may not be prudent exhaustive. As we discussed in response to an earlier comment, in such situations (as with all not prudent analyses), the Services would need to take into account the specific factual circumstances at issue for the given species.

*Comment:* Several commenters expressed concern that the proposed regulatory changes to the circumstances in which the designation of critical habitat would not be prudent would result in the Services not designating critical habitat for species threatened by climate change. This outcome would eliminate the possibility of designating unoccupied critical habitat that could provide habitat for species under a changing climate in the future.

*Response:* The Services intend to make not prudent determinations only in the rare circumstance when the designation of critical habitat would not assist in conserving the species. For example, the Services might conclude that Federal action agencies could take no meaningful actions to address the threats to the habitat of a particular species that might arise from climate change. Under these circumstances, the Services might determine that it is not prudent to designate critical habitat because the designation would not be able to further the conservation of the species in the face of these threats, and our resources are better spent on other actions that assist in the conservation of listed species. These regulatory revisions would not preclude us from designating occupied or unoccupied critical habitat if any of the specific circumstances that the revised regulations identify, including climate change, is present if we determine that designating critical habitat could still provide for the conservation of the species.

*Comment:* Several commenters stated that the Services should be required to determine that a designation is not prudent when any of the situations listed in the proposed regulation at § 424.14(a)(1) exist, rather than stating

that the Secretary “may, but is not required to, determine that a designation would not be prudent.” Others thought that use of phrases such as “not limited to” was too open-ended and would result in more not-prudent determinations. Both sets of commenters believe the proposed approach leaves too much discretion to the Services.

*Response:* We recognize that some commenters would appreciate the greater certainty that would occur if a not prudent determination were mandatory rather than discretionary, while other commenters believe that critical habitat designation should be prudent in almost all cases. However, the question regarding whether designating critical habitat is prudent must be addressed on a case-by-case basis. Each species is different, and the threats they face can be complex; a one-size-fits-all approach is not required by the statute and may not be in the best interests of the species. The inclusion of “but not limited to” to modify the statement “the factors the Services may consider include” allows for the consideration of circumstances where a determination that critical habitat is not prudent would be appropriate. It is important to expressly reflect this flexibility in the revised regulations. Any future rule that includes a not prudent determination will clearly lay out the Services’ rationale as to why a not prudent determination is appropriate in that particular circumstance.

In some situations, the Services may conclude, after a review of the best available scientific data, that a designation would nevertheless be prudent even in the enumerated circumstances.

*Comment:* Several commenters thought the Services should simply delete § 424.12(a)(1)(ii) instead of revising it. They further stated that the Act does not require that a species currently be threatened by habitat loss before critical habitat is designated and protected, and the spirit of the Act would not be served by the imposition of such a requirement by regulation.

*Response:* The Services are finalizing the proposed revisions to § 424.12(a)(1)(ii) because we have concluded that they will provide the public and the Services with a clearer, more transparent, and more straightforward interpretation of when it may not be prudent to designate critical habitat. Critical habitat is a conservation tool under the Act that can provide for the regulatory protection of a species’ habitat. The previous regulations and these revisions do not establish a

requirement that a species be threatened by the modification, fragmentation, or curtailment of its range for critical habitat to be prudent to designate. However, the regulation and revisions establish a framework whereby if we list a species under the Act and determine through that process that its habitat is not threatened by destruction, modification, or fragmentation, or that threats to the species' habitat stem primarily from causes that cannot be addressed by management actions, then the Secretary may find that it would not be prudent to designate critical habitat. Examples would include species experiencing threats stemming from melting glaciers, sea level rise, or reduced snowpack but no other habitat-based threats. In such cases, a critical habitat designation and any resulting section 7(a)(2) consultation, or conservation effort identified through such consultation, could not ensure protection of the habitat. While this provision is intended to reduce the burden of regulation in rare circumstances in which designating critical habitat would not contribute to conserving the species, the Services recognize the value of critical habitat as a conservation tool and expect to designate it in most cases.

*Comment:* Some commenters suggested that, by allowing for not prudent determinations where the threats stem solely from causes that cannot be addressed through management actions resulting from consultation under section 7(a)(2) of the Act, the Services would be pre-judging future Federal actions and outcomes of the consultations without basis for doing so. They cited two decisions from the Ninth Circuit Court of Appeals holding that the Services may not rely on the availability of other protections as a basis for not carrying out the mandatory duty of designating critical habitat.

*Response:* The Services will make a determination as to whether a designation of critical habitat is prudent based upon the best scientific data available to us at the time of listing. This determination includes a thorough analysis of the factors contributing to listing; therefore, we will be able to assess the degree to which these factors can be—not whether they will be—influenced by consultations under the destruction or adverse modification standard of section 7(a)(2) of the Act. In the rare circumstances in which we determine that the threats to the species' habitat are of such a nature that Federal action agencies are unable to modify or manage their actions such that the underlying causes posing risks to the

habitat can be affected or influenced, then conducting consultations under the destruction or adverse modification standard of section 7(a)(2) of the Act on the impacts of the Federal action on critical habitat would not further the conservation of the species, and designation of critical habitat would be not prudent. If the best available information changes over time such that habitat-based human intervention is possible, we can designate critical habitat at that time. In reaching the conclusion that it may not be prudent to designate in such circumstances, we are not relying on the existence of other protections and thus the cited cases are not relevant. Our interpretation of the statutory term “prudent” set forth in this rule is not contingent on there being other available protections.

#### *Comments Regarding Unoccupied Critical Habitat*

*Comment:* Numerous commenters stated that the Services have not justified the proposed change from current regulations that were recently amended in 2016.

*Response:* On May 12, 2014, the Services published a proposed rule revising the regulations at § 424.12 (79 FR 27066), in which we changed the step-wise approach we had been using since 1984 to allow for simultaneous consideration of occupied and unoccupied habitat according to the definition of “critical habitat” in the Act. We finalized the rule on February 11, 2016 (81 FR 7414), eliminating the sequenced approach to considering occupied habitat before unoccupied habitat. In carrying out Executive Order 13777, “Enforcing the Regulatory Reform Agenda,” the Department of the Interior (DOI) and the National Oceanic and Atmospheric Administration (NOAA) published documents in the **Federal Register** in summer 2017 (82 FR 28429, June 22, 2017; 82 FR 31576, July 7, 2017) requesting public comment on how the agencies could implement regulatory reform and improve the efficiency and effectiveness of regulations. Both of these documents resulted in input from States, trade organizations, and private landowner groups indicating that the Services should go back to considering occupied habitat before unoccupied habitat when designating critical habitat.

This final rule responds to those concerns as well as comments made on the proposed rule here by restoring the requirement that the Secretary will first evaluate areas occupied by the species. In addition, this approach furthers Congress's intent to place increased importance on habitat within the

geographical area occupied by the species when it originally defined “critical habitat” in 1978. The Conference Report accompanying the amendments specified that Congress was defining “critical habitat” as “specific areas *within* the geographical area occupied by the species at the time it is listed that is essential to the species conservation and requires special management.” H.R. Rept. No. 95–1804 (emphasis in the original). The report went on to state in the paragraph that followed: “In addition, the Secretary may designate critical habitat outside the geographical area occupied by the species at the time it is listed if he determines such areas are essential for the conservation of the species.”

*Comment:* Returning to the sequenced approach of considering occupied habitat first will result in critical habitat designations that are not adequate to conserve species that may face range shifts into previously unoccupied habitat that will be species' best chance for survival in a rapidly changing environment as a result of climate change.

*Response:* As the Act requires, we designate unoccupied critical habitat when it is essential to the conservation of the species. For species threatened by climate change, we will designate unoccupied habitat if we determine that occupied areas are inadequate to ensure the conservation of the species and we identify unoccupied areas that are essential for the conservation of the species (including that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area currently contains one or more of those physical or biological features essential to the conservation of the species).

In specific circumstances where the best scientific data available indicate that a species may be shifting habitats or habitat use, it is permissible to include specific areas accommodating these changes in a designation, provided that the Services can explain why the areas meet the definition of “critical habitat.” In other words, we may find that an unoccupied area is currently “essential for the conservation” even though the functions the habitat is expected to provide may not be used by the species until a point in the future. The data and rationale on which such a designation is based will be clearly articulated in our proposed rule designating critical habitat. The Services will consider whether habitat is occupied or unoccupied when determining whether to designate it as critical habitat and use the best available scientific data on a case-by-

case basis regarding the current and future suitability of such habitat for recovery of the species.

*Comment:* Many commenters stated that the changes to the procedures for designating unoccupied habitat do not adequately account for the species' recovery needs. Relatedly, some commenters suggested that the Services designate enough critical habitat at the time of listing to ensure that a species can recover.

*Response:* Although designation of critical habitat and the development of recovery plans are guided by two separate provisions of the Act and implementing regulations, the ultimate goal of each is the same: To provide for the conservation of listed species. "Conservation" is defined as the use of all methods and procedures that are necessary to bring any endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary, *i.e.*, the species is recovered in accordance with § 402.02. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

In evaluating which areas qualify as critical habitat (subject to section 4(b)(2) exclusions), we follow the statutory requirements. Designation of critical habitat is one important tool that contributes to recovery, but a critical habitat designation alone may not be sufficient to achieve recovery. Indeed, given the limited regulatory role of a critical habitat designation (*i.e.*, through section 7's mandate that Federal agencies avoid destruction or adverse modification of critical habitat), it is generally not possible for a critical habitat designation alone to ensure recovery. Also, we must designate critical habitat according to mandatory timeframes, very often prior to development of a formal recovery plan. See *Home Builders Ass'n of Northern Cal. v. U.S. Fish and Wildlife Service*, 616 F.3d 983, 989–90 (9th Cir. 2010). However, although a critical habitat designation will not necessarily ensure recovery, it will generally further recovery because the Services base the designation on the best available scientific data about the species' habitat needs at the time of designation.

*Comment:* Many commenters did not agree with the Service's proposal that

we would consider whether unoccupied areas could result in more efficient conservation when determining whether these areas are essential, for a variety of reasons. Some stated that "less-efficient conservation" is not defined and no thresholds were offered for determining what would be considered efficient conservation. Others thought this provision would grant the Services overreaching discretion to designate unoccupied areas that is not based on what is actually essential for conservation. Others stated that a decision on whether unoccupied areas are essential for conservation should be a scientific determination. Some commenters stated that the Services should not consider societal conflicts when designating critical habitat. They further stated that determining whether an area is essential for the survival or recovery of a species is an entirely different question than determining whether managing that area would be economically "efficient."

*Response:* Based on the confusion generated by this provision, we have removed the provision allowing the designation of unoccupied habitat where a designation limited to occupied habitat would result in less efficient conservation. We will only consider whether unoccupied areas are essential to the conservation of a species when occupied areas are not sufficient to conserve the species. When the Services propose to designate specific areas pursuant to section 3(5)(A)(ii), we will explain the basis for the determination, including the supporting data. Thus, the Services' explanation will be available for public comment in the context of each proposed critical habitat designation.

*Comment:* Some commenters suggested that the Act requires concurrent consideration of potential occupied and unoccupied critical habitat together, based on data showing occupancy at the time of listing as well as at the time of designating critical habitat, which could be later. The commenters are concerned that, if the Services prioritize occupied habitat and are not designating until later in time, some areas that the species used to occupy at the time of listing will lose the opportunity for protection. They suggest this course of action would violate the approach of "institutionalized caution" mandated in *T.V.A. v. Hill*, 437 U.S. 153, 194 (1978).

*Response:* As explained in the preamble to the final rule in 2016, the Services acknowledge that occupancy is to be determined with reference to where the species could be found at the time of listing. Where designation is

taking place later in time, the Services will rely on evidence that was contemporaneous with the time of listing where possible or, where necessary, may rely on more current evidence of distribution if there is a reasonable basis to conclude that it reflects distribution at the time of listing. Thus, the Services are able to appropriately analyze areas for possible inclusion as occupied critical habitat using the touchstone of occupancy at the time of listing even where designation takes place later in time. This course of action adequately fulfills the Services' statutory mandate to designate critical habitat. We note that *T.V.A. v. Hill* was decided in the context of a section 7 consultation and an earlier version of the statute that predated even the statutory definition of "critical habitat." The decision does not shed light on proper interpretation of the statutory provisions addressing designation of critical habitat.

*Comment:* Several commenters were concerned that the Services must commit to using the best scientific data available when designating unoccupied areas as critical habitat.

*Response:* We are mandated by the Act to use (and are committed to using) the best scientific data available in determining any specific areas as critical habitat, regardless of occupancy.

*Comment:* Some commenters stated that landowner willingness is an undefined term and will lead to confusion and inconsistent implementation. They further stated that success of conserving species is dependent on working with non-Federal landowners, and facilitating a process where they would be relieved from the responsibility of conserving species will put an undue burden on Federal and State landowners.

*Response:* We recognize that "landowner willingness" is not a defined term, but we are not required to define every term used in a preamble. Rather, it is appropriate to give such phrases their ordinary meaning in the context of making case-specific determinations. Given the varied circumstances that may be involved in designation of critical habitat, we conclude that it is a relevant factor to consider when we evaluate whether an unoccupied area is likely to contribute to the conservation of the species. We agree that conservation of most listed species is dependent on working with non-Federal landowners. That said, section 7 of the Act places special responsibility on Federal agencies to provide for the conservation of listed species. Therefore, it is appropriate to place more responsibility, relative to the

public generally or to private landowners, on Federal landowners to conserve listed species.

*Comment:* Some commenters stated that the definition of “essential” in the proposed regulations would limit Secretarial discretion to designate unoccupied areas as critical habitat.

*Response:* The statute limits Secretarial discretion to designate unoccupied areas to when we can determine such areas are essential to the conservation of a species. In the final regulation we explain that to be a specific area that is essential to the conservation there must be a reasonable certainty that the area currently contains one or more of those physical or biological features that are essential to the conservation of the species. It is appropriate through regulation to describe the circumstances or considerations that would lead the Secretary to conclude that unoccupied habitat is essential. Consistent with the requirements of section 3(5)(A)(ii), the question of whether unoccupied areas are essential can be complex and include an evaluation of which unoccupied areas are best suited to provide for long-term conservation. For example, unoccupied areas might be in Federal or conservation ownership with willing partners already committed to working on restoration and reintroduction. Some unoccupied areas could be free of threats or face reduced threats in comparison with other areas. Some unoccupied areas might require fewer financial and human resources in order to contribute to the conservation of a species than other areas. These are the types of case-specific factors that could be considered when making a determination that we are reasonably certain an area will contribute to the conservation of a species.

*Comment:* Numerous commenters raised issues with the proposed regulatory language that unoccupied areas needed to have a “reasonable likelihood” of contributing to conservation in order to be designated as critical habitat. Some thought this language provided too much deference to the willingness of the current landowner. Others raised concerns that the preamble language allowing the Services to use a lower threshold than “likely” to contribute to conservation would allow the Services too much discretion to designate unoccupied areas that would not be likely to contribute to species conservation and could lead to arbitrary decisions. Others suggested additional considerations of how we should determine that an area has a “reasonable likelihood” of contributing to the species conservation.

*Response:* In this final rule, we replace “reasonable likelihood” with “reasonable certainty.” As described above, in light of the public comments that the “reasonable likelihood” language was undefined, unclear, and could allow too much discretion to designate areas that would not ultimately contribute to species conservation, we concluded that the language of this final rule better reflects the need for high confidence that an area designated as unoccupied critical habitat will actually contribute to the conservation of the species. We consider the phrase “reasonable certainty” to confer a higher level of certainty than “reasonable likelihood” but not to require absolute certainty.

*Comment:* Some commenters stated that the Services should require a higher bar for designation of unoccupied critical habitat and require that unoccupied habitat be “habitable” as is, without restoration. Other commenters recommended that the Services require that unoccupied areas contain all the physical or biological features that occupied habitat has in order to designate them, or, if the Services determine they have the authority to designate unoccupied lands that require restoration, they should expressly declare a policy that doing so is a disfavored approach, only appropriate in dire circumstances.

*Response:* After considering these comments carefully, we agree that requiring reasonable certainty that any unoccupied area has, at the time of the designation, one or more of those physical or biological features that are essential to the conservation of the species comports with the language, legislative history, and purposes of the Act. Therefore, we have changed the regulatory text to substitute “reasonable certainty” for “reasonable likelihood” and are requiring that one or more of the physical or biological features be present.

*Comment:* Numerous commenters stated that the Services should have specific criteria for designating unoccupied critical habitat. They suggested criteria specifying: whether the area currently supports usable habitat for the species; the extent to which restoration may be needed for the area to become usable habitat; the financial and other resources available to accomplish any needed restoration; any landowner or other constraints on such restoration; how valuable the potential contributions will be to the biology of the species; and how likely it is that section 7 consultations will be triggered by Federal agency actions in the area.

*Response:* We agree and have clarified that one or more of those physical or biological features essential to the conservation of the species must be present for an area to be designated, even an unoccupied area.

*Comment:* A commenter recommended adding “significantly” to the last sentence of unoccupied habitat so that it reads, “the Secretary must determine that there is a reasonable likelihood that the area will significantly contribute to the conservation of the species.”

*Response:* The insertion of “significantly” is not necessary because the Act already requires unoccupied critical habitat to be “essential,” and addition of the term “significantly” would be vague and unclear. Therefore, we decline to adopt the commenter’s suggestion and will continue to rely on the statutory standard that unoccupied critical habitat must be “essential for the conservation of” a species.

*Comment:* Some commenters suggested that the Services have not adequately identified a reasonable basis to shift back to the sequential approach for designating critical habitat (of focusing first on occupied habitat and then looking to unoccupied habitat only if limiting to the first type of habitat would be inadequate to conserve the species). They cited to the explanation provided by the Services in a 2014 rulemaking action that proposed revisions to this provision that indicated the Services did not believe Congress mandated this restriction and that such a restriction was unnecessary in light of the statutory limitation of designation of unoccupied areas to those that are “essential” for the species’ conservation. *See, e.g.,* 79 FR 27066, 27073 (May 12, 2014). They stated that, in the face of such a definitive rejection of the approach in 2016, the Services now propose to revert to a version of the prior approach based merely on perceptions that the Services intended to designate expansive areas of unoccupied habitat.

*Response:* The Services’ preamble statements at the time of proposing the 2016 amendments to these regulations (in 2014) are not binding law, and we have explained the reasons for reconsidering these provisions. Even if the Services were correct in 2014 that the provision requiring sequencing of occupied and unoccupied habitat was not necessary, there was no suggestion that the prior provision had exceeded the Services’ discretion. It is permissible for the Services to nevertheless reincorporate a similar provision back into the regulations that we have concluded is a preferable approach.

While we initially proposed during this rulemaking to adopt a slightly different approach from the one we followed prior to 2016 (in that we proposed to allow for designation of unoccupied areas in lieu of occupied areas where doing so would result in “more efficient conservation.”), a number of commenters expressed concerns with that approach as being vague in that it introduces uncertainty and unpredictability into the determination and may be difficult to implement. After considering those comments, we concluded that the concept ultimately was not the best interpretation of the statute. Therefore, the approach in this final rule has been changed to be more aligned with the approach taken in the regulations prior to 2016.

*Comment:* The Services should require that both (1) occupied areas are insufficient and (2) designation of occupied areas would result in less-efficient conservation.

*Response:* As explained above, in response to comments that the “efficient conservation” concept was vague, we have removed the provisions regarding “efficient conservation.” Thus, unoccupied areas can be considered for potential designation only if limiting the designation to occupied areas would be inadequate to ensure recovery.

*Comment:* One State recommended that the Services develop a policy or metric to determine whether a particular area should be designated as critical habitat in unoccupied areas.

*Response:* This final rule explains the Services’ general parameters for designating critical habitat. The details of why a specific area is determined to be essential to the conservation of the species will be in part informed by any generalized conservation strategy that may have been developed for the species, which is an optional step, and clearly articulated in our proposed and final rules designating critical habitat. That determination is a fact-specific analysis and is based on the best available scientific data for the species and its conservation needs. The proposed rule for each critical habitat designation will be subject to public review and comment.

#### *Comments on Geographical Area Occupied by the Species*

*Comment:* We received multiple comments stating that the regulatory definition of the “geographical area occupied by the species” gives the Services too much discretion and allows for the inclusion of areas that are not occupied by the species. Some commenters cited the court’s decision in *Arizona Cattlegrowers’ Ass’n v. Salazar*,

606 F.3d 1160, 1166 (9th Cir. 2010), in support of this view. Some commenters requested that the Services revise the definition to avoid inclusion of areas that are only used temporarily or periodically by the species, or modify the definition to explicitly equate occupancy with sustained or regular use rather than mere presence or occurrence of the species. Several commenters requested we remove the term “range” because, as indicated by the statute’s use of this word in section 4(c), “range” is a broader concept than “geographical area occupied by the species” and can include unoccupied areas. Some commenters requested that the existing definition be withdrawn.

*Response:* We are not revising the regulatory definition of “geographical area occupied by the species” at this time.

*Comment:* Numerous commenters stated that protection of habitat is a key to species’ survival and that the Services should not alter their existing definition of “geographical area occupied by the species.” Commenters stated that changing this definition could have a significant negative impact on habitat conservation. Multiple commenters stated that the existing regulatory definition should not be changed, because it appropriately reflects the importance of wildlife connectivity to the survival of migratory species in particular. Some comments also stated that, because the Services did not propose specific changes to the regulations, they could not provide meaningful comments regarding this regulation.

*Response:* We are retaining the existing regulatory definition for “geographical area occupied by the species” and are not revising the definition as part of this rulemaking.

*Comment:* Multiple commenters stated that the current regulatory definition for “geographical area occupied by the species” inappropriately allows the Services to determine occupancy at the time of listing based on presumed migratory corridors or based on indirect or circumstantial evidence. Several commenters also stated that occupancy should be based on population-level information, and that it cannot be determined based on an “occurrence” of a species or on data for individual animals.

*Response:* Although we requested comment on the definition of the phrase “geographical area occupied by the species,” we have decided not to include such a definition in the regulations at this time.

*Comment:* We received comments stating that the existing regulatory definition for “geographical area occupied by the species” could be in conflict with the proposed changes to 50 CFR 424.12(b)(2), where the Secretary is given discretion to designate critical habitat “at a scale determined by the Secretary to be appropriate, specific areas outside the geographical area occupied by the species only upon a determination that such areas are essential for the conservation of the species.” In order to remove this conflict commenters suggested removing, “Such areas may include those areas used throughout all or part of the species’ life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).”

*Response:* The existing regulatory definition for “geographical area occupied by the species” is not in conflict with the changes to 50 CFR 424.12(b)(2) regarding the designation of unoccupied areas because areas that are not permanently occupied are still considered occupied for both determining the range of a species and when designating critical habitat. Some areas that may not be permanently occupied by the species may be crucial for a species to complete necessary phases of its life cycle. For example, terrestrial amphibians might only inhabit breeding ponds for a short time of year, but without these ponds the species would not be able to successfully reproduce.

*Comment:* Some commenters stated that use of the term “life-cycle” is confusing and requires further clarification. The commenters noted that a species’ occupancy of an area and its habitat needs from such area may fundamentally change depending upon the species’ life-cycle stage, and that an area and its supporting habitat features may be “essential” to conservation of the species in certain life stages, but not others. The commenters requested that the Services address these complexities by further detailing, in regulatory text, how they will identify the species’ life-cycle stages, and habitat features for such life-cycle stages, requiring designation of critical habitat.

*Response:* While we agree with the comment that a species’ distribution and habitat use can change depending upon the particular stages in its life cycle, we disagree that additional clarification within our implementing regulations is required to explain how this possibility will affect the designation of critical habitat. The existing regulatory definition for

“geographical area occupied by the species” makes clear that any areas used by the species, at any one or more stages of its life history, are considered “occupied” areas. To determine what specific areas within the “geographical area occupied by the species” meet the definition of critical habitat, the Services must evaluate the best available scientific data regarding that species’ habitat requirements. A clear rationale, supported by the best available science, must then be articulated in any subsequent proposed rule to designate critical habitat. The nature and type of areas included in any proposed rule will depend on the particular species and the scientific understanding of that species’ habitat needs during its life cycle.

#### *Comments Related to Physical or Biological Features*

*Comment:* We received a number of comments in response to our request for feedback on the existing regulatory definition of “physical or biological features.” Several commenters suggested that it would be preferable for the Services to return to the “primary constituent elements” approach followed since 1980 and until the 2016 revisions to the Services’ implementing regulations, which added the current definition, because the commenters claim that approach requires a higher degree of specificity in describing the attributes of critical habitat and is more consistent and objective than the approach codified in the current regulation.

*Response:* While the Services understand and agree with the need for as much specificity in the description of the attributes of critical habitat as the best available scientific data allow, we conclude that it is neither necessary nor desirable to revive the prior approach. Over our three decades of experience implementing the prior regulatory provision, the Services found that the “primary constituent elements” terminology had unnecessarily complicated implementation of the statutory provision. Also, the language of the “primary constituent elements” provision was itself somewhat vague and non-specific. As explained when we proposed to add the regulatory definition of the term “physical or biological features,” the “primary constituent elements” concept did not have a clear or consistent relationship to the operative statutory language—“physical or biological features” (see 79 FR 27066 and 27071, May 12, 2014). In shifting away from the term “primary constituent elements,” our intent was to simplify the designation process and

make it more transparent. We ensured continuity between the prior and current approaches by incorporating some of the previous regulatory language that had described primary constituent elements and emphasizing that designations should continue to be as specific as possible (See 81 FR 7414 and 7426, Feb. 11, 2016) (“The specificity of the primary constituent elements that has been discussed in previous designations will now be discussed in the descriptions of the physical or biological features essential to the conservation of the species.”). Because the statutory term “physical or biological features” is the operative concept under the statute, we concluded in our 2016 final rule (and reaffirm) that it is most efficient and transparent to focus on clarifying that concept rather than reintroduce unnecessary and complicated terminology.

*Comment:* Several commenters suggested that the definition of physical or biological features should focus on those features that are “essential to the conservation of the species” rather than those that “support the life-history needs of the species.” The commenters stated that “essential to the conservation of the species” is a greater biological significance than “supporting the life-history needs of the species” and we should not be allowed to designate an area that is of lower significance than “essential to the conservation of the species.”

*Response:* As noted above, we have decided to clarify the term “physical or biological features” to more specifically track some of the key statutory language from the Act’s definition of “critical habitat.” We have slightly modified the defined term, which is now “physical or biological features essential to the conservation of the species.” In doing so we have focused the definition more precisely on only those features that may be the basis for a designation of occupied critical habitat if the other conditions are met (*i.e.*, that the features are found in specific areas and may require special management considerations or protections). We have made clear that the essential features are only the subset of physical or biological features that are necessary to support the species’ life-history needs.

*Comment:* Several commenters stated that the phrase “including but not limited to” in the definition of physical or biological features is too vague or broad and should be removed from the definition.

*Response:* In defining physical and biological features and including this particular phrase, we provided a non-exhaustive list of examples of types of

features and conditions that we have found to be essential to certain species based on experience over many years of designating critical habitat for a wide variety of species. The determination of specific features essential to the conservation of a particular species will be based on the best scientific data available and explained in the proposal to designate critical habitat for that species, which will be available for public comment and peer review.

*Comment:* Several commenters stated that the Services should not include the phrase “habitat characteristics that support ephemeral or dynamic habitat conditions” as a feature that could be considered essential and a basis for designation under section 3(5)(A)(i) of the Act. They stated that the definition goes too far by allowing the Services to include areas that do not currently have the essential physical or biological features necessary for a species, and it improperly allows the critical habitat designation to include areas that may develop the essential features sometime in the future. Further, some stated that it is not clear what is meant by “habitat characteristics that support ephemeral or dynamic habitat conditions.” They stated that the language is unbounded, and the Services should define what is meant to support these conditions.

*Response:* We decline to remove the phrase “habitat characteristics that support ephemeral or dynamic habitat conditions” from the definition of physical or biological features. However, our proposed and final rules designating critical habitat for each species always include a detailed explanation of how the essential features relate to the life-history and conservation needs of the species based on the best scientific data available. When considering what features are essential, it is sometimes necessary to allow for the dynamic nature of the habitat, such as seasonal variations in habitat or successional stages of habitat, which could consist of water flow or level changes throughout the year or old-growth habitat or habitat newly formed through disturbance events such as fire or flood events. Thus, the physical or biological features essential to the conservation of the species may include features that support the occurrence of ephemeral or dynamic habitat conditions. The example we gave in the 2016 final rule (81 FR 7430, February 11, 2016) was a species that may require early-successional riparian vegetation in the Southwest to breed or feed. Such vegetation may exist only 5 to 15 years after a local flooding event. The necessary features, then, may include not only the suitable vegetation itself,

but also the flooding events, topography, soil type, and flow regime, or a combination of these characteristics and the necessary amount of the characteristics that can result in the periodic occurrence of the suitable vegetation. The flooding event would not be a subsidiary characteristic, as suggested by the commenter, but would itself be a feature necessary for the vegetation to return. As is our general practice, this type of specificity regarding the features and how they relate to the needs of the species will be clearly explained in each proposed and final rule designating critical habitat.

*Comment:* Several commenters suggested that we remove “principles of conservation biology” from the definition of “physical or biological features.” Further, they stated that this theory should not be included in regulations and it creates a higher bar than the best-available-data standard.

*Response:* The sentence that reads, “Features may also be expressed in terms of relating to principles of conservation biology, such as patch size, distribution distances, and connectivity” explains more clearly how we may identify the features. The principles of conservation biology are generally accepted among the scientific community and consistently used in species-at-risk status assessments and development of conservation measures and programs. We stated in the final rule (81 FR 7414, February 11, 2016) that, using principles of conservation biology such as the need for appropriate patch size, connectivity of habitat, dispersal ability of the species, or representation of populations across the range of the species, the Services may evaluate areas relative to the conservation needs of the species. The Services must identify the physical and biological features essential to the conservation of the species and unoccupied areas that are essential for the conservation of the species. When using this methodology to identify areas within the geographical area occupied by the species at the time of listing, the Services will expressly translate the application of the relevant principles of conservation biology into the articulation of the features. Aligning the physical and biological features identified as essential with the conservation needs of the species and any conservation strategy that may have been developed for the species allows us to develop more precise designations that can serve as more effective conservation tools, focusing conservation resources where needed and minimizing regulatory burdens where not necessary. Furthermore, not

including widely accepted scientific concepts into our process and procedures for designating critical habitat would amount to ignoring some of the best available scientific data.

#### *Comments on Required Determinations*

*Comment:* Many commenters stated the proposed changes are substantive and will have a significant impact on the environment and, therefore, the Services must comply with NEPA and issue either an environmental assessment or an environmental impact statement (EIS), including a robust set of alternatives. CEQ regulations state that, if a Federal action “may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the” Act, that possibility makes it more likely that the action may be considered significant and a full environmental review be conducted. 40 CFR 1508.27(b)(9). Commenters stated the proposed changes constitute a major Federal action because there is “the possibility that an action may have a significant environmental effect.” See *Citizens for Better Forestry v. USDA*, 481 F. Supp. 2d 1059, 1087 (N.D. Cal. 2007). Furthermore, commenters stated the Services cannot delegate their authority in NEPA by asking the public for opinions regarding whether an EIS is or is not appropriate. Finally, the proposed changes cannot be considered administrative, financial, legal, technical, or procedural in nature and therefore do not qualify for categorical exclusion.

*Response:* The Services have complied with NEPA by documenting their invocation of the categorical exclusions afforded under their relative procedures, including consideration as to whether the existence of any “extraordinary circumstances” would preclude invoking an exclusion here. We have determined that this final regulation is categorically excluded from further NEPA review and that no extraordinary circumstances are present (see Required Determinations, below). We do not consider merely asking the public for input regarding the applicability of an EIS abrogating our authority in complying with the provisions of NEPA, and it has been our practice to do so for similar recent rulemakings.

*Comment:* Several commenters stated that the proposed rule, if made final, would have significant economic impacts on small business, small government jurisdictions, and small organizations and therefore requires an initial regulatory flexibility analysis and

economic analysis under the Regulatory Flexibility Act (RFA).

*Response:* We interpret the RFA, as amended, to require that Federal agencies evaluate the potential incremental impacts of rulemaking only on those entities directly regulated by the rulemaking itself and, therefore, not on indirectly regulated entities. Recent case law supports this interpretation (Small Business Association 2012, pages 22–23). NMFS and FWS are the only entities that are directly affected by this rule because we are the only entities that add or remove species from the Lists and designate critical habitat. This rule pertains to the procedures for carrying out those authorities. No external entities, including any small businesses, small organizations, or small governments, will experience any direct economic impacts from this rule (see Required Determinations, *Regulatory Flexibility Act*, below, for certification).

#### *General Comments*

*Comment:* We received many comments on topics that were not specifically addressed in our proposed regulatory amendments, such as recommendations to change our policies on DPSs and the significant portion of a species’ range, define “best available scientific and commercial information,” modify the Services’ implementation of section 6 of the Act, and revise the regulations at § 424.19 regarding how we consider the impacts of the designation of critical habitat.

*Response:* The Services appreciate the many insightful comments and suggestions we received on various areas of section 4 implementation. While such input may inform the future development of additional regulatory amendments, policies, or guidance, we have determined at this time, in the interests of efficiency, to finalize the revisions for which we specifically proposed regulatory text or on which we sought particular comment (e.g., the term “physical or biological features”), and to defer action on other issues until a later time. The Services are required only to respond to “comments which, if true, . . . would require a change in [the] proposed rule,” *Am. Mining Cong. v. United States EPA*, 907 F.2d 1179, 1188 (DC Cir. 1990) (quoting *ACLU v. FCC*, 823 F.2d 1554, 1581 (DC Cir. 1987)). Such comments constitute the universe of “significant” comments. Therefore, comments that pertain to issues that were not specifically addressed in our proposed regulatory amendments are not “significant” in the context of the proposed rule. See also *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 n. 58 (DC Cir. 1977), *cert. denied*,

485 U.S. 959, 108 S.Ct. 1220, 99 L.Ed.2d 421 (1988). We are not responding to comments that are not “significant.”

*Comment:* Some commenters suggested that the Services should delay finalizing the proposed rule until the United States Supreme Court resolves the pending *Weyerhaeuser* litigation (*Weyerhaeuser Co. v. U.S. Fish and Wildlife Service*, No. 17–71 (docketed July 13, 2017)) because the Court’s analysis of the Act’s statutory framework could have implications for the interpretations of the proposed rule. The commenters suggest that waiting until spring 2019 to finalize the rule would allow time to digest the resulting decision, determine its implications for this rulemaking, and make any modifications or take any procedural steps that might be necessary in light of the decision.

*Response:* The Services carefully evaluated the Supreme Court’s recent opinion in the *Weyerhaeuser* litigation. The final rule has been modified in response to the decision to make clear that unoccupied habitat must be “habitat,” by requiring reasonable certainty that at least one physical or biological feature essential to the conservation of the species is present. This rule is therefore consistent with the Court’s decision. While the Services are considering further clarification of the meaning of habitat through separate rulemaking, we find that the Services’ and public’s interests are served by clarifying the existing regulatory framework in this final rule without delay.

*Comment:* Several commenters stated that the proposed regulatory changes to part 424 are an attempt by the Services to expand their own discretion and authority without congressional authorization and thus is neither justified nor lawful.

*Response:* The amended regulations do not expand the Services’ discretion beyond the authority provided in the Act. Rather, they clarify the existing process and, in some instances, narrow the Services’ discretion when designating critical habitat based on lessons learned over many years of implementing the Act and relevant case law. The amendments synchronize the language in the implementing regulations with that in the Act to minimize confusion and clarify the discretion and authority that Congress provided to the Secretaries under the Act. The Services are exercising their discretion to resolve ambiguities and fill gaps in the statutory language, and the amended regulations are a permissible interpretation of the statute.

*Comment:* Several commenters referred to the following statement in the proposed rule: “the final rule may include revisions to any provisions in part 424 that are a logical outgrowth of this proposed rule.” The commenters stated that any amendments adopted in the final rule must come from specific proposals announced in the proposed rule and not the Services’ open-ended request for suggestions. Furthermore, commenters stated that if the Services make changes based on this open-ended and vague premise, the final rule would fail the logical-outgrowth test and be in violation of the Administrative Procedure Act (APA) because this outcome would deny the public and all stakeholders the opportunity to provide comments regarding these changes.

*Response:* Although we do not necessarily agree with the commenters’ interpretation of the APA, none of the changes we make in this final rule relies upon the assertion in the quoted sentence that the final rule may include changes to “any provisions in part 424” not addressed in the proposed rule. The regulatory changes we finalize in this document flow directly from the regulatory provisions in the proposed rule, with modifications made in response to comments as explained throughout this document, and from the Services’ specific invitation for public comment on whether they should modify the definition of “physical or biological features.” We have determined to reserve for a later date our consideration of, and any action regarding, issues outside the scope of those specific provisions.

*Comment:* Many commenters had concerns regarding specific proposed changes, calling them arbitrary and capricious and therefore in violation of the APA.

*Response:* We do not agree with the assertion that the specific proposed changes to our implementing regulations are arbitrary and capricious. We published our proposal, detailed our proposed revised regulation changes, explained our rationale for changes and explicitly asked for public comment. We have now reviewed the public comments and in this final rule have provided responses to significant comments and made some changes in response to those comments as explained throughout this document. As to two issues (the definitions for “geographical area occupied by the species” and “physical or biological features”), we sought specific public comment without proposing regulatory text. In this final rule, we have decided to address one of those issues (the definition of “physical or biological

features essential to the conservation of the species”) through minor regulatory edits that merely incorporate and interpret some of the statutory language from the Act’s provision defining occupied critical habitat without substantively changing the meaning or process for identifying occupied critical habitat. We have provided the public with our rationale and a meaningful opportunity to comment on all aspects of the proposed rule. Thus, the process that we used to promulgate this rule complied with the applicable requirements of the APA.

*Comment:* Several commenters stated that the Services have misled stakeholders and effectively failed to provide adequate notice and opportunity for public comment. The comments assert that we should withdraw our proposal, republish it with a more accurate and clear summary of the changes to the regulations and their implications, and provide further opportunity for public comment.

*Response:* The Services have not misled stakeholders. We provided a 60-day public comment period on the proposed rule. Following publication of our proposed rule, we held numerous webinars providing an opportunity for States, tribes, non-governmental organizations, and industry groups to ask questions and provide input directly to the Services. This process satisfies the Services’ obligation to provide notice and comment under the APA.

*Comment:* Several tribes commented that traditional ecological knowledge should constitute the best scientific data available and be used by the Services.

*Response:* Traditional ecological knowledge (TEK) is important and useful information that can inform us as to the status of a species, historical and current trends, and threats that may be acting on it or its habitat. The Services have often used TEK to inform decisions under the Act regarding listings, critical habitat, and recovery. The Act requires that we use the best scientific and commercial data available to inform decisions to list a species and the best scientific data available to inform designation of critical habitat, and in some cases TEK may be included as part of what constitutes the best data available. However, the Services cannot predetermine, as a general rule, that TEK will be the best available data in every rulemaking. We will continue to consider TEK along with other available data, weighing all data appropriately in the decision process.

*Comment:* A State agency requested that we codify a requirement for consultation with affected State wildlife management agencies, giving effect to

the statutory language contained in section 7(a)(2) of the Act to consult with the affected States on critical habitat designations, as appropriate, to interpret inconclusive information, particularly involving individuals.

*Response:* We do not agree that additional requirements are needed to give effect to the statutory language in section 7(a)(2) regarding consulting affected States prior to designating critical habitat. The nature of this required consultation is already articulated in section 4(b)(5)(A)(ii), which requires the Secretary to give actual notice of any proposed critical habitat designation to the appropriate State agencies and invite their comment on the proposed designation. The Services will continue to meet this requirement.

### Required Determinations

#### *Regulatory Planning and Review—Executive Orders 12866 and 13563*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The Executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements. This rule is consistent with Executive Order 13563, and in particular with the requirement of retrospective analysis of existing rules, designed "to make the agency's regulatory program more effective or less burdensome in achieving the regulatory objectives."

#### *Executive Order 13771*

This rule is an Executive Order 13771 deregulatory action.

#### *Regulatory Flexibility Act*

Under the Regulatory Flexibility Act (as amended by the Small Business

Regulatory Enforcement Fairness Act (SBREFA) of 1996; 5 U.S.C. 601 *et seq.*), whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare, and make available for public comment, a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency, or his designee, certifies that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

This rulemaking revises and clarifies requirements for NMFS and FWS regarding factors for listing, delisting, or reclassifying species and designating critical habitat under the Endangered Species Act to reflect agency experience and to codify current agency practices. The changes to these regulations do not expand the reach of species protections or designations of critical habitat.

NMFS and FWS are the only entities that are directly affected by this rule because we are the only entities that list species and designate critical habitat under the Endangered Species Act. No external entities, including any small businesses, small organizations, or small governments, will experience any economic impacts from this rule. At the proposed rule stage, we certified that this rule would not have a significant economic effect on a substantial number of small entities. Nothing in this final rule changes that conclusion.

#### *Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*):

(a) On the basis of information contained in *Regulatory Flexibility Act*, above, this rule would not "significantly or uniquely" affect small governments. We have determined and certify pursuant to the Unfunded Mandates Reform Act, 2 U.S.C. 1502, that this rule would not impose a cost of \$100 million or more in any given year on local or State governments or private entities. A Small Government Agency Plan is not required. As explained above, small governments would not be affected because the rule would not place

additional requirements on any city, county, or other local municipalities.

(b) This rule would not produce a Federal mandate on State, local, or tribal governments or the private sector of \$100 million or greater in any year; that is, this rule is not a "significant regulatory action" under the Unfunded Mandates Reform Act. This rule would impose no obligations on State, local, or tribal governments.

#### *Takings (E.O. 12630)*

In accordance with Executive Order 12630, this rule would not have significant takings implications. This rule would not pertain to "taking" of private property interests, nor would it directly affect private property. A takings implication assessment is not required because this rule (1) would not effectively compel a property owner to suffer a physical invasion of property and (2) would not deny all economically beneficial or productive use of the land or aquatic resources. This rule would substantially advance a legitimate government interest (conservation and recovery of endangered species and threatened species) and would not present a barrier to all reasonable and expected beneficial use of private property.

#### *Federalism (E.O. 13132)*

In accordance with Executive Order 13132, we have considered whether this rule would have significant federalism effects and have determined that a federalism summary impact statement is not required. This rule pertains only to factors for listing, delisting, or reclassifying species and designation of critical habitat under the Endangered Species Act, and would not have substantial direct effects on the States, on the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government.

#### *Civil Justice Reform (E.O. 12988)*

This rule does not unduly burden the judicial system and meets the applicable standards provided in sections 3(a) and 3(b)(2) of Executive Order 12988. This rule would clarify factors for listing, delisting, or reclassifying species and designation of critical habitat under the Endangered Species Act.

#### *Government-to-Government Relationship With Tribes*

In accordance with Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments," the Department of the Interior's manual at 512 DM 2, and the Department of

Commerce (DOC) “Tribal Consultation and Coordination Policy” (May 21, 2013), DOC Departmental Administrative Order (DAO) 218–8, and NOAA Administrative Order (NAO) 218–8 (April 2012), we have considered possible effects of this final rule on federally recognized Indian Tribes. Two informational webinars were held on July 31 and August 7, 2018, to provide additional information to interested Tribes regarding the proposed regulations. After the opening of the public comment period, we received multiple requests for coordination or Government-to-Government consultation from multiple tribes: Cowlitz Indian Tribe; Swinomish Indian Tribal Community; The Confederated Tribes of the Grand Ronde Community of Oregon; Confederated Tribes of Warm Springs, Oregon; Quinalt Indian Nation; Makah Tribe; and the Suquamish Tribe. We subsequently hosted a conference call on November 15, 2018, to listen to Tribal concerns and answer questions about the proposed regulations. On March 6, 2019, Service representatives attended the Natural Resources Committee Meeting of the United and South and Eastern Tribes’ Impact Week conference in Arlington (Crystal City), VA. At this meeting, we presented information, answered questions, and held discussion regarding the regulatory changes.

The Services conclude that the changes to these implementing regulations make general changes to the Act’s implementing regulations and do not directly affect specific species or Tribal lands or interest. These regulations streamline and clarify the processes for listing species and designating critical habitat and directly affect only the Services. With or without these regulatory revisions, the Services would be obligated to continue to list species and to designate critical habitat based on the best available data. Therefore, we conclude that these regulations do not have “tribal implications” under section 1(a) of E.O. 13175, and formal government-to-government consultation is not required by the Executive order and related policies of the Departments of Commerce and the Interior. We will continue to collaborate with Tribes on issues related to federally listed species and their habitats and work with them as we implement the provisions of the Act. *See* Joint Secretarial Order 3206 (“American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act”, June 5, 1997).

#### *Paperwork Reduction Act*

This rule does not contain any new collections of information that require approval by the OMB under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State, local, or Tribal governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### *National Environmental Policy Act*

We analyzed this final rule in accordance with the criteria of NEPA, the Department of the Interior regulations on implementation of NEPA (43 CFR 46.10–46.450), the Department of the Interior Manual (516 DM 8), the NOAA Administrative Order 216–6A, and the Companion Manual, “Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities,” which became effective January 13, 2017. We have determined that the final regulation is categorically excluded from further NEPA review and that no extraordinary circumstances are present. The rule qualifies for the substantially similar categorical exclusions set forth at 43 CFR 46.210(i) and NOAA Administrative Order 216–6A and Companion Manual at Appendix E (Exclusion G7).

These revisions are an example of an action that is fundamentally administrative, legal, technical, or procedural in nature. The revisions go no further than to clarify the existing regulations and make them more consistent with the statutory language, case law, and plain-language standards. They are an effort to streamline and clarify the procedures and criteria that the Services use for listing or delisting species and for designating critical habitat. These revisions directly affect only the FWS and NMFS, which are the agencies charged with implementing the provisions of the statute, and they do not affect any specific areas. Specifically, rather than substantively changing the status quo, the effect of these revisions is to respond to court decisions and articulate the Services’ understanding and practice with respect to the statutory provisions for listing species and designating critical habitat. Further, the Services must still continue to list species and to designate critical habitat based on the best available scientific information, with or without these regulatory revisions. Finally, none of these revisions will affect the opportunity for public involvement in,

or outcome of, either agency’s decisions on listing species or designating critical habitat.

We also considered whether any “extraordinary circumstances” apply to this situation, such that the DOI categorical exclusion would not apply. See 43 CFR 46.215 (“Categorical Exclusions: Extraordinary Circumstances”). We have determined that none of the circumstances apply to this situation. Although the final regulations would revise the implementing regulations for section 4 of the Act, the effects of these changes would not “have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species,” as the effect of the revisions is to provide transparency about the Services’ implementation of the Act based upon court decisions and the Services’ understanding and practices. Furthermore, the revised regulations do not “[e]stablish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects” (43 CFR 46.215(e)), as any future listing, classification, or delisting decisions will continue to be based on the best available scientific information presented in a particular record. None of the extraordinary circumstances in 43 CFR 46.215(a) through (l) apply to the revised regulations in 50 CFR 17.31 or 17.71. Nor would the final regulations trigger any of the extraordinary circumstances under NOAA’s Companion Manual to NAO 216–6A. This rule does not involve: (a) Adverse effects on human health or safety that are not negligible or discountable; (b) adverse effects on an area with unique environmental characteristics (*e.g.*, wetlands and floodplains, national marine sanctuaries, or marine national monuments) that are not negligible or discountable; (c) adverse effects on species or habitats protected by the ESA, the MMPA, the MSA, NMSA, or the Migratory Bird Treaty Act that are not negligible or discountable; (d) the potential to generate, use, store, transport, or dispose of hazardous or toxic substances, in a manner that may have a significant effect on the environment; (e) adverse effects on properties listed or eligible for listing on the National Register of Historic Places authorized by the National Historic Preservation Act of 1966, National Historic Landmarks designated by the Secretary of the Interior, or National Monuments designated through the Antiquities Act of 1906; Federally

recognized Tribal and Native Alaskan lands, cultural or natural resources, or religious or cultural sites that cannot be resolved through applicable regulatory processes; (f) a disproportionately high and adverse effect on the health or the environment of minority or low-income communities, compared to the impacts on other communities; (g) contribution to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of the species; (h) a potential violation of Federal, State, or local law or requirements imposed for protection of the environment; (i) highly controversial environmental effects; (j) the potential to establish a precedent for future action or an action that represents a decision; in principle about future actions with potentially significant environmental effects; (k) environmental effects that are uncertain, unique, or unknown; or (l) the potential for significant cumulative impacts when the proposed action is combined with other past, present and reasonably foreseeable future actions, even though the impacts of the proposed action may not be significant by themselves.

FWS completed an Environmental Action Statement, which NOAA adopts, explaining the basis for invoking the agencies' substantially similar categorical exclusions for the regulatory revisions to 50 CFR 424.02, 424.11 and 424.12. The environmental action statement is available at <http://www.regulations.gov> in Docket No. FWS-HQ-ES-2018-0006.

*Energy Supply, Distribution or Use (E.O. 13211)*

Executive Order 13211 requires agencies to prepare statements of energy effects when undertaking certain actions. The revised regulations are not expected to affect energy supplies, distribution, and use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

**Authority**

We issue this rule under the authority of the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*).

**List of Subjects in 50 CFR Part 424**

Administrative practice and procedure, Endangered and threatened species.

**Regulation Promulgation**

For the reasons set out in the preamble, we hereby amend part 424,

subchapter A of chapter IV, title 50 of the Code of Federal Regulations, as set forth below:

**PART 424—LISTING ENDANGERED AND THREATENED SPECIES AND DESIGNATING CRITICAL HABITAT**

■ 1. The authority citation for part 424 continues to read as follows:

**Authority:** 16 U.S.C. 1531 *et seq.*

■ 2. Amend § 424.02 by removing the definition of “Physical or biological features” and in its place adding a definition for “Physical or biological features essential to the conservation of the species” to read as follows:

**§ 424.02 Definitions.**

\* \* \* \* \*

*Physical or biological features essential to the conservation of the species.* The features that occur in specific areas and that are essential to support the life-history needs of the species, including but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

\* \* \* \* \*

■ 3. Amend § 424.11 by revising paragraphs (b) through (f) and adding paragraph (g) to read as follows:

**§ 424.11 Factors for listing, delisting, or reclassifying species.**

\* \* \* \* \*

(b) The Secretary shall make any determination required by paragraphs (c), (d), and (e) of this section *solely* on the basis of the best available scientific and commercial information regarding a species' status.

(c) A species shall be listed or reclassified if the Secretary determines, on the basis of the best scientific and commercial data available after conducting a review of the species' status, that the species meets the definition of an endangered species or a threatened species because of any one or a combination of the following factors:

- (1) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (2) Overutilization for commercial, recreational, scientific, or educational purposes;

- (3) Disease or predation;
- (4) The inadequacy of existing regulatory mechanisms; or
- (5) Other natural or manmade factors affecting its continued existence.

(d) In determining whether a species is a threatened species, the Services must analyze whether the species is likely to become an endangered species within the foreseeable future. The term foreseeable future extends only so far into the future as the Services can reasonably determine that both the future threats and the species' responses to those threats are likely. The Services will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species' life-history characteristics, threat-projection timeframes, and environmental variability. The Services need not identify the foreseeable future in terms of a specific period of time.

(e) The Secretary shall delist a species if the Secretary finds that, after conducting a status review based on the best scientific and commercial data available:

- (1) The species is extinct;
- (2) The species does not meet the definition of an endangered species or a threatened species. In making such a determination, the Secretary shall consider the same factors and apply the same standards set forth in paragraph (c) of this section regarding listing and reclassification; or

(3) The listed entity does not meet the statutory definition of a species.

(f) The fact that a species of fish, wildlife, or plant is protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (see part 23 of this title) or a similar international agreement on such species, or has been identified as requiring protection from unrestricted commerce by any foreign nation, or to be in danger of extinction or likely to become so within the foreseeable future by any State agency or by any agency of a foreign nation that is responsible for the conservation of fish, wildlife, or plants, may constitute evidence that the species is endangered or threatened. The weight given such evidence will vary depending on the international agreement in question, the criteria pursuant to which the species is eligible for protection under such authorities, and the degree of protection afforded the species. The Secretary shall give consideration to any species protected under such an international agreement, or by any State or foreign nation, to determine whether the species is endangered or threatened.

(g) The Secretary shall take into account, in making determinations under paragraph (c) or (e) of this section, those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.

■ 4. Amend § 424.12 by revising paragraphs (a)(1) and (b)(2) to read as follows:

**§ 424.12 Criteria for designating critical habitat.**

(a) \* \* \*

(1) The Secretary may, but is not required to, determine that a designation would not be prudent in the following circumstances:

(i) The species is threatened by taking or other human activity and identification of critical habitat can be expected to increase the degree of such threat to the species;

(ii) The present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or threats to the species' habitat stem solely from causes that cannot be addressed through management actions resulting from consultations under section 7(a)(2) of the Act;

(iii) Areas within the jurisdiction of the United States provide no more than negligible conservation value, if any, for a species occurring primarily outside the jurisdiction of the United States;

(iv) No areas meet the definition of critical habitat; or

(v) The Secretary otherwise determines that designation of critical habitat would not be prudent based on the best scientific data available.

\* \* \* \* \*

(b) \* \* \*

(2) The Secretary will designate as critical habitat, at a scale determined by the Secretary to be appropriate, specific areas outside the geographical area occupied by the species only upon a determination that such areas are

essential for the conservation of the species. When designating critical habitat, the Secretary will first evaluate areas occupied by the species. The Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied would be inadequate to ensure the conservation of the species. In addition, for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

\* \* \* \* \*

Dated: August 12, 2019.

**David L. Bernhardt,**

*Secretary, Department of the Interior.*

Dated: August 9, 2019.

**Wilbur Ross,**

*Secretary, Department of Commerce.*

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