A Guide to the Revised Endangered Species Regulations

Which regulatory proposals and ideas made it into the final regulations? The table below shows the status of the 37 proposals and ideas.

Description of change	Magnitude of change	Effect on conservation	Change from proposed to final regulations	ESA section
Withdraw default 4(d) rules for threatened species	Moderate or major change	Depends on implementation	**No change from proposal** FWS withdraws its general 4(d) rules for animals and plants, which it adopted in 1975 and 1977 respectively. Those rules automatically extended to all threatened species the full section 9 protections for endangered species, unless FWS issued a "special" 4(d) rule to override the default protections. From now on, a newly-listed threatened species will get section 9 protections only if FWS issues a 4(d) rule specifically for that species. As part of the withdrawals, FWS explains that "the Secretary will still be required to make a decision about what regulations to put in place" for every newly-listed threatened species. The withdrawals do not apply to already-listed species. How the withdrawals will affect conservation is a complex question: • The outcome will depend largely on how often FWS issues species-specific 4(d) rules, how soon after a listing the agency issues the rules, and the contents of those rules, including whether they facilitate conservation and reduce uncertainty. No one knows the answers to those questions yet. But a historical perspective is helpful. • FWS has issued a species-specific 4(d) rule for about 50% of the threatened animal species it listed before 2019, with the Obama administration issuing a rule for about 52% of the 71 threatened animal species it listed, while the remaining 48% of species got the full protections of section 9. This is one coarse baseline against which to assess how often FWS issues 4(d) rules in the future. • A more meaningful baseline for comparison is the contents of the rules, especially what types of activities the rules exempt. Past rules have exempted a wide range of activities, some that impede	Listing

			conservation and some that advance it. Moving forward, FWS should strive for rules that incentivize conservation. FWS can create a direct incentive by exempting a conservation practice, thus eliminating the burden of seeking an ESA permit for the activity. FWS can also create an indirect incentive that increases social support or tolerance for conservation. The 4(d) rules that exempt catch-and-release fishing of many threatened fish species enable recreational fishing in rivers, streams, and lakes that might otherwise be closed to fishing (because inadvertently catching a threatened fish would be unauthorized "take"). Allowing fishing in these areas supports conservation investments such as purchase of easements on streams. The withdrawal of the default 4(d) rule for animals will likely cause FWS to be more thoughtful and deliberate about deciding which activities to regulate for threatened species. We will assess the content of those rules and whether they create incentives for private parties, minimize uncertainty for regulated entities, and facilitate conservation. • Neither agency has ever issued a species-specific rule for a plant, which are not protected by the "take" prohibition and which make up 57% of all US listed species (though only 18% of plants are threatened). Because section 9 offers very limited protections to plants, we will monitor whether FWS regularly extends even those limited protections in the future.	
Remove prohibition on referencing economic impacts in listing decisions	Minor change	Negative	**No change from proposal** The final rule removes the reference to “without reference to possible economic or other impacts of such determination” as part of listing and reclassification decisions. The Services explain that they have the authority to compile and present this information publicly, provided it is not considered as part of those decisions. Even if this approach is upheld in court, it is bad practice because it will likely present only the economic impacts (rather than also any benefits) of listing and because it will encourage political pressure to influence whether to list a species (despite what many people believe, listing decisions have never been based "solely" on science; policy considerations are inescapable).	Listing

			We do not yet know how often the Services will gather and release economic data, so the real-world impacts on conservation are speculative at this point. Further, if the potential economic impacts of listing a species are notable, the Services and the public are almost always already aware of those impacts, often because private parties complete and publish their own economic analyses (e.g., sage grouse, lesser-prairie chicken). For these reasons, we rank this change as minor compared to past practice.	
Codify new definition of "foreseeable future"	Minor change	Depends on implementation	**Minor change from proposal** The "foreseeable future" is used to evaluate whether to list a species as "threatened." The final rule adopts a "likely" standard to determine the extent of the foreseeable future. The agencies explain that "likely" means "more likely than not," suggesting a 51% to 49% threshold. By contrast, the 2009 FWS legal opinion on foreseeable future used a "reliable" standard and the proposed rule used a "probable" standard. The Services claim, however, that the final language is "consistent with the Services' long-standing interpretation and previous judicial opinions." Whether or not this is true remains to be seen. We are reading every foreseeable future decision to determine whether the Services' interpretation of this phrase will change under the new definition. Visit our project website here. The new rule also explains that the foreseeable future analysis must consider both the threats to a species and its response to those threats. This is not necessarily a new standard--many past listing decisions have considered both (e.g., 2014 decision not to list the N.A. wolverine), but many other listing decisions have focused only on analyzing threats to the species and not the species' response. Because species responses are often more difficult to foresee than threats, the new definition might make it slightly easier for the Service to make a not-warranted finding. We are monitoring this issue carefully.	Listing
Modify standard for delisting species and	Minor change	Negligible	**Minor change from proposal**	Listing

require delisting if warranted in status review			The final rule states that the Service "shall" (instead of "will" as in the proposed rule) delist a species if it concludes that the species is extinct, is not threatened or endangered, or is not a species. This change will likely reduce the time between a Service recommendation to delist a species and the agency's issuance of a rule to carry out the delisting. The final rule also eliminates certain redundant language from the proposed rule about delisting "recovered" species or species listed in "error." Removing the "recovery" reference was controversial because some people interpreted the move to suggest that the Services would delist a species before it has met recovery criteria. The Services, however, have had the legal authority to do this for years (see *Friends of Blackwater v. Salazar*) and has used this authority in a handful of delisting decisions.	
Adopt identical standards for listing and delisting	Clarifies or codifies past practice	Negligible	**No change from proposal** The standard and process for delisting species is identical to that for listing them. Historically, there has been some debate about whether the standards are identical.	Listing
Establish factors for making discretionary not-prudent determination for critical habitat	Moderate or major change	Depends on implementation	**Minor change from proposal** Although the final rule makes minor changes to the proposed rule, it will result in significant changes to past practice. Under past practice, the Services will conclude that critical habitat designation is not prudent (and thus not designate the habitat) if either of two conditions are met. But under the final rule, the Services "may" (but are not required to) make a not-prudent finding based on any of five non-exhaustive factors. These include the ability of section 7 consultations to address threats to the habitat, and the conservation value of US habitat for species that occur primarily in a foreign country. And there is a fifth catch-all factor that broadly allows the Services to conclude that critical habitat is not prudent based on the best available data.	Critical habitat

			The Services have rarely issued not-prudent findings (we found only 19 such findings by FWS from 2000-18). Will the proportion of these findings increase? That will depend on how diligently the Services designate critical habitat and how they apply the five non-exhaustive factors.	
Modify sequence and standard for designating unoccupied critical habitat	Moderate or major change	Negative	**Major change from proposal** The final rule increases the barriers to designating unoccupied critical habitat in three ways. • First, in determining whether unoccupied habitat is "essential" to conserving a species, the Services have removed their earlier proposal to consider whether it would be "less efficient" to designate occupied habitat before unoccupied habitat. Thus, the only remaining basis for unoccupied habitat to precede occupied habitat is if the latter is "inadequate" to conserve a species. • Second, in the final rule (but not the proposed rule), the Services have added the requirement that unoccupied critical habitat contain "physical or biological features" (PBFs) essential to conserving the species. The ESA applies this requirement only to occupied critical habitat, but the Services have added this requirement based on their analysis of the ESA legislative history and their interpretation of the 2018 W*eyerhaeuser v. USFWS* decision that all critical habitat must be habitat to begin with. Although this requirement is new on paper, it is not entirely new in practice. Several past designations of unoccupied critical habitat have identified PBFs. For example, the 2003 critical habitat rule for five Hawaiian plants identifies unoccupied habitat based largely on specific PBFs needed for recovery. The 2012 designation for the western snowy plover likewise explains that "for *both* the occupied and unoccupied areas...critical habitat designation identifies...those [PBFs] essential to the conservation of the species (such as space, food, cover, and protected habitat)." In these and other examples we found, FWS was not required to identify PBFs but did so anyway. • Third, the Services must now have "reasonable certainty" (instead of the less stringent "reasonable likelihood" from the proposed rule) that unoccupied habitat will both contribute to conserving the species and contain the physical and biological features discussed earlier.	Critical habitat

			Historically, the Services have designed very little unoccupied critical habitat (0.6% of all FWS terrestrial critical habitat, 3.1% of all FWS aquatic critical habitat, and 0% of all NMFS critical habitat in recent years, according to the agencies). In 2016, however, NMFS issued a climate change directive explaining that it "will consider proactive designation of unoccupied habitat…because of the function(s) it is likely to serve as climate changes." The need to protect habitat to help species deal with climate change is undisputed among conservation scientists. But because the ESA protects critical habitat only through the destruction / adverse modification prohibition, which the Services rarely apply, there remains considerable debate about the conservation value of critical habitat.	
Modify definition of "physical and biological features" for critical habitat	Minor change	Negative	**Minor change from proposal** The final rule could restrict critical habitat designations by narrowing the definition of "physical and biological features" in two minor ways. First, those features must now be "essential" to support the life-history needs of a species. Second, those features must now be tied to "specific areas" rather than exist in general. Exactly how specific these areas must be remains unclear.	Critical habitat
Modify definition of "geographical area occupied by the species"	Not adopted	Not adopted	**Not adopted** The Services sought comment on whether to revise the current definition of this phrase and declined to do so.	Critical habitat
Redefine "destruction or adverse modification."	Clarifies or codifies past practice	Negligible	**No change from proposal** As with the proposed rule, the final rule requires the Services to evaluate destruction or adverse modification based on how an action will affect a species' entire critical habitat, not just the particular area affected by a federal action. Unfortunately, this problematic approach reflects the Services' longstanding practice and was explicitly affirmed in the Obama administration's 2016 revised definition of adverse modification. Thus, the final rule does not change the outcome of consultations; it only solidifies past practice, which was	Sec. 7 consult.

			bad for conservation because the Services have never adopted a system to track whether the amount of cumulative harm to critical habitat rises to the level of adverse modification. Further, the Services have largely viewed adverse modification as offering limited value beyond the jeopardy prohibition, as evident from this study and from the paucity of adverse modification findings *without* a jeopardy finding at FWS and NMFS. Without a meaningful prohibition on adverse modification, it matters little how much critical habitat exists, as the ESA offers no other legal protection for critical habitat.	
Reject "tipping point" and "baseline" concepts in jeopardy analysis	Moderate or major change	Negative	**No change from proposal** The Services abolish the concepts of a (1) "tipping point" beyond which a species cannot recovery from adverse effects and (2) "baseline" conditions that put a species in jeopardy under section 7, in contradiction to some court decisions. As a result, conservationists will find it harder to argue that the Service should have found jeopardy for a particular federal action. We think this is one of the most problematic changes, because the Services already lack a national system to track the amount of incidental take they have authorized. As a result, it is very difficult for the agencies to know when a species' status has deteriorated to the point where recovery options are foreclosed or extinction becomes very likely. Read more about this topic here.	Sec. 7 consult.
Define "reasonably certain to occur" and modify when it applies to "effects of the action"	Moderate or major change	Depends on implementation	**Minor change from proposal** This is one of the more complex regulatory changes to understand, with four major elements. You may first want to familiarize yourself with the section 7 process. • First, the final rule establishes a new definition of "reasonably certain to occur," which is used to determine the "effects of the action" during consultation. Put differently, the definition sets the standard (reasonable certainty) that establishes which effects of a federal action must be considered during consultation. • Second, a reasonable certainty conclusion must now be based on	Sec. 7 consult.

			"clear and substantial information," which requires a "firm basis to support a conclusion" of reasonable certainty and a "degree of certitude." This is a new and stricter standard for evaluating the effects of an action. • Third, the final rule describes three situations that would *not* meet the reasonable certainty test, such as when the consequences of the federal action are very remote in time or location. These situations were not in the proposed rule. • Fourth, the final rule and its preamble raises the question of whether the reasonable certainty standard applies not only during formal consultation (which it always has) but also to informal consultation and the "no effect" / "may affect" determination. The Consultation Handbook does not mention the reasonable certainty standard applying to the latter. If the final rule changes that, the outcome will be one of the most significant changes under the entire rulemaking. The "may affect" and "likely to adversely affect" standards would be more difficult to reach when cabined by the requirement of reasonable certainty. This outcome would broadly affect the entire consultation program, considering that~93% of FWS consultations and ~80% of NMFS consultations are informal. Further, "no effect" findings do not require Service concurrence, which means that federal agencies could use the restrictive reasonable certainty test to exclude harmful effects that would have previously been considered during consultation. We will continue looking into this issue and update our analysis when we get a clear answer. • On the whole, the final regulation will probably reduce ambiguities about how to interpret the reasonable certainty standard, but may well limit the types of harmful effects that must be considered during a consultation. It is too early to understand how the new changes will be applied.	
Clarify that "reasonably certain to occur" does not apply to proposed agency actions	Clarifies or codifies past practice	Negligible	**No change from proposal** Whether the proposed federal action itself will be implemented does not undergo the "reasonably certain to occur" causation test (or the "but for" test)–only the "consequences" of the proposed action do. Note that "consequence" is now defined in the definition of "effects	Sec. 7 consult.

			of the action."	
Simplify definition of "effects of the action"	Moderate or major change	Depends on implementation	**Minor change from proposal** This definition is used during formal consultation to identify effects subject to a jeopardy/adverse modification analysis. As with the proposed rule, the final rule simplifies the definition of “effects of the action" by eliminating the longstanding concepts of interdependent and interrelated activities, and indirect and direct effects. All of these concepts are now replaced by the new, catch-all concept of "all consequences" of the proposed agency action on listed species and critical habitat. The final rule also explains that the "consequences" of a proposed action must not occur "but for" the action and must be "reasonably certain to occur." The Services claim that all of these changes clarify rather than change existing practice. However, there is at least one major difference: under past practice, the but for and reasonable certainty tests applied only to indirect effects and cumulative effects; but under the new definition, both tests apply to all effects of a proposed action, including to what was previously called direct effects and interrelated/interdependent actions. The final rule might limit the scope of those effects/actions during formal consultation, especially when combined with the new definition of reasonable certainty. But it is too early to make strong predictions about the effects of these changes on conservation. Major sections of the Services' Section 7 Handbook will now require updating.	Sec. 7 consult.
Separate "environmental baseline" from "effects of the action"	Minor change	Negligible	**No change from proposal** The final rule adopts a standalone definition of "environmental baseline," thus separating it from the definition of "effects of the action." This separation does not affect the jeopardy/adverse modification analysis, which must still consider the status of the species, the environmental baseline, the effects of the action, and the cumulative effects. But where the separation could make a difference is that effects considered as part of the environmental baseline do not require "reasonable and prudent measures" to minimize take because	Sec. 7 consult.

			those effects are not part of the proposed action. This scenario could arise when certain ongoing effects are considered as part of the baseline rather than the effects of the action.	
Define "environmental baseline" to include ongoing activities	Moderate or major change	Depends on implementation	**Minor change from proposal** The final rule adopts the new position that the "environmental baseline" in a section 7 consultation includes existing or ongoing activities that are not within a federal agency's *discretion* to modify. Thus, those activities would not be considered part of the "effects of the action." The Services have lacked a consistent approach to dealing with ongoing actions. This new position should not change the overall jeopardy/adverse modification analysis, which requires the Services to consider the effects of ongoing activities, regardless of whether they are part of the baseline or the effect of the action under consultation. By implication, ongoing activities for which a federal agency *retains discretion* would be part of the effects of the action--even if those activities were previously consulted on. Note that activities that are part of the environmental baseline do not require reasonable and prudent measures, whereas activities that are part of the action do. Finally, the Services clarify that for discretionary ongoing actions, all effects will be evaluated during a consultation, even effects from parts of the action for which the federal action agency is not proposing any change. Because this regulatory change adopts two new approaches--separating the baseline from the effects of the action, and treating ongoing non-discretionary activities as part of those effects--it is difficult to predict how the change will affect conservation.	Sec. 7 consult.
Create 60-day deadline for concurrence in informal consultation	Moderate or major change	Negligible	**Moderate change from proposal** The proposed rule sought comment on whether a deadline should apply to informal consultations. The final rule adopts a 60-day deadline for the Service to concur or not concur on a federal action agency's request for concurrence during informal consultation. This deadline may be extended to 120 days with the consent of the federal	Sec. 7 consult.

			agency and any applicant. The new deadline applies *only to the concurrence process* during informal consultation, not to the *entire consultation process*, which remains without an overall deadline. To start the 60-day clock, the federal action agency must provide enough information about its proposed action to allow the Service to decide whether it can concur. This deadline on the concurrence process is not a new idea--the Services already have a 30-day deadline to respond to biological assessments for "major construction activities." We think that a 60 to 120 day deadline should be workable for the Services, considering that (1) the median duration of the *entire* informal consultation process for FWS was 13 days from 2008-2015 and (2) the deadline clock does not start until the Service agrees that the action agency has provided enough information. For these reasons, we rank this rule change as having negligible effects on conservation, particularly because meeting a deadline is several steps removed from on-the-ground conservation outcomes.	
Eliminate requirement to reinitiate consultation on land use plans	Minor change	Negligible	**Minor change from proposal** The final rule exempts certain land management plans under NFMA and FLPMA from reinitiation of consultation when a species is listed or critical habitat is designated, provided that any activity authorized under those plans will undergo its own site-specific consultation. We agree with the Services that reinitiating a programmatic consultation on a forest plan in response to a new listing or critical habitat designation offers little for conservation. The reinitation requirement in this context has also created political risk for the ESA (in response to *Cottonwood Environmental Law Center* v. *U.S. Forest Service,* 789 F.3d 1075 (9th Cir. 2015)), prompting at least one bill to reduce the perceived regulatory burden. Under the final rule, one potential problem for conservation is that a reinitiation would allow the Service to better assess the cumulative effects of all projects covered by the programmatic action. But this assessment often leaves a lot to be desired in the first place. Because the requirement for a site-specific consultation remains, we ranked	Sec. 7 consult.

			this change as having a minor effect on conservation.	
Establish that section 7 conservation measures do not require additional binding plans	Moderate or major change	Negative	**Minor change from proposal** The final rule is largely consistent with the proposed rule on the position that conservation measures in a section 7 consultation are not required to demonstrate they are supported by binding plans (e.g., clear resource commitments); the Services will presume the measures will occur, in the same way that they will assume the harmful effects of an action will occur. This position conflicts with certain case law in the Ninth Circuit and recently arose in the NMFS consultation on the Federal Columbia River Power System. Nonetheless, conservation measures must still be described in enough detail for the Services to assess their beneficial effects.	Sec. 7 consult.
Create optional collaborative consultation process	Minor change	Positive	**No change from proposal** The final rule includes the "optional collaborative consultation" process, which allows an action agency to better coordinate with the Services to develop analysis and documentation to help the Services draft their biological opinions. Under past practice, the Services could already have incorporated by reference or adopt an action agency's analysis as part of a biological opinion (e.g., the "optional formal consultation" process under the ESA-FIFRA counterpart rule that was upheld in Washington Toxics v. USFWS). For federal agencies to use the new optional collaborative consultation option effectively, the Services should issue supplemental guidance on how to pursue that option.	Sec. 7 consult.
Create expedited consultation process	Minor change	Positive	**No change from proposal** This is a new option to streamline certain consultations, especially those with limited harmful effects on species. This approach could incentivize federal agencies to minimize the harmful effects of their projects as much as possible before initiating consultation, in order to take advantage of the expedited process. The outcome would improve	Sec. 7 consult.

			conservation and save agency time and resources.	
Create efficiency in drafting initiation package	Minor change	Positive	**No change from proposal** The final rule clarifies that the Services may consider documents prepared for NEPA and other purposes as part of a package for initiating formal consultation, provided those documents meet minimum standards specified in the final rule. This is not a new approach, as the Section 7 Consultation Handbook already allows biological opinions to reference descriptions of actions in NEPA documents. This change will improve the efficiency of the consultation process.	Sec. 7 consult.
Allow concurrent initiation of consultation on related actions	Minor change	Positive	**No change from proposal** The final rule explains that a federal agency's request for formal consultation may include "a number of similar individual actions within a given geographical area, a programmatic consultation, or a segment of a comprehensive plan." The goal of concurrent initiation is to increase the efficiency of the consultation process.	Sec. 7 consult.
Allow biological opinions to adopt other documents	Minor change	Positive	**No change from proposal** As part of a Service's biological opinion, the agency may adopt "all or part of" a federal agency's initiation package or the Service's analysis for an ESA section 10 permit. This is consistent with past practice and reduces Services workload without compromising on conservation.	Sec. 7 consult.
Clarify use of programmatic consultations	Clarifies or codifies past practice	Negligible	**No change from proposal** The definition of programmatic action is consistent with the Services' 2015 rule that defines framework and mixed programmatic actions.	Sec. 7 consult.

Clarify requirements to initiate formal consultation	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice.	Sec. 7 consult.
Clarify biological assessment as prerequisite to formal consultation	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice.	Sec. 7 consult.
Clarify Services responsibilities during formal consultation	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice.	Sec. 7 consult.
Clarify reference to "director."	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice.	Sec. 7 consult.
Clarify that Services will consider beneficial actions in formal consultation	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice.	Sec. 7 consult.
Clarify contents of biological opinions generally	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice.	Sec. 7 consult.
Clarify contents of jeopardy biological opinions	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice. The final rule, however, does not mention "adverse modification" as a finding independent of jeopardy, even though that outcome is possible.	Sec. 7 consult.
Clarify that reinitiation of informal consultation is possible	Clarifies or codifies past practice	Negligible	**No change from proposal** This is consistent with past practice. The final rule clarifies that reinitiation on informal consultation is also possible by removing	Sec. 7 consult.

			"formal" from the current regulation. This affirms the breadth of the reinitiation requirement (more protective standard). Note that 50 CFR 402.16(a) specifies four triggers for reinitiating consultation. One of them has been updated to address an inadvertent omission in the past regulations: reinitiation is also required if a federal action is modified in a way that was not considered in a "written concurrence" during informal consultation.	
Establish Services responsibilities during formal consultation	Minor change	Negligible	**No change from proposal** The final rule describes past practice for Services responsibilities during formal consultation.	Sec. 7 consult.
Establish no consultation requirement for "global processes" such as many greenhouse gas emitting activities	Not adopted	Not adopted	**Not adopted** The Services declined to adopt this very controversial concept, which it sought comment on in the proposed rules. This is noteworthy because the Trump administration has, by omission, preserved the potential requirement for section 7 to cover greenhouse gas emitting activities.	Sec. 7 consult.
Limit scope of consultation to actions within jurisdiction of agency	Not adopted	Not adopted	**Not adopted** The Services declined to adopt this concept that would seriously undermine conservation by limiting the types of effects that must be considered during consultation. The background to the final rule explains that "the Services decline to limit the 'effects of the action' to only those effects or activities over which the Federal agency exerts legal authority or control." Elsewhere in the background, the Services note that they will "ensure that a reasonable and prudent measure assigned to a Federal action agency does not exceed the scope of a Federal action agency's authority." This same limitation, however, is already described on page 4-53 of the Section 7 Handbook.	Sec. 7 consult.

Combine consultations affecting species under joint jurisdiction	Not adopted	Not adopted	**Not adopted** The current Section 7 Handbook already describes a process for both Services to coordinate on consultations for species under joint jurisdiction (e.g., sea turtles).	Sec. 7 consult.