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December 7, 2020

Via Federal eRulemaking Portal

Mr. Aaron Valenta
Chief, Division of Restoration & Recovery
U.S. Fish & Wildlife Service
Southeast Regional Office
1875 Century Boulevard
Atlanta, GA 30345

**Re: Proposal to Downlist the Red-Cockaded Woodpecker With a Section 4(d) Rule
Docket No. FWS-R4-ES-2019-0018**

Dear Mr. Valenta:

The Southern Environmental Law Center submits the following comments on behalf of a broad coalition of Conservation Groups working in the Southeast in response to the U.S. Fish and Wildlife Service's ("FWS" or "Service") proposed downlisting and accompanying rule for the red-cockaded woodpecker. [Proposed] Reclassification of the Red-Cockaded Woodpecker From Endangered to Threatened With a Section 4(d) Rule, 85 Fed. Reg. 63,474 (Oct. 8, 2020) (to be codified at 50 C.F.R. §§ 17.11(h) and 17.41(h)).

Over the course of decades of federal protection and oversight, scientific research, and intensive management, red-cockaded woodpecker populations have steadily grown. The improvements in red-cockaded woodpecker numbers and management is a testament to the power of the Endangered Species Act ("ESA"). But the Fish and Wildlife Service is poised to throw away those hard-earned strides by prematurely claiming victory and removing critical protections and oversight for red-cockaded woodpeckers. The Service's proposal to downlist the red-cockaded woodpecker is not justified and would result in the species backsliding in the future without the support and protection needed.

We have repeatedly raised concerns that the Service is ignoring the best available science, excluding the public from the process, and violating the standards set by the ESA for listing species. Over the past two and a half years, the Service has not responded to those concerns or remedied them. Instead, the Service has continued toward its predetermined decision to reclassify the species without regard to the science or legally-required analyses. The Service now seeks to compound and codify these transgressions through the proposed downlisting and 4(d) rule that would not provide for the conservation of the species.

In these comments, we highlight how the Service's proposal would violate the ESA and fail to provide for recovery of the species:

- The Service has not followed the best available science to reach its conclusion, and failed to prepare a prerequisite status review to justify its decision as required by the ESA;

- The red-cockaded woodpecker remains at risk of extinction due to habitat loss, climate-change, southern pine beetle infestations, inbreeding and genetic drift, among other threats;
- The Service violated the ESA in failing to consider the combined effect of the many threats facing the red-cockaded woodpecker for the foreseeable future, as required by its own regulations;
- The Service failed to adequately analyze whether the red-cockaded woodpecker is at risk of extinction throughout significant portions of its range in violation of the ESA’s listing requirements and governing case law;
- The proposed rule lacks needed specificity and adequate protections to ensure conservation and recovery, in violation of the ESA’s requirements for 4(d) rules;
- The proposed 4(d) rule would further fail to provide for recovery and conservation by allowing red-cockaded woodpeckers to be harmed and killed on military bases, which are home to some of the most important red-cockaded woodpecker populations.

We elaborate on these and other deficiencies of the Service’s proposal below.

I. Historical Protections for Red-Cockaded Woodpeckers and Pine Ecosystems

The red-cockaded woodpecker was first federally listed as endangered in 1970. *See* Reclassification of the Red-Cockaded Woodpecker, 85 Fed. Reg. at 63,476 (citing 35 Fed. Reg. 16,047 (Oct. 13, 1970)). The species has remained protected as endangered since that time. The 50 years of protections for the red-cockaded woodpecker have not only been key to preventing the species’ extinction; they have also helped protect the pine ecosystems of the south, including other rare and imperiled species.

Previously, the red-cockaded woodpecker was widespread across the Southeast, but by the time it was listed in 1970, fewer than 10,000 individuals remained.¹ As few as 7,800 active clusters of red-cockaded woodpeckers exist today across the species’ range, down from an historical, pre-European settlement estimate of 1-1.6 million family groups.² The species once ranged from New Jersey, Maryland, and Virginia down to Florida, west to Texas, and north into Oklahoma, Missouri, Tennessee, and Kentucky.³ Now, the species persists in mostly small, heavily fragmented populations.⁴ Habitat loss was the primary driver of this decline, and continues to be a serious threat to the species today.⁵

¹ U.S. Fish & Wildlife Serv., Recovery Plan for the Red-Cockaded Woodpecker (*Picoides Borealis*) Second Revision 1 (Jan. 27, 2003) (hereinafter “Recovery Plan”), Attachment 1.

² U.S. Fish & Wildlife Serv., Species Status Assessment Report for the Red-cockaded Woodpecker (*Picoides borealis*), Version 1.3 (Apr. 2020) [hereinafter Final SSA] at 14, 19.

³ *Id.* at 19.

⁴ FWS, RCW Current Condition PowerPoint, slide 33, Attachment 2

⁵ Recovery Plan, Att.1, at 1; e.g. Final SSA at 73; *see infra* Section IV.B .

Red-cockaded woodpeckers “nest and roost in cavities they excavate in living pines.”⁶ The excavation process is an admirable, multi-year undertaking, requiring the birds to select an appropriately-aged pine, excavate 10 to 15 centimeters of live sapwood while avoiding dangerous pine resin, and ultimately construct a cavity contained within the living pine’s heartwood.⁷ While red-cockaded woodpeckers prefer longleaf pines, they also use loblolly, slash, and shortleaf pines for constructing their cavities.⁸ This unusual behavior has led to other quirks in red-cockaded woodpecker life, such as cooperative breeding and “daily excavation of resin wells to create resin barriers against predatory rat snakes.”⁹ Because of the bird’s unique reliance on cavities in living pines, they require mature pines which will have sufficient heartwood diameter.¹⁰ Specifically, the birds select pines that are “generally 60-80 years” old.¹¹ Older trees are also more susceptible to red heart fungus which decays a tree’s heartwood and in turn shortens the excavation time for red-cockaded woodpeckers.¹² Red-cockaded woodpeckers use the cavities for nesting and roosting throughout the year.

The mature, living pines used by the red-cockaded woodpecker best thrive in fire-maintained pine forests, savannahs, flatwoods, sandhills, and woodlands, as regular forest fires reduce plant competition and maintain open mid-stories necessary for native plants and prey to thrive.¹³ Longleaf pine forests, which once covered the Southeast, are now largely relegated to isolated patches due to fire suppression and conversion to other land uses.¹⁴ Once carpeting almost 90 million acres from Virginia to Texas, longleaf pine forests have been decimated to merely three million acres.¹⁵ The longleaf pine ecosystems “are now among the most endangered systems on earth.”¹⁶ This dramatic and devastating habitat loss has contributed to the declines of red-cockaded woodpeckers, as well as many other species associated with longleaf pine ecosystems, such as the Bachman’s sparrow, eastern indigo snake, gopher tortoise, and dusky gopher frog.¹⁷

⁶ Recovery Plan, Att. 1, at 32.

⁷ *Id.* at 33.

⁸ *Id.* In fact, in South Florida, south of the longleaf pine range, red-cockaded woodpeckers can only excavate cavities in slash pine trees. USFWS, *Red-cockaded woodpecker: Picoides borealis*, in USFWS, MULTI-SPECIES RECOVERY PLAN FOR SOUTH FLORIDA, 4-473 - 4-502, 4-476 (2019), <https://www.fws.gov/verobeach/MSRPPDFs/RedCockadedWoodpecker.pdf>; Attachment 3.

⁹ Recovery Plan, Att. 1, at 32.

¹⁰ *Id.* at 32, 34.

¹¹ *Id.* at 34.

¹² *Id.* at 35.

¹³ Recovery Plan, Att. 1, at 44-45.

¹⁴ *Id.* at 1.

¹⁵ Albert Way, *Longleaf Pine Ecosystem*, NEW GA. ENCYCLOPEDIA (June 8, 2017), <https://www.georgiaencyclopedia.org/articles/geography-environment/longleaf-pine-ecosystem>.

¹⁶ *Id.*

¹⁷ Jerome A. Jackson, *The southeastern pine forest ecosystem and its birds: Past, present, and future*, in BIRD CONSERVATION 3, 119-159 (Jerome A. Jackson ed., 1989); see also Recovery Plan, Att. 1, at 70.

In order to combat the limiting effects of lost habitat on red-cockaded woodpecker conservation and recovery, the Service and its partners have engaged in intensive habitat management. Indeed, most populations of red-cockaded woodpeckers exist on federal and state lands, including national forests, military bases, wildlife refuges, and national and state parks.¹⁸ The red-cockaded woodpecker remains a “highly conservation reliant species.”¹⁹

Current RCW populations are highly dependent on active conservation management with prescribed fire, beneficial and compatible silvicultural methods to regulate forest composition and structure, the provision of artificial cavities where natural cavities are insufficient, translocation to sustain and increase small vulnerable populations, and effective monitoring to identify limiting biological and habitat factors for management.²⁰

This single-species management approach is appropriate given the species’ status as a critically endangered species. However, because these practices contribute to restoring southern, fire-maintained pine ecosystems closer to pre-European settlement conditions, red-cockaded woodpecker habitat management actually constitutes “ecosystem management,” which has numerous conservation benefits.²¹ Longleaf pine ecosystems are “one of the most species-rich ecosystems found outside the tropics,” and are “renowned for their high levels of diversity, endemism, and species rarity.”²² At least 86 bird species are found in longleaf pine communities.²³ In this way, management targeted at recovering red-cockaded woodpecker populations can simultaneously protect ecologically valuable pine ecosystems and their myriad species.

Red-cockaded woodpeckers are uniquely situated within longleaf and other pine forests because they are both a keystone and an indicator species.²⁴ They are a keystone species because the cavities they build influence the presence and abundance of a variety of other cavity-dwelling species.²⁵ At least 27 species of vertebrates have been documented using abandoned red-

¹⁸ See, e.g., 85 Fed. Reg. at 63,481–82 (4,033 of 7,794 active clusters occur on lands solely owned and managed by federal agencies, and 6,059 active cluster are on lands managed entirely by federal and state agencies).

¹⁹ Final SSA, at 134.

²⁰ *Id.* at 129.

²¹ See RICHARD N. CONNER ET AL., THE RED-COCKADED WOODPECKER: SURVIVING IN A FIRE-MAINTAINED ECOSYSTEM 272, 314 (2001); Loren W. Burger, Jr. et al., *Effects of prescribed fire and midstory removal on breeding bird communities in mixed pine-hardwood ecosystems of southern Mississippi*, in PROCEEDINGS OF THE 20TH TALL TIMBERS FIRE ECOLOGY CONFERENCE, 107-113, 112 (Teresa L. Pruden ed., 1998), Attachment 4.

²² DAVID N. WEAR & JOHN G. GREIS (Eds.), SOUTHERN FOREST RESOURCE ASSESSMENT 621, 55 (2002), <https://www.fs.usda.gov/treesearch/pubs/4833>.

²³ Stacy Shelton, *Birds of a Feather, Linked to an Open Pine Forest*, USFWS (Dec. 11, 2014), <https://www.fws.gov/landscape-conservation/stories/birds-of-a-feather-linked-to-an-open-pine-forest.html>.

²⁴ A *keystone species* is a species on which other species largely depend, and whose presence influences the presence and/or abundance of other species in an ecosystem. An *indicator species* is a species whose population trends can be used to infer conditions of the larger ecosystem.

²⁵ Conner et al., *supra* note 21, at 93.

cockaded woodpecker cavities, including birds, snakes, lizards, squirrels, and frogs.²⁶ In addition, red-cockaded woodpeckers are known to forage in flocks made up of a mix of bird species, especially in longleaf pine ecosystems, a practice that increases feeding efficiency and enhances predator detection.²⁷ Because of this, avian diversity and abundance are both greater near areas occupied by red-cockaded woodpeckers.²⁸

Red-cockaded woodpeckers are also an indicator species because their population trends can mark the health of southern pine ecosystems.²⁹ As discussed previously, red-cockaded woodpeckers have very specific nesting requirements, relying on healthy, living pine trees of great age and large diameter. Red-cockaded woodpeckers are even known to abandon trees when understory plants reach the height of the nest cavity as a result of fire suppression.³⁰ Therefore longleaf and other pine habitats must be well-functioning for red-cockaded woodpeckers to thrive, making the birds ideal indicators of habitat quality.

The red-cockaded woodpecker's unique role as both a keystone and an indicator species in open pine communities makes it a highly effective umbrella species for conservation purposes.³¹ Because red-cockaded woodpeckers are closely associated with many other species, through shared cavities and mixed-species foraging flocks, these other species also benefit from red-cockaded woodpecker management.³² In addition, the habitat conditions that red-cockaded woodpecker management practices are aiming to produce represent the habitat conditions to which many other species are adapted.³³ Since red-cockaded woodpeckers rely on healthy pine forests for success, recovery efforts inherently benefit other pine forest species.

The literature is rife with examples of other bird populations benefitting from red-cockaded woodpecker management. While results can vary by region and management type, a large number of songbirds have increased in abundance as a result of red-cockaded woodpecker management strategies: great crested flycatcher, indigo bunting, yellow-breasted chat, brown-headed nuthatch, rufous-sided towhee, blue-gray gnatcatcher, common yellowthroat, eastern wood-pewee, prairie warbler, red-headed woodpecker, tufted titmouse, northern cardinal,

²⁶ Ralph Costa, *Red-Cockaded Woodpecker Brochure*, USFWS (Oct. 2002), https://www.fws.gov/charleston/pdf/RCW/redcockadedwp_brochure.pdf.

²⁷ Richard R. Schaefer et al., *Composition of mixed-species foraging flocks associated with red-cockaded woodpeckers*, in RED-COCKADED WOODPECKER: ROAD TO RECOVERY, 672-677 (Ralph Costa & Susan J. Daniels eds., 2004), Attachment 5; Jared M. Diamond, *Mixed-species foraging groups*, NATURE (July 30, 1981), Attachment 6; Conner et al., *supra* note 21, at 193.

²⁸ Schaefer et al., *id.*

²⁹ Recovery Plan, Att. 1, at 118.

³⁰ Cliff Shackelford & Jeff Reid, *The endangered red-cockaded woodpecker and modern forestry in Texas: Living in harmony*, TEX. PARKS & WILDLIFE (2001), https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_w7000_0361.pdf.

³¹ An *umbrella species* is defined as a species whose conservation confers protection to a large number of naturally co-occurring species.

³² Conner et al., *supra* note 21; Schaefer et al., *supra* note 27.

³³ Recovery Plan, Att. 1, at 107.

Carolina chickadee, white-eyed vireo, Bachman's sparrow, field sparrow, northern bobwhite, Carolina wren, and hooded warbler.³⁴

The benefits of red-cockaded woodpecker conservation extend beyond just small bird species. A number of small mammal species have also benefitted from the implementation of red-cockaded woodpecker conservation measures, including white-footed mice, golden mice, fulvous harvest mice, hispid cotton rats, and white-tailed deer.³⁵

Management for red-cockaded woodpeckers also supports many imperiled species. More than 100 vertebrate species associated with red-cockaded woodpecker habitats are on federal or state lists of proposed, endangered, threatened, or sensitive species.³⁶ Notably, 35% of the amphibians and reptiles inhabiting longleaf pine forests and 56% of longleaf pine specialists are listed by at least one conservation agency as being of special concern.³⁷ Across the region, many situations exist where the status of other imperiled species has actually improved as a result of conservation actions taken to protect the red-cockaded woodpecker. Some authors have even suggested that red-cockaded woodpecker management practices be used to stabilize declining populations of other species.³⁸ The most common at-risk species to have benefitted from red-cockaded woodpecker conservation measures are the northern bobwhite and Bachman's sparrow, both of which respond strongly to management for red-cockaded woodpeckers.³⁹

Finally, management for red-cockaded woodpeckers provides strong benefits for the entire ecosystem by restoring native habitats and enhancing overall biodiversity. This is because native habitats like longleaf, loblolly, and shortleaf pine systems naturally support a high level of plant diversity which contributes to a higher number of animal species.⁴⁰ In fact, studies have

³⁴ Leonard A. Brennan et al., *Assessing the influence of red-cockaded woodpecker colony site management on non-target forest vertebrates in loblolly pine forests of Mississippi: Study design and preliminary results*, in RED-COCKADED WOODPECKER: RECOVERY, ECOLOGY, AND MANAGEMENT, 309-319 (David L. Kulhavy et al. eds., 1995); Kathleen E. Lucas, *Modeling avian response to red-cockaded woodpecker habitat management in loblolly pine forests of east-central Mississippi* (Master's thesis, Miss. St. Univ., 1993); Christopher W. Wilson et al., *Breeding bird response to pine-grassland community restoration for red-cockaded woodpeckers*, J. WILDLIFE MGMT. (Jan. 1995); Louis Provencher et al., *Breeding bird response to midstory hardwood reduction in Florida sandhill longleaf pine forests*, J. WILDLIFE MGMT. (July 2002); Clark Jones & Robert J. Cooper, *Consideration of the non-stationary effects of the red-cockaded woodpecker as an umbrella species* (Poster presentation, Ga. Ornithological Soc'y, 2011), Attachment 7; Burger et al., *supra* note 21; Recovery Plan, Att. 1, at 107.

³⁵ Ronald E. Masters et al., *Small mammal response to pine-grassland restoration for red-cockaded woodpeckers*, WILDLIFE SOC'Y BULL. (1998); Ronald E. Masters et al., *Effects of pine-grassland restoration for red-cockaded woodpeckers on white-tailed deer forage production*, WILDLIFE SOC'Y BULL. (1996); Ronald E. Masters et al., *Influence of ecosystem restoration for red-cockaded woodpeckers on breeding bird and small mammal communities*, in THE ROLE OF FIRE IN NONGAME WILDLIFE MANAGEMENT AND COMMUNITY RESTORATION: TRADITIONAL USES AND NEW DIRECTIONS, 73-90 (W. Mark Ford et al. eds., 2002), Attachment 8.

³⁶ See Attachment 74 for a full list.

³⁷ Recovery Plan, Att. 1, at 70.

³⁸ Larkin A. Powell et al., *Effects of forest management on density, survival, and population growth of wood thrushes*, J. WILDLIFE MGMT. (Jan. 2002), Attachment 9.

³⁹ See, e.g., Jones & Cooper, *supra* note 34; Wilson et al., *supra* note 34.

⁴⁰ See Schaefer et al., *supra* note 27, at 675. See also Jennifer C. Allen, *Species-habitat relationships for the breeding birds of a longleaf pine ecosystem* (Master's thesis, Va. Polytechnic Inst. & St. Univ., 2001), available at

shown that higher-quality red-cockaded woodpecker habitat is directly correlated with higher levels of species richness of birds, butterflies, amphibians, reptiles, and small mammals, an observation that is consistently confirmed throughout the literature.⁴¹ In sum, red-cockaded woodpeckers are an effective umbrella species whose protection provides simultaneous protection for entire ecosystems and the hosts of associated species within those ecosystems. Removing red-cockaded woodpecker protections could threaten the conservation of dozens of other species associated with open pine ecosystems, including ones that are also of conservation concern.

II. The Service Ignores the Endangered Species Act’s Requirements for Listing Decisions

The ESA has clear requirements about what data should be considered and what specific analyses should be completed in order to support a possible listing change. As detailed throughout these comments, the Service’s downlisting proposal for the red-cockaded woodpecker violates a variety of procedural and substantive requirements under the ESA.

When making a reclassification decision, the ESA directs the Fish and Wildlife Service to determine whether a species is endangered or threatened under the Act according to any of five listed factors:

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) disease or predation;
- (D) the inadequacy of existing regulatory mechanisms; or
- (E) other natural or manmade factors affecting its continued existence.

16 U.S.C. § 1533(a)(1). In making listing determinations under the ESA, the Service must make the decision “solely on the basis of the best scientific and commercial data available to [the Service] after conducting a review of the status of the species.” *Id.* § 1533(b)(1)(A). The ESA defines an endangered species as one “which is in danger of extinction throughout all or a significant portion of its range,” and a threatened species as one “which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” 16 U.S.C. §§ 1532 (6), (20).

To ensure the list of endangered and threatened species remains current and accurate based on species’ present-day status, the Service must complete a status review at least every five years for each listed species. *Id.* § 1533(c)(2). At the time of such review, the Service must

<https://vtechworks.lib.vt.edu/handle/10919/31670> (finding that RCW-managed habitats support increased density and diversity of shrubs, a likely cause of increased abundance of associated bird species).

⁴¹ Ronald E. Thill et al., *Shortleaf pine-bluestem restoration for red-cockaded woodpeckers in the Ouachita Mountains: Implications for other taxa*, in RED-COCKADED WOODPECKER: ROAD TO RECOVERY, 657-671 (Ralph Costa & Susan J. Daniels eds., 2004), Attachment 10; Burger et al., *supra* note 21; Masters et al. (2002), *supra* note 35; Masters et al. (1998), *supra* note 35.

make a determination as to whether the species warrants a change in status from endangered to threatened, or vice versa, or whether the species should be removed entirely from either list. *Id.* § 1533(c)(2)(B). This determination must be made in accordance with the previously identified listing factors and based on the best available scientific information. *Id.*

To aid in recovery and eventual delisting of species, the Service must also “develop and implement” recovery plans which incorporate, among other factors, “objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of this section, that the species be removed from the list.” *Id.* § 1533(f)(1)(B)(ii). Thus, the recovery plan is intended to provide guideposts to the agency for how to determine when recovery has been achieved and delisting should occur.

The ultimate goal of the ESA is to achieve recovery of listed species through conservation actions, where “conservation” is defined as “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 chapter are no longer necessary.” 16 U.S.C. § 1532; *id.* § 1533(f) (requiring implementation of recovery plan “for the conservation and survival of the species”); 50 C.F.R. § 424.02. “The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978). Service regulations mandate that a species may be delisted only “after conducting a status review” that is supported by the “best scientific and commercial data available,” and only if that best available data indicates that the species no longer meets the definition of endangered or threatened—i.e., that it has achieved recovery. 50 C.F.R. § 424.11(e).

The Endangered Species Act’s purpose is “not merely to forestall the extinction of species (i.e., promote a species survival), but to allow a species to recover to the point where it may be delisted.” *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059, 1070 (9th Cir.), *amended*, 387 F.3d 968 (9th Cir. 2004); *see Sierra Club v. U.S. Fish & Wildlife Serv.*, 245 F.3d 434, 438 (5th Cir. 2001) (emphasizing the ESA’s definition of conservation); *Ctr. for Biological Diversity v. Jewell*, No. CV-16-00094-TUC-JGZ, 2018 WL 1586651, at *14 (D. Ariz. Mar. 31, 2018) (“‘Persistence’ is antithetical to the ESA’s recovery mandate.”). As explained below, the Service’s proposal here falls short of ensuring recovery and instead is designed to merely allow the species to persist at best.

III. The Service’s Poor Public Process

Here, the Service has flouted the ESA’s requirements in its haste to claim a premature victory for this species. SELC has sent a series of letters over the past three years, all expressing concerns about how the Service was engaging in an opaque decisionmaking process not informed by the best available science, as required under the ESA.⁴²

⁴² We are attaching these previous letters and expressly incorporate by reference their contents. *See* Letter from SELC Regarding Species Status Assessment, Attachment 11 (May 1, 2018); SELC Comments on Notice of Initiation of Status Review for Red-cockaded Woodpecker (Oct. 5, 2018), Attachment 12; SELC Supplemental Comments on Notice of Initiation of Status Review for Red-cockaded Woodpecker (Nov. 20, 2018), Attachment 13; Letter from SELC Regarding Red-cockaded Woodpecker ESA Protections (Oct. 7, 2019), Attachment 14.

After reviewing a final draft Species Status Assessment (“SSA”) for the red-cockaded woodpecker, we sent you a letter on May 1, 2018, explaining how the data in this report demonstrated that the red-cockaded woodpecker is still endangered under the standards of the Endangered Species Act.⁴³ Two months later, on July 6, 2018, we received a response from then-Assistant Regional Director for Ecological Services Leopoldo Miranda explaining that the Service anticipated announcing a five-year status review for red-cockaded woodpeckers “in the near future” and that the Service anticipated “considering [our] comments at that time.” On August 6, 2018, the Service published a notice of initiation for status reviews of 42 southeastern species, including the red-cockaded woodpecker. *See* 5-Year Status Reviews for 42 Southeastern Species, 83 Fed. Reg. 38,320 (Aug. 6, 2018). On October 5, 2018, SELC submitted comments on behalf of 31 conservation organizations showing that the best available science included in the March 2018 Species Status Assessment did not demonstrate that the red-cockaded woodpecker no longer meets the definition of an endangered species.⁴⁴

On November 20, 2018, SELC submitted supplemental comments expressing concern about the recent impacts of Hurricane Florence and Hurricane Michael on red-cockaded woodpeckers, noting that the harm to the species from these and future storms, which continue to be intensified by climate change, must be considered in any changes to the status of the species.⁴⁵

Most recently, on October 7, 2019, SELC sent a letter chronicling the Service’s determination to remove protections for red-cockaded woodpeckers, regardless of the best available science and without the support of a current, complete status review.⁴⁶ Now, more than two years have passed since the close of the comment period on the Service’s notice of initiation of a status review for the red-cockaded woodpecker.⁴⁷ Not only did we never receive any response to our status review comments or October 2019 letter, but the Service *still has not completed an updated status review*.

A. The Service’s Predetermined Listing Outcome

As we previously detailed in our October 2019 letter, we are concerned with how the Service, and other entities, have been planning for downlisting or delisting the red-cockaded woodpecker for several years, without reference to the best available science. Indeed, the Department of Defense appeared to be pushing for delisting as early as September 2018, *before* the comment period closed on the Service’s notice of initiation of a status review, with notes stating that a lawsuit about the SSA process “may become a challenge in the effort to delist the

⁴³ *See* Letter from SELC Regarding Species Status Assessment, Att. 11.

⁴⁴ *See* SELC Comments on Notice of Initiation of Status Review for Red-cockaded Woodpecker, Att. 12.

⁴⁵ *See* SELC Supplemental Comments on Notice of Initiation of Status Review for Red-cockaded Woodpecker, Att. 13.

⁴⁶ *See* Letter from SELC Regarding Red-cockaded Woodpecker ESA Protections, Att. 14.

⁴⁷ *See id.*

RCW.”⁴⁸ We restate these concerns here, which illuminate and inform our critique of the Service’s proposed rule below.

Shortly after the close of the comment period on the status review initiation notice, a draft planning document between the Service and military—containing comments from Air Force Staff, FWS staff, and former FWS Region 4 Director Cindy Dohner—evidenced a goal of downlisting or delisting the red-cockaded woodpecker:

By March 31, 2020 complete a final rule to either delist or downlist (with regulatory relief) the RCW through the establishment of long-term management and monitoring implementation requirements to determine commitments for future populations.⁴⁹

Consistent with this goal, FWS began requesting “management commitments for this species for the foreseeable future,” from Department of Defense installations in December 2018.⁵⁰

Then, in April 2019, FWS Region 4 Director Leopoldo Miranda sent letters to federal and state partners in red-cockaded woodpecker recovery, stating that

[b]ased on our review of the best available scientific and commercial information, we believe we can propose to reclassify the species to a threatened status under the Endangered Species Act (ESA). Further, if we are able to determine that the current level of management commitments for RCW are reasonably certain to occur for the next 30 years or so (e.g., mid-century), it may be possible that the RCW be considered recovered and suitable for delisting.⁵¹

The letters went on to explain that the Service was “asking all [its] partners to provide their anticipated management and monitoring commitments for this species, particularly those

⁴⁸ DoD Conservation Committee Meeting Notes, at 2, Sept. 11, 2018, Attachment 15; *see also* Draft USFWS and DOD Recovery and Sustainment Partnership Initiative: Red-cockaded Woodpecker (*Picoides borealis*) Action Plan (2018), Attachment 16 (including goal specifically regarding *delisting*).

⁴⁹ USFWS and DOD Recovery and Sustainment Partnership Initiative: Red-cockaded Woodpecker (*Picoides borealis*) Action Plan, Nov. 19, 2018 (redline markings omitted from quoted text), Attachment 17; *see also* USFWS and DOD Recovery and Sustainment Partnership Initiative: Red-cockaded Woodpecker (*Picoides borealis*) Action Plan, Nov. 8, 2018 (including a question from FWS staff about whether a certain item addressed “the range expansion concerns and new mission beddown or is this why down/delisting is needed”), Attachment 18. These two documents both indicated that the decision to downlist or delist would be supported by approximately 25-year management commitments, which is notably the same timeframe that was selected for modelling in the SSA, *see* Final SSA at 133, and used as the “foreseeable future” underlying this downlisting proposal. *See* 85 Fed. Reg. at 63,491.

⁵⁰ E.g. E-mail from Matthew Dekar, Deputy Chief of Div. of Restoration and Recovery, USFWS Region 4, to Michelle Brown, U.S. Air Force, Dec. 21, 2018 3:21 PM, Attachment 19; Letter from Leopoldo Miranda, Regional Director, USFWS, to Karing H. Ohannessian, Dep. Asst. Sec. of the Navy for Env’t., U.S. Dep’t of Navy, Dec. 21, 2018, Attachment 20.

⁵¹ E.g. Letter to Alvin A Taylor, Director, S.C. Dep’t of Natural Res., from Leopoldo Miranda, Regional Director, USFWS, Apr. 10, 2019, Attachment 21; *see also* E-mail to Ryan Orndorff, U.S. Airforce, from Leopoldo Miranda, Regional Director, USFWS, Apr. 4, 2019, Attachment 22.

commitments that would be maintained even if the species was no longer protected under the ESA.”⁵² The letters requested that stakeholders with primary and secondary core and support populations, as identified under the Red-cockaded Woodpecker Recovery Plan, commit to “continuing to pursue the current population and management goals for each population as identified in the associated management plan and the RCW recovery plan.”⁵³ The Service also made similar requests to “non-federal landowners enrolled in the safe harbor program.”⁵⁴

Notably, these anticipated management and monitoring “commitments” are not binding and not intended to be formalized in any fashion; the Service had “no plans to seek or develop formal or other agreements regarding future management commitments. At the same time, “no thresholds have been identified for a specific set of populations with a pre-defined level of management to support a proposed delisting rule.”

According to Service documents from shortly after this time, both the red-cockaded woodpecker species status assessment and the status review were complete as of April 2019. The completed status review and SSA, which had not been released to the public, “provided new and updated status information since the 2003 RCW recovery plan.”⁵⁵ The document detailing these updates explained that while “there have been subsequent SSA edits and revisions,” there have been “no changes to the fundamental data” presented in the March 2018 Draft SSA.⁵⁶ The Service nevertheless claimed that its “analysis continues” while the agency collects information on anticipated management and monitoring commitments from state agencies and private landowners.

In May 2019, the Service began receiving responses to its requests for management commitments. Several states responded with concerns about being able to make a commitment for the requested 30-year time period, citing funding uncertainties.⁵⁷ Despite this, the Service’s instant proposal appears to still be setting up for a possible delisting, offering that “if ongoing and future proactive red-cockaded woodpecker management were assured, the remaining negative factors identified above could be ameliorated.” 85 Fed. Reg. at 63,491.

⁵² E.g. Letter to Taylor, Attachment 21, *supra* note 51.

⁵³ E.g. Letter to Taylor, Attachment 21, *supra* note 51. Additionally, emails indicate that Aaron Valenta and others made efforts to increase the future commitments reported by state conservation agencies by securing reverted Section 6 funds for states’ use, which would only be good for 1-3 years and could likely not fund translocations, which are critical for small populations. *See* Attachment 23, Attachment 24, Attachment 25.

⁵⁴ Red-cockaded Woodpecker Future Management Commitment, Conference Call (April 25, 2019) Q&A’s, at 3, Attachment 26.

⁵⁵ *Id.* at 4.

⁵⁶ E-mail from Will McDearman, RCW Recovery Coordinator, USFWS, to Jonathan Burnam, Ga. Dep’t of Natural Res., Wildlife Res. Div., June 18, 2019 2:20 PM Attachment 27. An early draft of the SSA, with a document title dated January 4, 2017, however, stated that “[s]ubstantial increases in population sizes are required to achieve recovery of RCW.” *See* Attachment 28 at 83.

⁵⁷ E.g. Letter to Aaron Valenta, Region 4 Chief, Div. of Restoration and Recovery, USFWS, from Rusty Garrison, Director, Ga. Dep’t of Natural Res., Wildlife Res. Div., May 17, 2019, Attachment 29; Letter to Leopoldo Miranda, Regional Director, USFWS, from Robert H. Boyle, JR., Interim Director, S.C. Dep’t Natural Res., May 16, 2019 at 2, Attachment 30.

Fundamentally, the Service appears to have set a goal to reclassify the red-cockaded woodpecker for years now and has been working toward that goal instead of honestly assessing the best available science to determine whether such a change is warranted. Such tunnel vision is impermissible. “An agency is required to provide a meaningful opportunity for comments, which means that the agency’s mind must be open to considering them.” *Grand Canyon Air Tour Coal. v. FAA*, 154 F.3d 455, 468 (D.C. Cir. 1998); *see also McLouth Steel Products Corp. v. Thomas*, 838 F.2d 1317, 1323 (D.C. Cir. 1988) (“Consideration of comments as a matter of grace is not enough” where the record “suggest[s] too closed a mind” on the part of the agency).

B. The Service Failed to Complete a Status Review Prior to Its Proposed Downlisting

Despite documents indicating the status review was complete in April 2019,⁵⁸ the Service still has not completed the long-overdue five-year status review for the red-cockaded woodpecker. Instead, more than two years after soliciting comments for an updated five-year review, and seven years since the most recent 2006 Status Review was completed, the Service has proposed a rule to downlist the red-cockaded woodpecker which relies on a Species Status Assessment—a document not envisioned by the ESA and developed around a framework entirely separate from the ESA’s listing requirements. The Service claims that “because we have determined the species now meets the definition of a threatened species under the Act,” as informed by its SSA analysis, “this proposed rule will equate to our 5-year review.” 85 Fed. Reg. at 63,476.

The plain language of the ESA makes clear that the Service must first complete the overdue status review, according to the ESA’s listing factors, prior to reclassifying the red-cockaded woodpecker. The ESA provides that “[t]he Secretary shall make determinations . . . after conducting a review of the status of the species.” 16 U.S.C. § 1533(b)(1)(A) (emphasis added). In addition to the plain mandate, the ESA directs the Service to conduct a status review every five years explicitly for the purpose of determining whether a status change is warranted and requires the Service to base decisions to reclassify a species on such a status review. *Id.* § 1533(c)(2). The Service’s own regulations further emphasize the requirement to prepare a status review prior to reclassifying a species’ status, stating a species “shall be listed or reclassified . . . after conducting a review of the species’ status.” 50 C.F.R. § 424.11(c) (emphasis added); *see also id.* § 424.11(e) (emphasizing requirement to complete status review prior to delisting). Given the requirement to use the best available science when making decisions, the Service cannot use a nonexistent or incomplete five-year status review to determine whether a species should be reclassified.

But neither a proposed rule nor an SSA constitutes a five-year status review, notwithstanding the Service’s apparent reliance on them as substitutes. The status review is an analysis required by the ESA to ensure independent and scientifically-supported decisions, and sets forth a step-wise approach to reclassifying species: first, the agency should determine the species’ status *without a particular action or outcome in mind*, and then, the agency can act

⁵⁸ Red-cockaded Woodpecker Future Management Commitment, Conference Call (April 25, 2019) Q&A’s, at 4, Att. 26, *supra* note 54.

informed by that analysis. Once the Service is already proposing a reclassification in status, that necessarily means that the Service has already predetermined there will in fact be a status change and ruled out the possibility of the status remaining unchanged. Muddling the steps together can lead to what has unfolded with the red-cockaded woodpecker: an attempt to collect information to support a future status change, rather than objectively considering the species' status.

Additionally, an SSA does not review a species' status according to the ESA listing factors, and instead evaluates the species resiliency, redundancy, and representation—concepts that nowhere appear in the ESA. Throughout the proposed rule, the Service relies on the SSA and its “3 Rs” rubric to make its reclassification decision, contrary to the requirements of the ESA. The Service's attempt to reclassify the red-cockaded woodpecker's status remains unjustified by a proper analysis based on the ESA listing factors. In fact, as detailed below, the data recounted in the SSA actually demonstrates that continued endangered status is warranted for the species.

By failing to complete the five-year status review and relying on the SSA to reclassify the red-cockaded woodpecker from endangered to threatened, the Service has demonstrated an alarming disregard for the procedures in place to ensure that the goals of the ESA are realized and that reclassification decisions are based on the best available science.

IV. The Red-Cockaded Woodpecker Remains Endangered Based on the Best Available Science

The Service's own most recent analysis of the red-cockaded woodpecker—the Species Status Assessment—amply demonstrates that the species is still at risk of extinction and thus endangered. The SSA details how 108 of 124 demographic populations, or roughly 87% of all populations, have fewer than 100 clusters and are considered to have low or very low resiliency.⁵⁹ While the Service leans into the idea of positive or stable growth rates for some populations, it does not grapple with carrying capacity limits for those populations if they were limited to existing (or shrinking) habitat, and the Service admits its methodology does not account for predicted increases in severe storm events. Fundamentally, a variety of pressing threats continue to leave red-cockaded woodpeckers at risk of extinction, and the Service's notice of proposed downlisting and SSA do not show how many of these long-running threats have abated at all to merit reclassification now.

A. Neither Downlisting nor Delisting Is Warranted Based on the Most Recent Recovery Plan and Status Review

As discussed above, the Service has yet to properly complete the overdue five-year status review it initiated in 2018, leaving the last status review, completed in 2006, as the only valid review upon which to base a reclassification. That status review easily reached the conclusion that the red-cockaded woodpecker was still endangered.

The 2006 Status Review identified lack of suitable habitat as the source for *all* primary threats to red-cockaded woodpecker viability in relation to Listing Factor A under ESA

⁵⁹ Final SSA at 104–05.

Section 4,⁶⁰ and highlighted the necessity of prescribed burning programs and increasing population numbers independent of installation of artificial cavities in overcoming these threats.⁶¹

As to Listing Factor D, the 2006 Status Review determined that existing regulatory mechanisms were adequate based on protections from the ESA and “assuming the recovery plan is fully implemented.”⁶² The 2006 Status Review also explained that Listing Factor E pertains to red-cockaded woodpeckers because of the isolated nature of fragmented populations and risks associated with inherently small populations, such as loss of genetic diversity.⁶³

The 2006 Status Review determined that the woodpecker continued to meet the definition of endangered.⁶⁴ The status review identified as remaining threats:

- (1) insufficient numbers of natural cavities and continuing net loss of cavity trees,
- (2) habitat fragmentation and its effects on genetic variation, dispersal, and demography,
- (3) lack of foraging habitat of adequate quality,
- (4) range-wide and within population isolation, and
- (5) tenuous viability of small populations.⁶⁵

In explaining why endangered listing status continued to be appropriate, the 2006 Status Review acknowledged that several large populations existed and that the red-cockaded woodpecker exhibited a positive population trend across its range—but highlighted that “the vast majority (73%) of properties harbor fewer than 40 active clusters.”⁶⁶ By comparison, the latest population numbers show only a minor improvement in the intervening 14 years: approximately 68% of properties still have fewer than 40 active clusters.⁶⁷

Similarly, the comprehensive 2003 Recovery Plan for the species—consistently relied upon by the U.S. Fish and Wildlife Service in assessing progress toward recovery—demonstrates that the red-cockaded woodpecker still qualifies as endangered based on the latest population estimates. Both the draft and final versions of the red-cockaded woodpecker SSA also incorporated the recovery plan criteria in discussing how the species is conservation-reliant and has not attained long-term viability.

Moreover, as we previously outlined in greater detail in response to the Service’s 2018 initiation of a status review, the species’ 2003 Recovery Plan carefully outlined a series of

⁶⁰ Ralph Costa, U.S. FISH & WILDLIFE SERV., Red-Cockaded Woodpecker (*Picoides borealis*) 5-Year Review: Summary & Evaluation 3, 9 (2006) (hereinafter “2006 Status Review”), Attachment 31, at 7.

⁶¹ *Id.* at 11.

⁶² *Id.* at 8, 11.

⁶³ *Id.* at 8-9.

⁶⁴ *Id.* at 14.

⁶⁵ *Id.* at 12.

⁶⁶ *Id.* at 13.

⁶⁷ Final SSA at 106-08, Table 3.

criteria in relation to the ESA listing factors in order to determine when the red-cockaded woodpecker should be delisted or downlisted. The 2006 Status Review determined that the Recovery Plan's recovery criteria were up-to-date and adequately addressed all of the five listing factors under the ESA.⁶⁸ In turn, the 2006 Status Review expressly incorporated and used the Recovery Plan's criteria in analyzing the five listing factors.⁶⁹

The Recovery Plan's necessary benchmarks for downlisting and delisting the species and data referenced in the Proposed Rule and presented in the Service's SSA show that those thresholds have not been achieved for the red-cockaded woodpecker. The Recovery Plan specifies that delisting will only occur when each of its delisting criteria is met.⁷⁰ As we detailed previously, a comparison of the Recovery Plan's downlisting and delisting criteria with the data in the Draft SSA showed that the criteria have not been met for either threshold, which remains true according to the Final SSA as well. Indeed, the proposed downlisting notice admits that only three of the downlisting criteria have been met. 85 Fed. Reg. at 63,488-89. The proposed downlisting goes on to acknowledge that only 14 of 20 population size requirements corresponding to the downlisting criteria have been met. *Id.* at 63,490. At the same time, the Service's Final SSA states only 13 of the 20 population size criteria have been met—and another 10-15 years are needed before those downlisting criteria may be fully met.⁷¹

As for delisting criteria, the proposed rule admits *none* of the criteria have been fully met because of the requirement that populations not be dependent on artificial cavities, and only 12 of 29 delineated populations have met their delisting population targets. 85 Fed. Reg. at 63,490.

In its proposed rule, the Service makes little attempt to explain why it previously relied on the 2003 Recovery Plan and its downlisting and delisting criteria when it last evaluated the status of the species, but now disregards them. The Service confusingly acknowledges that the recovery plan “provided management guidelines fundamental to the conservation and recovery of red-cockaded woodpeckers,” but then ultimately ignores the Plan and its criteria in reaching its decision to downlist the red-cockaded woodpecker. *Id.* at 63,488. And even as the Service itself appears to be arbitrarily abandoning the guidelines of the Recovery Plan that it has always relied on, it directs others to continue abiding by the Recovery Plan: “The Service continues to strongly encourage the application of these guidelines [in the Recovery Plan] to the management of woodpecker populations on public and private lands.” *Id.* The Service ultimately brushes off the Recovery Plan criteria by referring to the species’ “resiliency” and “redundancy”—SSA factors that, unlike the Recovery Plan or status review, are nowhere provided for under the ESA. *See id.* The Service cannot simultaneously disavow its ESA-required Recovery Plan and hold it up as a standard—and certainly cannot expect others to adhere to or honor the Recovery Plan that it now disregards.

⁶⁸ 2006 Status Review, Attachment 31, *supra* note 60.

⁶⁹ *Id.* at 4-9.

⁷⁰ Recovery Plan, Att. 1, at xiii, 140.

⁷¹ Final SSA at 14 (“Population growth rate estimates for 6 of the 7 remaining populations indicate these populations should attain downlisting population size objectives in the next 10-15 years.”).

B. Habitat Loss Threatens the Red-Cockaded Woodpecker

Several conclusions within the SSA show that under the ESA’s listing factors, the red-cockaded woodpecker continues to be endangered. Listing factor A—“the present or threatened destruction, modification, or curtailment of its habitat or range”—continues to apply to the red-cockaded woodpecker. As stated in the Species Status Assessment, the species “now occup[ies] a patchy distribution from southern Virginia to Florida and west to Texas and Oklahoma,” a sliver of its former range.⁷² Additionally, woodpecker populations existing on properties where habitat has not been managed have declined.⁷³ The “[l]oss of cavities and cavity trees was a primary cause of the decline of RCW, *and is currently a substantial threat.*”⁷⁴ Storm events, southern pine beetles, wildfire, invasive species, drought, sea level rise, and kleptoparasitism all can further disturb otherwise-suitable habitat for red-cockaded woodpeckers.⁷⁵

The red-cockaded woodpecker’s dependence on habitat management actions, including artificial cavity installations, underscores the severely limited nature of suitable habitat for the species. Management practices recommended by the 2003 Recovery Plan have been “applied at varying degrees,” but “generally, where midstory condition, cavity availability, demographics and habitat fragmentation are addressed in site specific recovery plans, these populations have fared well and grown.”⁷⁶ Similarly, “[t]he condition of . . . habitat pre-disturbance and the availability of resources and a management plan greatly affect the ability of populations to ‘bounce back’ from these disturbances.”⁷⁷ By contrast, “[w]oodpecker populations relying on properties with no affirmative requirements or incentives to conserve habitat have declined due to loss of foraging and nesting habitat, fragmentation and unmitigated loss of suitable cavities.”⁷⁸

An analysis of GIS data shows that habitat destruction remains a substantial, ongoing threat to the red-cockaded woodpecker.⁷⁹ Likewise, analysis of 30 years of Landsat satellite data shows that since 1986 the species has lost 32% of its potential habitat, as defined by the USGS Gap⁸⁰ species distribution model, and 14.7% of this suitable habitat within the current range recognized by the Service. These losses only include permanent decreases in vegetated land cover and exclude restoration efforts. While red-cockaded woodpeckers have received more robust protection on federal lands (4.6% total loss), habitat on private lands has been much more

⁷² *Id.* at 74, 118 (“In summary representation for RCW has decreased significantly relative to the historical distribution of the species.”).

⁷³ *Id.* at 74.

⁷⁴ *Id.* at 83 (emphasis added).

⁷⁵ *Id.* at 82-83. For a more detailed discussion of climate change-induced impacts, *see infra* Section IV.C.

⁷⁶ *Id.* at 74.

⁷⁷ *Id.* at 83.

⁷⁸ *Id.* at 74.

⁷⁹ A.J. Eichenwald, M.J. Evans & J.W. Malcolm, *U.S. Imperiled Species are Most Vulnerable to Habitat Loss on Private Lands*, 18 FRONTIERS IN ECOLOGY & THE ENV’T 439, 444 (2020), Attachment 32.

⁸⁰ U.S. Geological Survey, *Gap Analysis Project Species Habitat Maps CONUS_2001* (2018), <https://doi.org/10.5066/F7V122T2>.

vulnerable (35.2% total loss). Furthermore, annual rates of loss on private lands have been steadily increasing, from 1.3 to 1.8% per year over the last five years.

The preamble to the proposed rule attempts to paint a rosy picture about habitat by focusing on currently occupied habitat. *See, e.g.* 85 Fed. Reg. at 63,479. While areas currently inhabited by and actively managed for red-cockaded woodpeckers are not at risk of loss or degradation—precisely because of the ESA’s protections—those existing inhabited areas are few and far between compared with the species’ historic habitat. As acknowledged in the SSA, many of even the smaller populations of red-cockaded woodpecker may be reaching carrying capacity limits, meaning that without additional new populations or existing populations expanding on to greater swaths of suitable habitat, the red-cockaded woodpecker may not be able to fully recover. Contrary to the proposed rule’s claims that “stressors to the species resulting from exposure to habitat modification or destruction are minimal,” the extreme loss of habitat for the red-cockaded woodpecker, across its historic range, continues to imperil the species. Indeed, elsewhere, the preamble to the proposed rule refers to these as “legacy stressors”—but the fact that these are long-lasting threats does not change their effect of presently threatening red-cockaded woodpeckers with extinction. 85 Fed. Reg. at 63,491.

Broadly, habitat loss is a major problem affecting the Southeast, and red-cockaded woodpeckers are not immune to this threat. Eleven of the 20 fastest-growing metropolitan areas in the nation are found in the Southeast.⁸¹ As these cities expand, urban sprawl is contributing significantly to the fragmentation and destruction of natural habitats in the region.⁸² Habitat fragmentation introduces a host of threats to imperiled species and their habitats, such as by interrupting predator-prey relationships, decreasing the availability of foraging habitat, and hindering resilience from disturbance and climate change.⁸³ Urban development may also facilitate the expansion of invasive species.⁸⁴

Moreover, a separate proposed rulemaking by the Service would define the meaning of “habitat” in a way that could impair efforts to restore or otherwise rehabilitate habitat for use by red-cockaded woodpeckers. *See* Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat, 85 Fed. Reg. 47,333 (proposed Aug. 5, 2020) (to be codified at 50 C.F.R. pt. 424). The proposed definition would restrict the meaning of “habitat” to areas “with existing attributes that have the capacity to support”—thus not extending to adjacent tracts of land that *could*, with some restoration and management, provide suitable habitat in the future. 85 Fed. Reg. at 47,334 (emphasis added). Given that the red-cockaded woodpecker does not yet have any critical habitat designated under the ESA, if finalized, the habitat definition would seriously limit what habitat would be eligible for such a designation in the future.

⁸¹ U.S. CENSUS BUREAU, U.S. DEP’T OF COMMERCE, RELEASE NO. CB15-56, NEW CENSUS BUREAU POPULATION ESTIMATES REVEAL METRO AREAS AND COUNTIES THAT PROPELLED GROWTH IN FLORIDA AND THE NATION (2015), <https://www.census.gov/newsroom/press-releases/2015/cb15-56.html>.

⁸² *See* Adam J. Terando et al., *The southern megalopolis: Using the past to predict the future of urban sprawl in the Southeast U.S.*, PLOS ONE (July 23, 2014), Attachment 33.

⁸³ *Id.*

⁸⁴ Sean B. Menke et al., *Urban areas may serve as habitat and corridors for dry-adapted, heat tolerant species; an example from ants*, URBAN ECOSYSTEMS (Sept. 9, 2010), Attachment 34.

Simply put, lack of suitable habitat continues to threaten the red-cockaded woodpecker—and is only likely to worsen in the future. The Service’s proposal to downlist red-cockaded woodpeckers seems to be effectively assuming—and dooming—the red-cockaded woodpecker to a future of persisting only in the isolated patchwork of suitable habitat existing today, without hope for expansion. Such mere survival is antithetical to the recovery purposes of the ESA, and will ultimately lead to the extinction of species.

C. Climate Change Poses Increasing Threats to Red-Cockaded Woodpeckers

To further complicate these issues, climate change is predicted to significantly transform red-cockaded woodpecker habitats throughout the Southeast in the near future, introducing additional threats to the species’ already imperiled habitats in the region.⁸⁵ The Intergovernmental Panel on Climate Change reports that human activities are estimated to have caused approximately 1.0°C (1.8°F) of global warming above pre-industrial levels, and global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate.⁸⁶ Climate change will lead to red-cockaded woodpecker habitat degradation and/or loss in myriad ways, including increased storm intensity, heat waves, increased drought, more intense wildfires, invasive species outbreaks, and sea level rise.⁸⁷

Hurricanes and other severe storm events pose a particularly extreme threat to the species, since the old-growth pine forests in which they live and the large cavity trees that they depend upon for nesting are often felled during storms.⁸⁸ North Carolina, South Carolina, Florida, and Georgia are already among the U.S. states historically most hard hit by tropical storm systems, and there has been a substantial increase in the severity of Atlantic hurricane activity in the last several decades.⁸⁹ The Atlantic coast presently sees more Category 4 and Category 5 hurricanes compared to the 1980s, and further increases are projected.⁹⁰ Hurricanes have also dropped more rain in recent years compared to the historic average, and this extreme precipitation will increasingly cause extensive flooding throughout the Coastal Plain.⁹¹

⁸⁵ Jennifer Costanza et al., *Assessing climate-sensitive ecosystems in the southeastern United States*, U.S. GEOLOGICAL SURVEY (2016), <https://pubs.er.usgs.gov/publication/ofr20161073>.

⁸⁶ Intergovernmental Panel on Climate Change, *2018: Summary for Policymakers*, in SPECIAL REPORT: GLOBAL WARMING OF 1.5°C (Valérie Masson-Delmotte et al. eds., 2018), Attachment 35, <https://www.ipcc.ch/sr15/chapter/spm/>.

⁸⁷ See, e.g., *id.* at 4, 7, 9, 13. See also Final SSA at 119.

⁸⁸ See, e.g., Steven M. Lohr et al., *Restoration, status, and future of the red-cockaded woodpecker on the Francis Marion National Forest thirteen years after Hurricane Hugo*, in RED-COCKADED WOODPECKER ROAD TO RECOVERY, 230–37 (Ralph Costa & Susan J. Daniels eds., 2004), Attachment 36.

⁸⁹ Xing Chen et al., *Variations in streamflow response to large hurricane-season storms in a southeastern U.S. watershed*, J. HYDROMETEOROLOGY (Feb. 2015), Attachment 37.

⁹⁰ See Peter J. Webster et al., *Changes in tropical cyclone number, duration, and intensity in a warming environment*, SCI. (Sept. 16, 2005), Attachment 38; Kevin J.E. Walsh et al., *Tropical cyclones and climate change*, WIRES CLIMATE CHANGE (Nov. 2015), Attachment 39.

⁹¹ Kenneth E. Kunkel et al., *Recent increases in U.S. heavy precipitation associated with tropical cyclones*, GEOPHYSICAL RES. LETTERS (Dec. 23, 2010), Attachment 40; Hans W. Paerl et al., *Recent increase in catastrophic*

Hurricanes are also maintaining their strength farther inland than in the past as climates warm, which “will likely make hurricanes more damaging further inland in years to come.”⁹² In other words, more red-cockaded woodpecker populations, including those farther inland, will be at risk of greater damage from storms in the future.

A single hurricane can destroy habitat and wipe out entire populations of red-cockaded woodpeckers. The notice of proposed downlisting itself admits that “[h]abitat destruction caused by hurricanes is the most acute and potentially catastrophic disturbance because hurricanes can impact entire populations.” 85 Fed. Reg. at 63,479. The proposed downlisting also states that approximately 63 of the 124 populations “are vulnerable to potential catastrophic impacts of hurricanes,” with 89% of those at-risk populations considered as having low or very low resiliency. *Id.* at 63,480. The preamble even admits that major storms are expected to increase as a result of climate change, and that “smaller populations are more vulnerable to individual hurricanes, as well as to the effects of recurring storms depleting cavity trees and foraging habitat with reductions in population size.” *Id.* The preamble to the proposed rule then suggests that these small populations may be able to “persist” if stakeholders “implement prompt, effective post-storm recovery actions”, and points to the quick response after Hurricane Michael in 2018.

But this oversimplifies the damage wrought by Hurricane Michael, and the necessary response. As we have documented in previous comments, Hurricane Michael devastated several different populations, and occurred the same year that Hurricane Florence hit eastern North Carolina.⁹³ Moreover, recovering from the damage of these storms will take years—the quick initial response is necessary, but not sufficient alone to allow the species to bounce back from the substantial toll these storms have taken on key populations.⁹⁴ Meanwhile, the impacts of this past year’s storms are still being assessed and documented, with many less robust populations in areas like Louisiana being potentially permanently devastated. Early estimates put initial loss of cavity trees at the Vernon Unit population in Kitsatchie Forest at 730, while another 85 cavity trees and three pairs of red-cockaded woodpeckers were reported lost at nearby Fort Polk.⁹⁵ At the beginning of the year, in January 2020, a tornado tore through the same area, with wildlife managers reporting a loss of 10 clusters.⁹⁶

tropical cyclone flooding in coastal North Carolina, USA: Long-term observations suggest a regime shift, SCI. REPORTS (July 23, 2019), Attachment 41.

⁹² Matt McGrath, BBC, *Climate Change: Hurricanes Get Stronger on Land as World Warms*, Nov. 11, 2020, <https://www.bbc.com/news/science-environment-54902068>, Attachment 42.

⁹³ See also Camp Lejeune INRMP Summary for Fiscal Year 2018, Attachment 43 (150 cavity trees lost during Hurricane Florence on Camp Lejeune in September 2018).

⁹⁴ See, e.g., Georgia Department of Natural Resources, *Post-Hurricane Michael Longleaf Pine Restoration at Silver Lake and Chickasawhatchee Wildlife Management Areas*, Attachment 44 (indicating that replanting of longleaf pine stands destroyed by Hurricane Michael is expected to continue for four years after the storm).

⁹⁵ David Mitchell, THE ADVOCATE, *These endangered woodpecker families were recovering. Then Hurricane Laura flattened their homes*, Oct. 19, 2020, <https://www.houmatoday.com/story/news/2020/10/19/these-endangered-woodpecker-families-were-recovering-then-hurricane-laura-flattened-their-homes/5980000002/>, Attachment 45.

⁹⁶ Anna Deaton, KALB, *Kitsatchie National Forest still recovering from downed timber, missing birds ahead of weekend storms*, Jan.10, 2020, <https://www.kalb.com/content/news/Kisatchie-National-Forest--566889391.html>, Attachment 46.

The notice of proposed downlisting also fails to acknowledge the very real possibility of multiple severe storm events hitting a single population in a given hurricane season,⁹⁷ or multiple populations being hit by a single severe storm event. In either scenario, or if both happened in a single hurricane season, stakeholders would not have the resources to respond to provide the necessary prompt and aggressive response at multiple sites or on repeated occasions—especially under the language of the proposed rule, which as explained below, will likely restrict rather than enhance resources to be deployed for red-cockaded woodpeckers. Indeed, the Service’s final SSA explicitly admits “[o]ur future simulations do not adequately represent potential impacts of hurricanes.”⁹⁸

Beyond hurricanes and other severe storm events, researchers predict that areas of the Coastal Plain may experience drier conditions as a result of climate change, particularly in the southwestern portion of the region.⁹⁹ Drier conditions, in combination with higher temperatures, will likely increase the frequency and intensity of catastrophic wildfires, which represent stochastic events that can threaten small, vulnerable red-cockaded woodpecker populations.¹⁰⁰ Moreover, as small, frequent, and low-intensity fires are an integral part of preserving red-cockaded woodpecker habitat, catastrophic wildfires can be a significant impediment to continued species management programs that include prescribed burns.¹⁰¹

Some red-cockaded woodpecker populations and existing or future habitat may also be threatened by sea level rise, which will erode shorelines, inundate wetlands, facilitate saltwater intrusion, and exacerbate flooding across the Southeast Coastal Plain. Increases in global temperatures have already caused a 7 to 8 inch increase in global average sea level rise since 1900, with almost half of this rise (3 inches) occurring since 1993.¹⁰² Using intermediate projections with emission rates similar to today, the interagency report led by the National Oceanic and Atmospheric Administration anticipates 1.5 to 2 feet of sea level rise by 2050 along the South Atlantic coast, but an 8 foot rise by 2100 cannot be ruled out.¹⁰³ Projected sea level rise is higher than the global average on the East and Gulf Coasts of the United States.¹⁰⁴

⁹⁷ FWS Resiliency Presentation, Attachment 47, at slide 9 (listing impacts of hurricanes, including that “[r]epeated Category 1 and 2 storms can cumulative deplete foraging and cavity resources”).

⁹⁸ Final SSA at 13.

⁹⁹ Lynne M. Carter et al., *Southeast and the Caribbean*, in CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THIRD NATIONAL CLIMATE ASSESSMENT, 396-417, 399 (Jerry M. Melillo et al. eds., 2014), <https://nca2014.globalchange.gov/report/regions/southeast>.

¹⁰⁰ *Id.* See also Final SSA at 119.

¹⁰¹ Final SSA at 125.

¹⁰² William V. Sweet et al., *Sea Level Rise*, in CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME I, 333-63, 333 (Donald J. Wuebbles et al. eds., 2017), Attachment 48, https://science2017.globalchange.gov/downloads/CSSR_Ch12_Sea_Level_Rise.pdf.

¹⁰³ Projections are relative to sea level in the year 2000. William V. Sweet et al., *Global and Regional Sea Level Rise Scenarios for the United States*, NOAA (Jan. 2017), tidesandcurrents.noaa.gov/publications/techrpt83_Global_and_Regional_SLR_Scenarios_for_the_US_final.pdf, at 23.

¹⁰⁴ *Id.* at 29.

These climate change-induced impacts will likely cause red-cockaded woodpecker habitat to shift geographically over time, with certain habitat areas becoming inhospitable and currently unsuitable habitat areas becoming newly viable for red-cockaded woodpeckers.¹⁰⁵ Hurricanes, flooding, changing temperature extremes, droughts, wildfires, and sea level rise are expected to greatly modify ecosystems and redistribute species across the Southeast, and birds will be particularly vulnerable to these changes.¹⁰⁶ But given the increasing development pressures throughout the Southeast, as discussed above, opportunities for red-cockaded woodpeckers to shift into new habitats will likely be hampered. This threat of limited opportunity for future habitat is compounded by the species' need for old, mature pines. In essence, in order for those pine forests to exist in the future, existing pine forests must be protected and new pines must be planted *now*.

D. Southern Pine Beetle Infestations Threaten Red-Cockaded Woodpeckers

Red-cockaded woodpeckers also remain substantially threatened by outbreaks of southern pine beetles.¹⁰⁷ Southern pine beetles are a species of bark beetle that kill pine trees over the course of 2-4 months by burrowing through the tree's cambium tissue and disrupting the nutrient flow; the tree's natural defenses become overwhelmed in an epidemic when it is attacked by thousands of burrowing beetles.¹⁰⁸

Southern pine beetle outbreaks can adversely impact red-cockaded woodpecker populations by killing cavity trees and altering nesting and foraging habitat. While longleaf pine trees have historically been relatively resistant to pine beetles, a beetle infestation can be particularly devastating to red-cockaded woodpecker populations that are dependent on other pine species, such as loblolly and shortleaf.¹⁰⁹ Indeed, southern pine beetle infestation is the major cause of cavity tree mortality in loblolly and shortleaf pines.¹¹⁰ Southern pine beetle epidemics can wipe out entire populations of red-cockaded woodpeckers, such as when 350 cavity trees and more than 50 red-cockaded woodpecker active clusters were lost during an epidemic in Sam Houston National Forest between 1983-1985,¹¹¹ or when red-cockaded

¹⁰⁵ See Daniel A. Farber, *Separated at birth? Addressing the twin crises of biodiversity and climate change*, ECOLOGY (2015), Attachment 49.

¹⁰⁶ Lynne Carter et al., *Southeast*, in IMPACTS, RISKS, & ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. II, 743-808, 768 (David Reidmiller et al. eds., 2018), https://nca2018.globalchange.gov/downloads/NCA4_Ch19_Southeast_Full.pdf; Emma P. Gómez-Ruiz & Thomas E. Lacher, Jr., *Climate change, range shifts, and the disruption of a pollinator-plant complex*, SCI. REPORTS (Oct. 1, 2019), Attachment 50; Michela Pacifici et al., *Species' traits influenced their response to recent climate change*, NATURE CLIMATE CHANGE (Feb. 13, 2017), Attachment 51.

¹⁰⁷ See, e.g., Recovery Plan, Att. 1, at 29-30.

¹⁰⁸ See Final SSA at 124.

¹⁰⁹ See Recovery Plan, Att. 1, at 30.

¹¹⁰ See Recovery Plan, Att. 1, at 40; Final SSA at 37, 82.

¹¹¹ See Recovery Plan Att. 1, at 40; Final SSA at 37, 124.

woodpeckers were lost from shortleaf pine habitats in Daniel Boone National Forest, Kentucky, following a severe southern pine beetle infestation in the summer of 2000.¹¹²

The notice of proposed downlisting, however, devotes absolutely no specific consideration, analysis, or discussion to the threat of southern pine beetles. In fact, the term “pine beetle” only occurs twice in the entire Federal Register notice, each time in passing as part of a list of naturally occurring stressors to the species. 85 Fed. Reg. at 63,479.

The proposed downlisting fails to acknowledge that one of the seven red-cockaded woodpecker populations that FWS determined to be in the “high resilience” category, Homochitto National Forest, in Mississippi, suffered a “severe outbreak of southern pine beetles” after the SSA population modeling was completed, and the active clusters lost were not accounted for in the SSA.¹¹³

The notice of proposed downlisting also completely fails to account for evidence showing that the annual number of observed southern pine beetle outbreaks has been increasing for the past several years, particularly across the western portion of the red-cockaded woodpecker’s range. In August 2017, U.S. Forest Service entomologist Jim Meeker described the southern pine beetle outbreak affecting the Homochitto, Bienville, Tombigbee, and Holly Springs Ranger Districts as “unprecedented in scope with beetle activity progressing at breakneck speed with infestations rapidly escalating in size, coalescing and decimating whole plantations.”¹¹⁴ A recent Fish and Wildlife presentation indicated as much as 4,000 acres were affected in 2017, with southern pine beetle damage in “100+ active clusters,” and “[f]uture RCW population reduction [was] likely.”¹¹⁵ Surveys that year found more than 3,500 incidences of southern pine beetle infestation across those four Forest Service ranger districts.¹¹⁶ The number of observed southern pine beetle infestations in Alabama rose from 109 in 2013 to 168 in 2014, 378 in 2015, and 691 in 2016.¹¹⁷

FWS further fails to account for or consider the synergistic impacts of climate change on southern pine beetle infestation. Trees that are already weakened by drought or storm damage are more susceptible to succumbing to beetle infestation, which puts even relatively healthy neighboring pine stands at risk of infestations spreading to them.¹¹⁸ Furthermore, National Insect and Disease Risk Maps prepared by the U.S. Forest Service clearly show that large areas across

¹¹² Final SSA at 47.

¹¹³ Final SSA at 138 (“A severe outbreak of southern pine beetles on Homochitto National Forest occurred after the model and simulations were completed.”).

¹¹⁴ U.S. Forest Service, *Mississippi Battles to Save Forests from Southern Pine Beetle Epidemic* (Aug. 15, 2017), Attachment 52.

¹¹⁵ FWS Resilience Results Recommendation Presentation at 19, Attachment 53.

¹¹⁶ *Id.*

¹¹⁷ See, e.g., Dennis Pillion, *How the Tiny Southern Pine Beetle Can Wipe Out a Whole Forest*, AL.com (Alabama Media Group) (Mar. 14, 2017, updated May 18, 2019), Attachment 54, https://www.al.com/news/birmingham/2017/03/southern_pine_beetle_infestati.html#:~:text=These%20popcorn%2Dlooking%20%22pitch%20tubes,as%20well%20as%20healthy%20ones.

¹¹⁸ *Id.*

the red-cockaded woodpecker's range are expected to lose 25% or more of host basal area to southern pine beetle infestation between 2013-2027.¹¹⁹ Despite the predictable nature of these losses, and the significant impact that they will have, FWS did not take predicted habitat losses due to southern pine beetle infestation into consideration in its proposed downlisting decision.¹²⁰

E. Red-Cockaded Woodpeckers Persist in Mostly Small Isolated Populations Susceptible to Stochastic and Genetic Threats

Listing Factor E also bears on the current status of the red-cockaded woodpecker, as “other natural or manmade factors affecting its continued existence” include the isolated nature and small size of the majority of red-cockaded woodpecker populations. With 108 of the 124 demographic populations containing 99 or fewer clusters, and 71 of those containing 29 or fewer clusters, these populations are at greater risk for a catastrophic event wiping out the entire population, putting these populations at an inherently higher risk of extirpation. The small size of such populations also increases their risks of inbreeding depression and genetic drift, which adversely impact the populations' long-term viability.¹²¹ Unsurprisingly, an internal FWS presentation showed that of the populations for which the Service had associated growth rates, nearly a third were stable or decreasing, and all of those were characterized by low or very low resiliency.¹²²

The Service's own SSA highlights that inbreeding depression is not just a theoretical threat, but a proven occurrence in red-cockaded woodpecker populations,¹²³ and that the full extent of this threat “may not yet be evident due to the relatively recent nature of fragmentation and reductions in population size.”¹²⁴ Unsurprisingly, “[i]nbreeding is expected to increase in populations that remain small and isolated,” especially those populations with around 31-39 potential breeding groups.¹²⁵

But even the largest red-cockaded woodpecker populations persisting today are at risk from threats due to loss of genetic variation caused by genetic drift. A population may need anywhere from 500, to as many as 5,000 individuals, in order to withstand effects of genetic drift.¹²⁶ As summarized in the Service's SSA: “a reasonable conclusion is that only populations

¹¹⁹ See USFS, National Insect and Disease Risk Maps, Attachment 55, available at https://www.fs.fed.us/foresthealth/technology/pdfs/spb_maps_All_Print.pdf.

¹²⁰ Compounding this threat, pine beetle infestations are frequently managed by clear-cutting swathes of forest around an infestation epicenter to prevent the beetles from spreading from tree-to-tree. Thus, habitat loss often results not just directly from the harm caused by the beetles themselves, but also from the extreme reactive measures used by foresters to curb an outbreak. USFWS failed to account for this as well.

¹²¹ Final SSA at 65-70.

¹²² FWS RCW Current Conditions PowerPoint, at 24, Attachment 2.

¹²³ Final SSA at 67-68; *see also* Recovery Plan, Att. 1, at 27 (“The red-cockaded woodpecker is one of the few species for which inbreeding depression has been demonstrated in wild populations, as opposed to assumed from theoretical considerations.”).

¹²⁴ Final SSA at 69.

¹²⁵ Final SSA at 69-70. This would translate to somewhere between 34-55 active clusters.

¹²⁶ Final SSA at 70-71.

with actual sizes in the thousands, rather than hundreds, can maintain long-term viability and evolutionary potential in the absence of immigration.”¹²⁷ The preamble to the proposed rule acknowledges these threats as well, noting that “adaptive genetic variation is still expected to decline in all red-cockaded woodpecker populations.” 85 Fed. Reg. at 63,480. But the proposed downlisting then points to “[e]ffective management programs to sustain even the smallest populations,” and forecasts—without any justification—these would continue under the proposed rule. This observation ignores that *sustaining* small populations is insufficient to achieve recovery under the ESA, and does not reverse the previously-mentioned trend of declining genetic diversity and its deleterious effects on long-term population viability.¹²⁸

F. The Service Failed to Review the Cumulative Effects of Threats Into a Reasonable “Foreseeable Future”

In making a status determination, the Service cannot evaluate each of the ESA listing factors in isolation. 50 C.F.R. § 424.11(c) (requiring Service to reclassify or list a species “because of any one *or a combination* of the following factors” (emphasis added)). Instead, the Service must “consider each of the listing factors both individually and in combination.” *Ctr. for Biological Diversity v. Everson*, 435 F. Supp. 3d 69, 81 (D.D.C. 2020), *appeal dismissed sub nom. Ctr. for Biological Diversity v. Skipwith*, No. 20-5075, 2020 WL 5822535 (D.C. Cir. May 13, 2020), and *appeal dismissed sub nom. Ctr. for Biological Diversity v. Skipwith*, No. 20-5075, 2020 WL 4106889 (D.C. Cir. July 15, 2020) (50 C.F.R. § 424.11(c)).

Here, as noted throughout these comments, the Service failed to review the cumulative or combined effects of the many ongoing threats to the red-cockaded woodpecker. Instead, the Service reviewed each threat in turn, and then without any support makes the conclusory statement that the Service finds downlisting to be justified “after evaluating the threats to the species and *assessing the cumulative effect* of the threats.” 85 Fed. Reg. at 63,491. Nowhere does the Service consider the combined effect of the species’ already curtailed habitat with likely storm impacts, southern pine beetle infestation, genetic inbreeding, or other risks. If the Service did in fact assess those cumulative effects, it must show its work—and indeed, should have done so in the statutorily-required five-year status review.

The failure to consider the combined effects of these threats is compounded by the unreasonable and unjustified “foreseeable future” analysis chosen by the Service. Under the Service’s recently revised ESA regulations, 50 C.F.R. § 424.11(d), the Service chose to consider the foreseeable future in this case as 25 years into the future. 85 Fed. Reg. at 63,491. Yet beyond the Service’s limited population modeling exercise—which did not integrate or account for future severe storm events—the Service never appears to earnestly consider the threats and responses into the foreseeable future.

Regardless, the 25-year time horizon is unreasonable and arbitrary here. As noted above, a whole host of climate-change induced impacts are well-documented and likely to happen in the

¹²⁷ Final SSA at 71.

¹²⁸ Indeed, the Recovery Plan explains that “[l]oss of genetic variation increases with decreasing population size, but such loss also *increases dramatically if populations remain small over time.*” Recovery Plan, Att. 1, at 29 (emphasis added).

foreseeable future, extending well-beyond 25 years, but the Service does not attempt to analyze the impacts of those threats. The 25-year horizon also does not account for the red-cockaded woodpecker's well-known habitat requirements of decades-old mature pines.¹²⁹ The short, 25-year period is particularly arbitrary both in light of the red-cockaded woodpecker's unique habitat needs and as compared with other instances where the Service has used much longer periods for foreseeable future analyses. *See, e.g., Alaska Oil & Gas Ass'n v. Pritzker*, 840 F.3d 671, (9th Cir. 2016) (upholding National Marine Fisheries Service's use of climate change models that projected through 2100 to determine that the Beringia and Okhotsk distinct population segments of bearded seal were threatened); *In re Polar Bear Endangered Species Act Listing & Section 4(d) Rule Litig.*, 709 F.3d 1, 15 (D.C. Cir. 2013) (concluding that FWS's use of 45-year foreseeable time period in listing the polar bear as threatened was reasonable); Threatened Species Status for *Pinus albicaulis* (Whitebark Pine) With Section 4(d) Rule, 85 Fed. Reg. 77,408, 77,417 (Dec. 2, 2020) (considering "foreseeable future to be within 40 to 80 years").

G. The Species Remains at Risk of Extinction Throughout Significant Portions of Its Range

Upon reaching its finding that the red-cockaded woodpecker is threatened, the Service must still evaluate whether the species is in fact endangered throughout a significant portion of its range. *See* 85 Fed. Reg. 63,491-92 (citing *Ctr. for Biological Diversity*, 435 F. Supp. 3d 69). The Service notes that in making this evaluation, it must answer two questions, in whatever order it chooses: "whether there is any portion of the species' range for which both (1) the portion is significant; and, (2) the species is in danger of extinction in that portion." *Id.* In this instance, the Service chose to address the status question first, easily determining "there is a concentration of threats from the combination of both hurricanes and small population sizes in the Florida Peninsula, West Gulf Coastal Plain, and the southernmost near-coastal extension of the Upper West Gulf Coastal Plain ecoregions." 85 Fed. Reg. at 63,492. After reaching the determination that "these are portions of the range where the species may be in danger of extinction" the Service proceeds in a muddled analysis seeming to conflate the significance question.

The Service admits that the identified portion of range—which is very likely an underestimate of the true portion of range susceptible to increased threats—contains a substantial 40%, or 49 of 124, demographic populations, all but three of which the Service consider to have low or very low resiliency. *Id.* The Service then claims, without any explanation or supporting analysis, that these 49 demographic populations "do not contribute significantly, either currently or in the foreseeable future, to the species' total resiliency at a biologically meaningful scale compared to other representative areas." *Id.* The Service nowhere explains what *would* be a "biologically meaningful scale" or identify those "other representative areas" for comparison.

The Service's reasoning here is entirely conclusory, summed up by its finding that even with the loss of some of the populations in the identified regions, the red-cockaded woodpecker "would maintain sufficient levels of resiliency, representation, and redundancy *in other*

¹²⁹ As described in the Recovery Plan "cavity trees average roughly 80 to 150 years in age and can be much older." Recovery Plan, Att. 1, at 34. In fact, pines must generally be at least 60-80 years old at minimum before use as a cavity tree is even possible. *Id.*

ecoregions across its range . . .” *Id.* at 63,492. Simply put, the Service is writing off, without any legal or scientific justification, at least the 49 identified populations as not being “biologically meaningful” to the remaining populations.

This logic is circular and defeats the whole purpose and meaning of the ESA’s “significant portion of its range” language. Indeed, the Service appears to be attempting to apply the significance definition from its 2014 SPR Policy that multiple courts have now invalidated. *See Desert Survivors v. U.S. Dep’t of Interior*, 321 F. Supp. 3d 1011, 1070 (N.D. Cal. 2018); *Ctr. for Biological Diversity v. Jewell*, 248 F. Supp. 3d 946 (D. Ariz. 2017). That now defunct policy provided that the Service would ask

whether, without that portion, the three Rs of the species . . . would be so impaired that the species would have an increased vulnerability to threats to the point that the overall species would be in danger of extinction (i.e., would be “endangered”) or likely to become so in the foreseeable future (i.e., would be “threatened”).

Final Policy on Interpretation of the Phrase “Significant Portion of Its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species,” 79 Fed. Reg. 37,578, 37,582 (July 1, 2014).

As explained by the court in *Center for Biological Diversity v. Jewell*,

Under the Final SPR Policy, listing a species based on threats in a significant portion of its range will be considered warranted only if three conditions are satisfied: (1) the species is neither endangered nor threatened throughout all of its range, (2) the portion's contribution to the viability of the species is so important that, without the members in that portion, the species would be endangered or threatened throughout all of its range, and (3) the species is endangered or threatened in that portion of its range. *See* 79 Fed. Reg. at 37,582–83. All three of these conditions cannot be satisfied at once, because whenever conditions (2) and (3) are satisfied, a species should properly be determined to be endangered or threatened throughout all of its range. If a portion of a species' range is so vital that its loss would render the entire species endangered or threatened, and the species is endangered or threatened in that portion, then the entire species is necessarily endangered or threatened.

Ctr. for Biological Diversity v. Jewell, 248 F. Supp. 3d 946, 956–57 (D. Ariz. 2017).

And yet here, the Service appears to making a thinly-veiled attempt to still apply this impermissibly circular and narrow definition. Having determined the red-cockaded woodpecker is endangered in certain portions of its range, the Service then rejects that the portions are significant because even if some of the populations in those ranges were lost, “the species would maintain sufficient levels of resiliency, representation, and redundancy in the rest of these ecoregions and in other ecoregions across its range, supporting the species viability as a whole.” 85 Fed. Reg. at 63,492. This is precisely the analysis envisioned by the significant definition in

the SPR Policy, referring to the “three Rs”—which has been invalidated. And as explained above, even if the Service is applying some new significance analysis distinct from the 2014 SPR Policy, the agency has failed to adequately justify or explain its reasoning.

The Service’s superficial “significant portion of range” discussion also fails to give a complete picture of the current distribution of existing populations. While the Service touts that 65% of all clusters are in 16 moderate to very high resiliency populations, the unstated and concerning counterpart is that the remaining 108 populations combined only account for 35% of all clusters in total. *See, e.g.*, 85 Fed. Reg. at 63,484. These 108 populations, 87% of the 124 populations examined, exhibit low or very low resiliency and are generally geographically isolated from one another in addition to being small in size. *Id.* A cursory review of the distribution of these populations reveals that the handful of more robust populations are concentrated in the eastern region of the species range.¹³⁰ There is not a single “high” or “very high” resiliency population west of the Florida panhandle—and no high or very high resiliency populations at all in five of the thirteen ecoregions or recovery units designated for the species.¹³¹ And the Upper Eastern Gulf Coastal Plain has a single high resiliency population in its far eastern section—but that population, Fort Benning, is also suffering from loblolly pine decline and the Service’s own documents show “[f]uture population reductions may be unavoidable.”¹³² The spotty distribution of small, susceptible populations in the Western region¹³³ of the red-cockaded woodpecker’s range poses a greater risk of extinction for the species as a whole—and within a significant portion of its range.

Furthermore, the Service’s conclusion that “the Florida Peninsula, West Gulf Coastal Plain, and the southernmost near-coastal extension of the Upper West Gulf Coastal Plain ecoregions” where FWS acknowledges red-cockaded woodpeckers are at risk of extinction do not constitute a “significant portion of its range” directly contradicts the Service’s own analysis and delineation of recovery units in the recovery plan. As set forth in the Services’ joint Recovery Planning Guidance, recovery units are “*individually necessary* to conserve genetic robustness, demographic robustness, important life history stages, or some other feature necessary for long-term sustainability of the *entire listed entity*”.¹³⁴ The Red-cockaded Woodpecker Recovery Plan mirrors this language.¹³⁵ In this case FWS recognizes that all the populations of at least two of the recovery units—the South/Central Florida recovery unit and the

¹³⁰ Final SSA at 109 fig. 24; *see also* Map, SELC, *Status of Recovery Populations for the Endangered Red-cockaded Woodpecker (Picoides borealis)*, Attachment 56 (demonstrating that the only populations to have achieved recovery targets are concentrated in the eastern portion of the species’ range).

¹³¹ The specific regions are: Mississippi River Alluvial Plain, Ouchita Mountains, Upper West Gulf Coastal Plain, West Gulf Coastal Plain, and Gulf Coast Prairies and Marshes.

¹³² FWS Resilience Results Recommendation Presentation at 18, Attachment 53_.

¹³³ *E.g.* Excel Spreadsheet, Western Zone RCW Pop Data, Aug. 17, 2020, Attachment 57 (documenting small size of populations, many without any discernible growth in past five years).

¹³⁴ NAT’L MARINE FISHERIES SERV., U.S. FISH & WILDLIFE SERV., *Endangered and Threatened Species Recovery Planning Guidance*, Version 1.4, 2018, at 5.1-12, available at <https://www.fws.gov/endangered/esa-library/index.html#recovery> (emphases in original), Attachment 58.

¹³⁵ Recovery Plan, Att. 1, at 145.

West Gulf Coastal Plain—are at risk of extinction. Furthermore, 6 out of the 7 primary core populations of the East Gulf Coastal Plain recovery unit, and 1 primary core population in the South Atlantic Coastal Plain recovery unit are at risk of extinction because they are found in the Florida Peninsula. Since these recovery units are individually necessary to conserve the entire species, they separately constitute any reasonable interpretation of a significant portion of the red-cockaded woodpecker’s range, and risk of extinction in each (let alone all) means downlisting is not warranted.

The recovery plan further reiterates the importance of each individual recovery unit to the survival of the species as a whole when discussing ESA Section 7 consultations, noting that “actions that appreciably impair or preclude the capability of such a recovery unit from providing the survival and recovery functions identified for it in a recovery plan may therefore represent jeopardy to the species.”¹³⁶ Similarly, the threat of extirpation in both recovery units listed above means the species is at risk of extinction in “all or a significant portion of its range.” In one recent 2015 biological opinion for the red-cockaded woodpecker, the Service reiterated that the jeopardy analysis is at the recovery unit, and for that consultation determined whether jeopardy existed based on one primary core population (Fort Benning) in a single recovery unit (Sandhills).¹³⁷ Here, FWS acknowledges that all primary core populations in two recovery units, all but one primary core populations in a third, and one primary core population in a fourth recovery unit remain at risk of extinction.

V. The Proposed 4(d) Rule Would Fail to Provide for the Conservation of the Red-cockaded Woodpecker

As detailed above, the best available science indicates that the red-cockaded woodpecker remains endangered and should not be downlisted to threatened status. Compounding these concerns, the 4(d) rule proposed by the Service is not sufficiently protective of the species. Section 4(d) of the ESA requires that rules promulgated pursuant to that section must “provide for the conservation of” listed species. 16 U.S.C. § 1533(d); *see also Defenders of Wildlife v. Tuggle*, 607 F. Supp. 2d 1095, 1116–17 (D. Ariz. 2009) (holding that while “USFWS has discretion to issue the regulations it deems necessary and advisable, [] the regulation *shall* provide for the conservation of such species” (emphasis added)). The ESA defines “conservation,” in turn, to mean “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 chapter are no longer necessary,” i.e. to the point at which it has achieved recovery. 16 U.S.C. § 1532(3).¹³⁸ The 4(d) rule proposed by the Service for the red-cockaded woodpecker, however, would fall short of this legal standard. Indeed, the proposed rule would

¹³⁶ *Id.* at 148.

¹³⁷ U.S. FISH & WILDLIFE SERV. 2015. Biological Opinion, Enhanced Training at Fort Benning, FWS Log #FF04EG1000-2015-F-0833.

¹³⁸ “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.” *Id.* (emphasis added).

put the red-cockaded woodpecker at significant risk of backsliding on the recovery progress that has been made to date, rather than ensuring continued recovery in the future.

Because of the recent rollbacks to the former, long-standing ESA regulations, threatened species receive no protections against take other than what is provided for in any 4(d) rule the Service might choose to promulgate. *See* Regulation for Prohibitions to Threatened Wildlife and Plants, 84 Fed. Reg. 44,753 (Aug. 27, 2019) (codified at 50 C.F.R. §§ 17.31, 17.71).¹³⁹ Here, the Service’s proposed rule would allow, among other things, for a variety of poorly-defined actions to take place so long as some sort of general management plan approved by a state conservation agency or prepared by a military installation exists for the area in question—without any requirements on the level of specificity or projected conservation benefits of these plans. The rule fails to impose any uniform conditions, take restrictions, or reporting requirements that would apply to these plans.

This deferral to the military’s and states’ general resource management efforts would remove the federal oversight that has been critical to the woodpecker’s recovery progress thus far. Instead, the woodpecker would be left with a confusing patchwork of varying protections based on management plans drafted by agencies that do not have the same ESA expertise or duties as the Fish and Wildlife Service itself. Worse, the rule fails to define key terms and fails to specify how implementation of the proposed 4(d) rule would interact with existing guidance, including the Red-cockaded Woodpecker Recovery Plan.

A. Removing Take Protections on Military Installations Would Fail to Conserve Red-cockaded Woodpecker Populations Essential to Recovery

The proposed exemption for activities on military installations would put the red-cockaded woodpecker at significant risk of backsliding on its recovery progress in several of the largest and healthiest populations that exist today. The proposed rule, at section (h)(3)(v)(A) would allow take for “[r]ed-cockaded woodpecker management and military training activities on Department of Defense installations with a Service-approved integrated natural resources management plan.” 85 Fed. Reg. at 63,498.

This take exemption would put red-cockaded woodpeckers at risk for several reasons. First, military installations are home to some of the largest populations of red-cockaded woodpeckers, and clusters on military installations account for as much as a third of existing red-cockaded woodpecker clusters. Second, military integrated natural resources management plans are not sufficiently protective of red-cockaded woodpecker conservation, do not reflect the expertise of FWS, and are aimed at primary goals other than red-cockaded woodpecker recovery. Third, creating an exemption for virtually all incidental take on military installations in this manner would create confusion in the implementation of other ESA areas, such as Section 7 consultation, and may reduce the consistency and accuracy of population monitoring.

¹³⁹ Previously, under the Service’s so-called blanket 4(d) rule, a species listed as threatened would by default receive the full extent of take protections afforded to endangered species under Section 9 of the ESA—which would be far more protective of the red-cockaded woodpecker than anything proposed by the Service under this species-specific 4(d) rule.

Moreover, as described in detail in Section III.A, *supra*,¹⁴⁰ the Department of Defense has been coordinating with FWS to relieve its conservation responsibilities under the ESA with regards to the woodpecker for several years, which calls into question the motives and rationale for the military incidental take exemption in the proposed 4(d) rule.

1. Recovery Populations on Military Installations Must Be Protected

Of the 13 primary core populations identified in the 2003 Recovery Plan, six are located entirely or partially on military installations.¹⁴¹ Four of the 16 essential support populations identified in the 2003 Recovery Plan also occur on military installations.¹⁴² Thus, roughly half of the primary core populations and a quarter of the essential support populations needed to recover the red-cockaded woodpecker stand to be adversely affected by this proposal to remove protections against take. Approximately a third of all known clusters exist on military lands.¹⁴³

Furthermore, military installations currently represent the majority of red-cockaded woodpecker recovery populations that are in the best shape. For example, of the 124 populations analyzed in the Final SSA, only three were classified as having more than 500 active clusters and demonstrating “very high resilience.”¹⁴⁴ Two of those three “very high resilience” populations reside primarily on military bases (the Eglin Air Force Base population in Florida and Fort Bragg/Camp Mackall within the North Carolina Sandhills population).¹⁴⁵ Similarly, two of the only three “high resilience” populations—having 250-499 active clusters—identified by the Service occur on military bases (at Fort Stewart and Fort Benning, both in Georgia).¹⁴⁶

Military installations house some of the few robust populations of red-cockaded woodpeckers. Given that 87% of red-cockaded woodpecker populations have only “low” or

¹⁴⁰ See also USFWS and DOD Recovery and Sustainment Partnership Initiative, Attachment 17 (setting goal for delisting/downlisting of RCW prior to completion of status review or even finalization of SSA); Email from Cindy Dohner, USFWS Region 4 Director, to Gordon Meyers, N.C. Wildlife Resources Commission Executive Director, Attachment 59 (USFWS document strategizing how to set a “fixed level of effort” for DoD recovery commitments to achieve goal of downlisting or delisting the red-cockaded woodpecker in reliance on those commitments); Memorandum of Understanding Between the Department of Defense and the Department of the Interior Establishing a Recovery and Sustainment Partnership Initiative (June 2018) at 2, Attachment 60 (setting objective of identifying “certain species to be reviewed based on DOD mission impacts, risks, and costs,” assessing “which of those mission-priority species has been recommended for down/de-listing,” and developing a “prioritized work plan” regarding changing species’ classification).

¹⁴¹ Final SSA at 104-06.

¹⁴² *Id.*

¹⁴³ Based on calculations from figures in the Final SSA (~37.6%) and 2015 Ad Hoc Report, *available at* <https://164.159.171.28/ecpo/reports/implementation-activity-status-ore-report?documentId=100035&entityId=107> (~32.6%).

¹⁴⁴ Final SSA at 104-05.

¹⁴⁵ See Final SSA at 137 (most of NC Sandhills population comprised of Fort Bragg, Sandhills Gamelands, and Camp Mackall).

¹⁴⁶ Final SSA at 106.

“very low” resiliency and more than half have fewer than 30 active clusters,¹⁴⁷ ensuring that these relative strongholds on military installations continue to grow is absolutely critical. But the proposed rule is poised to do the opposite by rolling back protections for these populations in a way that will inhibit or reverse recovery on these properties.

2. INRMPs Are Not Sufficiently Protective of Endangered Species

Integrated Natural Resource Management Plans, or INRMPs, are planning documents prepared pursuant to the Sikes Act, 16 U.S.C. § 670a(a)(1)(B), for the management of “significant natural resources” on military installations.¹⁴⁸ Military branch secretaries (“DoD Components”) must develop and implement an INRMP for each military installation under their jurisdiction with the cooperation of FWS and any appropriate state fish and wildlife agencies. 16 U.S.C. § 670a(a)(2).¹⁴⁹

The primary purpose of an INRMP is to “conserve[e] the environment for mission sustainability.”¹⁵⁰ Accordingly, in keeping with the mission and relevant expertise of the military, DoD INRMP policy and guidance focus more on ensuring military preparedness than on conserving and rehabilitating the environment. DoD Components exercise considerable discretion in developing and implementing INRMPs, which “to the extent appropriate and applicable” are required to address a variety of required elements related to natural resources, including “fish and wildlife management” and “fish and wildlife habitat enhancement or modifications,” as well as “no net loss in the capability of installation lands to support the military mission of the installation.” 16 U.S.C. § 670a(b)(1).¹⁵¹

DoD’s INRMP Implementation Manual 4715.03 (“DoD INRMP Manual”) describes the “procedures to prepare, review, update, and implement INRMPs,”¹⁵² including DoD’s guidance for the contents of INRMPs. That DoD Manual emphasizes the “no net loss” element above all others, stating “[g]eneral INRMP contents address how natural resources management goals *support no net loss in military mission capability for military installation lands while enhancing training and testing capabilities to the maximum extent practicable.*”¹⁵³ Indeed, the DoD

¹⁴⁷ Final SSA at 105. Of the 124 populations considered by USFWS, 108 had “low” or “very low” resilience, meaning that they contained fewer than 100 or fewer than 30 active clusters, respectively. *Id.*

¹⁴⁸ U.S. DEP’T OF DEF. NAT. RES. CONSERVATION PROGRAM, INTEGRATED NATURAL RESOURCES MANAGEMENT PLANS (2016) [hereinafter DOD INRMP FACT SHEET], Attachment 61, <https://www.denix.osd.mil/nr/resources/program-information/fact-sheets/nr-fact-sheets/integrated-natural-resource-management-plans-inrmps/INRMP%20fact%20sheet%2008-12-16.pdf>.

¹⁴⁹ Subject to available funding, DoD Components must also create and implement INRMPs for State-owned National Guard installations in coordination with the chief executive officer of the state in which the installation is located. *Id.* § 670a(a)(1)(B)(ii).

¹⁵⁰ U.S. DEP’T OF DEF., MANUAL NO. 4715.03, INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN (INRMP) IMPLEMENTATION MANUAL 22–24 (2013) (amended 2018) [hereinafter DOD INRMP MANUAL], Attachment 62 at 8.

¹⁵¹ See U.S. DEP’T OF DEF., INSTRUCTION NO. 4715.03 (“DoD INRMP INSTRUCTION”), Attachment 63 (primary policy document for the integrated management of natural resources on DoD lands).

¹⁵² DOD INRMP MANUAL, *supra* note 150 Att. 62 at 22–24.

¹⁵³ See DOD INRMP MANUAL, *supra* note 152, Att. 62, at 20 (emphasis added).

INRMP Manual espouses that “no net loss” to military capability is the only “required element” of INRMPs.¹⁵⁴ The use of language from other “required elements” in DoD policy and guidance is not nearly as strict, although certain elements are frequently paraphrased.¹⁵⁵

While FWS must sign off on the approval of an INRMP, the Service sees its involvement in the INRMP planning process and development to be only necessary where “the Service is requested to participate.”¹⁵⁶ State conservation agencies are likewise not required to participate in INRMP development.¹⁵⁷ While military installations are instructed to give priority “to the entering into of contracts for the procurement of such implementation and enforcement services with Federal and State agencies having responsibility for the conservation or management of fish or wildlife,” 16 U.S.C. § 670a(d)(2), there is no inherent legal enforcement authority comparable to that of ESA Section 9, 16 U.S.C. § 1538. Indeed, DoD’s controlling INRMP policy document only provides for “conservation law enforcement” to enforce federal (i.e. the ESA) and state laws, not the provisions of the INRMP itself.¹⁵⁸

Thus, while INRMPs can be valuable documents in their own right, they are also more generalized documents that are aimed at preserving the landscape of a military installation so that it can provide the necessary elements to support military training and readiness for years to come. Their primary purpose is not species conservation, or even the conservation of ecological integrity of habitat.¹⁵⁹

As applied here, INRMPs do not provide the in-depth analysis and species-specific considerations necessary to ensure that red-cockaded woodpeckers are sufficiently protected on a given military installation. INRMPs may not even provide for red-cockaded woodpecker

¹⁵⁴ See DOD INRMP FACT SHEET, *supra* note 148 (discussing “no net loss” to military capability as a separate, underlying goal of INRMPs while separately listing a reordered, rephrased, and condensed version of the “required elements” provided in the Sikes Act).

¹⁵⁵ See, e.g., DOD INRMP INSTRUCTION, *supra* note 151, at 27 (“DoD Components shall coordinate with appropriate agencies to support conservation law enforcement to enforce Federal and applicable State laws and regulations pertaining to the management and use of the natural resources under their jurisdiction.”). FWS also prioritizes “no net loss” to military capability in its INRMP guidance, listing it first in a reordered list of the Sikes Act “required elements.” See U.S. FISH & WILDLIFE SERV., GUIDELINES FOR COORDINATION ON INTEGRATED NATURAL RESOURCE MANAGEMENT PLANS 12 (2015) (amended 2018) [hereinafter FWS INRMP GUIDELINES], Attachment 64.

¹⁵⁶ FWS INRMP GUIDELINES, *supra* note 155, at 9. *But see id.* at 11 (“If the military determines that an installation requires an INRMP, the Service is required to work in cooperation with the military to prepare each INRMP.”).

¹⁵⁷ See MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. DEPARTMENT OF DEFENSE AND THE U.S. FISH AND WILDLIFE SERVICE AND THE ASSOCIATION OF FISH AND WILDLIFE AGENCIES FOR A COOPERATIVE INTEGRATED NATURAL RESOURCE MANAGEMENT PROGRAM ON MILITARY INSTALLATIONS (July 29, 2013) [hereinafter TRIPARTITE MOU], Attachment 65.

¹⁵⁸ DOD INRMP INSTRUCTION, *supra* note 151, at 27.

¹⁵⁹ For example, in documents obtained through North Carolina’s public records law, Attachment 66, a former military biologist expressed her opinion in email exchange about Camp Lejeune’s INRMP that “my experience with the military indicates that wildlife (and habitat) conservation is not near the top of the priority list. The biologists who fight for it are often buried – I used to be one of them! But maybe one day, when there’s a different administration, that will be different – we can hope!”

conservation at all, despite active clusters being on or adjacent to the property.¹⁶⁰ Even in the best cases, INRMPs are generally descriptive documents and are not themselves the appropriate venue for the types of spatial and habitat analyses and management actions that are necessary for red-cockaded woodpecker management.¹⁶¹ As such, they are no substitute for the ESA's legal protections against incidental take.

Blanket exemptions for any activities conducted pursuant to an INRMP would essentially give military installations a free pass to do whatever they like with red-cockaded woodpeckers, with minimal input from the Service. If it were to allow this blanket exemption, the Service would largely abrogate its management authority and responsibilities for some of the most important red-cockaded woodpecker populations that persist today.

3. The Proposed Military Take Exemption Would Have Adverse Impacts on Other ESA Implementation Areas

As a federal agency, the Department of Defense must consult with FWS under section 7 of the ESA to ensure any actions that may affect red-cockaded woodpeckers do not jeopardize the continued existence of the species, 16 U.S.C. § 1536, 50 C.F.R. § 402.14, and this requirement would presumably persist under the proposed rule.¹⁶² If the Service determines the activity is not likely to jeopardize the species, then the Service must formulate a statement of any incidental take that is reasonably likely to occur as a result of the action. 50 C.F.R. § 402.14(g). If activities conducted on military installations cannot legally result in incidental take so long as the installations have a Service-approved INRMP, then this calls into question the applicability of incidental take statements issued under Section 7.

If the effect of the proposed 4(d) rule would be that incidental take statements would no longer be issued by the Service each time the military's proposed actions may result in the incidental take of woodpeckers, then this in turn eliminates accountability for ensuring that the action does not exceed the maximum level of incidental take permitted by FWS in an incidental take statement. Without the inherent tracking system that these incidental take statements have historically provided for active cluster outcomes on military installations,¹⁶³ installations would also be at greater risk of not only allowing activities to occur that may result in incidental take, but also not having the data to track the incidental take that in fact results from these activities, and its impact on red-cockaded woodpecker population health and abundance.

¹⁶⁰ Emails from NCWRC Staff, Attachment 67, indicate that the INRMP for Marine Corps Air Station Cherry Point does not provide for red-cockaded woodpecker conservation, despite active clusters being present within a one-mile radius of the installation in the Croatan National Forest.

¹⁶¹ Even INRMPs that are comparatively in-depth in their discussion of RCWs do not themselves contain these types of analyses. *See, e.g.*, Integrated Natural Resources Management Plan 2019-2023 for Fort Bragg and Camp Mackall, North Carolina, Attachment 68.

¹⁶² Section 7 of the ESA already takes military defense needs into account by requiring the Endangered Species Committee to grant an exemption from the requirements of Section 7 where the Secretary of Defense finds that such an exemption for an agency action is "necessary for reasons of national security." 16 U.S.C. § 1536(j).

¹⁶³ *See, e.g.*, Table of "All RCW Clusters Covered by Incidental Take Authorizations as of 15 December 2017 (n=55) for Fort Benning, Georgia (prepared as Appendix 4 to June 29, 2018 Update to Fort Benning's Red-cockaded Woodpecker Endangered Species Management Component), Attachment 69.

The proposed 4(d) rule's INRMP take exemption is even more concerning in light of an Interagency Agreement signed between the Fish and Wildlife Service and the Army on the same day that the Service announced its proposal to downlist the red-cockaded woodpecker. The Agreement has a goal of, among other things, “[f]acilitating the utilization/acceptance of the INRMPs as the document by which an installation will manage, monitor, and support its responsibilities under the Endangered Species Act, *for meeting consultation requirements*, making the process of species conservation simpler and more efficient.”¹⁶⁴ Thus, not only would INRMPs be used to excuse all military installations from Section 9 take protections for red-cockaded woodpeckers under the proposed 4(d) rule, but they may also be used to excuse Army installations from even having to conduct Section 7(a)(2) consultations on individual actions that may affect or jeopardize the continued existence of woodpeckers. If DoD components were to rely on INRMPs alone to replace take protections and Section 7 consultation requirements, this could further result in the DoD failing in its duty to carry out a program for the conservation of the species, as required by ESA Section 7(a)(1), 16 U.S.C. § 1536(a)(1).¹⁶⁵

Additionally, relieving the military of responsibility for incidental take of red-cockaded woodpeckers could have the collateral adverse effect of removing incentives for the military to participate in habitat restoration programs, habitat expansion programs, translocation programs, and other forms of mitigation that are intended to offset incidental take.

B. Deferring to Undefined State Management Plans Fails to Ensure Recovery

The Service's proposed rule would create an analogous exemption for state agencies at (h)(3)(v)(B), permitting general “habitat restoration activities” so long as a management plan exists that provides “for red-cockaded woodpecker conservation” developed and approved by the Service “or a State conservation agency.” 85 Fed. Reg. at 63,498.

This section of the proposed rule fails to provide for the conservation of the red-cockaded woodpecker, as required by the ESA, 16 U.S.C. § 1533(d), and suffers from a number of flaws, beginning with the use of multiple vague, undefined terms. The proposed rule lacks any specificity as to what is included in “habitat restoration activities;” what qualifies as a “management plan;” what it means to “provide for red-cockaded woodpecker conservation;” or even what qualifies as a “state conservation agency.” *Id.*

Rather than suggesting any definitions or guidance on what would qualify as a management plan for this exemption, the Service instead solicits comment on “what conditions, if any, should be placed on State-approved management plans such that they would provide both protections to red-cockaded woodpeckers and incentives to landowners similar to a Service-approved plan.” 85 Fed. Reg. at 63,495. The Service could have and should have suggested some minimal parameters for the public to react to. And indeed, the Service could easily look to

¹⁶⁴ See INTERAGENCY AGREEMENT BETWEEN THE U.S. FISH AND WILDLIFE SERVICE AND THE U.S. ARMY FOR THE CONSERVATION OF NATURAL RESOURCES ON ARMY CONTROLLED LANDS (Sept. 25, 2020), Attachment 70.

¹⁶⁵ Indeed, the proposed rule may run afoul of the Service's own Section 7(a)(1) duties by deferring red-cockaded management to other agency's management plans and ultimately falling short of furthering conservation, as detailed throughout these comments. See 16 U.S.C. § 1536(a)(1).

its Safe Harbor program and its “net conservation benefit” calculus, *see* 50 C.F.R. § 17.32(c)(2)(ii), and other requirements.

For example, a Safe Harbor Agreement cannot be approved unless FWS finds that, among other things, the “implementation of the terms of the Safe Harbor Agreement is reasonably expected to provide a net conservation benefit to the affected listed species by contributing to the recovery of listed species included in the permit, and the Safe Harbor Agreement otherwise complies with the Safe Harbor policy available from the Service;” the “[i]mplementation of the terms of the Safe Harbor Agreement will not be in conflict with any ongoing conservation or recovery programs for listed species covered by the permit.” 50 C.F.R. § 17.32(c).

By contrast, the Service has made no attempt to impose any such requirements or guidance here. Instead, the proposed rule would ostensibly exempt incidental take resulting from any habitat management or restoration activities for which a State conservation agency has prepared some general guidance document that mentions red-cockaded woodpecker conservation.¹⁶⁶ It follows that this rule could in theory be used to cover any incidental take resulting from clear-cutting or other harmful methods of timber harvest so long as there may be some suggested guidelines for avoiding direct woodpecker mortality, or some distant nexus with red-cockaded woodpecker conservation, like hypothetically reducing understory and midstory hardwood encroachment. Indeed, “habitat restoration activities” covered under the proposed rule’s take exemption could extend to activities intended to convert presently occupied mixed-species pine stands that already provide cavity trees and foraging habitat for red-cockaded woodpeckers to longleaf pine, thereby reducing the red-cockaded woodpecker population. *See* 85 Fed. Reg. at 63,494. While the Service notes that there may be instances in which the long-term benefits of limited replanting justify the short-term losses, such as when a stand is comprised of even-aged senescent pines that would hinder natural regeneration, it also notes that site-specific analyses are needed to determine when this is the case. *Id.* There is no rationale, then, to support the blanket exemption that the proposed 4(d) rule would provide to activities occurring under state plans that are not required to be site-specific and do not reflect the Service’s expertise.

The proposed rule’s failure to provide any spatial or temporal limitations, reporting requirements, or enforceability requirements, for qualifying “management plans” inherently fails to provide for the conservation of the species. Qualifying management plans could in theory be unenforceable, state-wide, or even region-wide, general guidance documents that require no site-specific analysis or requirements for the effects of the action to be periodically evaluated. Moreover, there would be no requirement that incidental take resulting from activities covered by this section of the proposed rule would even be tracked or reported to the appropriate state management agency. The proposed rule also fails to explain how such state management plans would apply on *federal lands* within a state’s boundaries—such as wildlife refuges or national

¹⁶⁶ *See, e.g.*, Florida Fish and Wildlife Conservation Commission, Habitat Restoration and Management Plan for Liberty County, Florida (Mar. 26, 2019), Attachment 71. Under the proposed 4(d) rule, this ten-page document could be a qualifying management plan; yet it only discusses red-cockaded woodpeckers in one paragraph and imposes minimal suggested prohibitions, such as not placing firebreaks through red-cockaded woodpecker clusters.

forests—or interact with other existing management plans for such properties. This also could undermine the decades of hard work of partners working to protect and restore longleaf and other pine habitats for red-cockaded woodpecker conservation.¹⁶⁷

Finally, removing the Service’s oversight authority here is inappropriate because the Service is the designated expert agency charged with ensuring the recovery of threatened and endangered species. State agencies, by contrast, have mixed goals, missions, and expertise. While state wildlife managers can undoubtedly be valuable sources of expertise and have contributed to the conservation of the species to date, in the absence of a federally-imposed legal duty to ensure against incidental take of the species, many state officials and employees would be left with conflicting management responsibilities. For example, the mission statements of several state wildlife agencies within the red-cockaded woodpecker’s range are just as concerned with hunting, fishing, and other productive uses of natural resources as with protecting non-game species, which could easily put red-cockaded woodpecker conservation efforts at odds with other goals of those agencies.

Thus, it is unsurprising that state habitat management plans are designed to fill the competing objectives of the state agencies, including providing for economic growth and hunting and fishing opportunities, rather than a singular focus on red-cockaded woodpecker recovery.¹⁶⁸ For this reason, the Service’s role in overseeing red-cockaded woodpecker habitat management is critical and cannot be supplanted by state agencies—especially when state agencies have never before been expected to fill this role. Furthermore, the way in which FWS has written its proposed rule puts red-cockaded woodpeckers in jeopardy by giving complete discretionary control to state agencies and not even requesting that these state agencies observe the same restrictions and requirements for public input that FWS places on itself in review and approval of Safe Harbor Agreements, Habitat Conservation Plans, and similar management plans.

C. The Proposed 4(d) Rule Fails to Include Necessary Specificity

The proposed 4(d) rule lacks key specifics that should be explicitly defined by the standards and protocols set forth in the Recovery Plan that has been long relied upon by red-cockaded woodpecker managers. If these terms are left vague and undefined, their misinterpretation could jeopardize the species and fail to provide for its conservation.

For example, the proposed 4(d) rule at section (h)(2)(iv) would prohibit incidental take resulting from “[d]amage or conversion of currently occupied red-cockaded woodpecker nesting

¹⁶⁷ For example, the National Parks Conservation Association has worked for more than a decade to restore longleaf pine habitat at Big Thicket National Preserve, by planting over 200,000 trees. Longleaf pine restoration is ongoing at Moores Creek National Battlefield in North Carolina, and red-cockaded woodpeckers are listed on Georgia’s Colonial Coast Birding Trail, which includes Fort Pulaski National Monument, Cumberland Island National Seashore, Okefenokee National Wildlife Refuge, and Harris Neck National Wildlife Refuge.

¹⁶⁸ For example, the “specific measures of success” listed in the management plan for North Carolina’s Sandhills Game Land include not only “Potential Breeding Groups of red-cockaded woodpecker,” and “breeding success of RCW population,” but also measures such as “deer and turkey harvest reported,” “counts of bobwhite quail,” and “level of hunter participation and harvest rates.” See North Carolina Wildlife Resources Commission, Sandhills Game Land Management Plan 2015-2025, Attachment 72, available at <https://www.ncwildlife.org/Portals/0/Hunting/GameLand-Plans/Sandhills-GLMP.pdf>.

and foraging habitat to other land uses that results in *conditions not able to support red-cockaded woodpeckers*” and “[f]orest management practices in currently occupied red-cockaded woodpecker nesting and foraging habitat, including, but not limited to, timber harvesting for thinning or regeneration, that result in *conditions not able to support red-cockaded woodpeckers*.” 85 Fed. Reg. at 63,498 (emphasis added). The Service should clarify what is meant by the ambiguous term “conditions not able to support red-cockaded woodpeckers” and provide more specificity on both the meaning of this term and how it would be enforced within the text of the proposed rule. As written, the term is too vague to afford any meaningful protection to red-cockaded woodpecker habitat.

Another confusing term is the proposed rule’s definition of an “active cavity tree cluster” to mean “the area delineated by a polygon of red-cockaded woodpecker active (*i.e.*, occupied) cavity trees with a 200-foot buffer.” *Id.* at 63,498. “Active cavity tree cluster” is not a term that appears in the Red-cockaded Woodpecker Recovery Plan, or in the SSA, and the Service must explain its rationale for this definition. As written, the term “active cavity tree cluster” is an arbitrary departure from the Recovery Plan’s definition of a “cluster” as “the minimum convex polygon containing all of a group’s cavity trees [both active and inactive] *and* the 61 m (200 ft) buffer surrounding that polygon” and would be significantly less protective of woodpeckers and their habitat.¹⁶⁹ The Service must explain whether this term is intended to have the same meaning as “active cluster,” a term used throughout the SSA, or if its specification that a polygon be drawn for only *occupied* cavity trees would result in substantially smaller areas being delineated and protected. At minimum, the Service should explicitly incorporate the standards set forth in the recovery plan for determining whether a cavity tree is inactive or abandoned, for purposes of whether they are protected as active cavity trees under the proposed 4(d) rule.¹⁷⁰ Better yet, the protections of the proposed 4(d) rule should be extended not just to cavity trees that have been determined to be presently “active” or “occupied,” but to any cavity tree that has not been determined to actually be “abandoned,” as defined by the Recovery Plan.¹⁷¹ Left undefined and unspecified, the proposed 4(d) rule risks allowing inexperienced persons to determine activity status based on improper and insufficient methods.

Additionally, the Service fails to provide a rationale for its choice of a prohibition against incidental take resulting from the “[u]se of insecticide or herbicide on any standing pine tree within 0.50-mile from the center of an active cavity tree.” 85 Fed. Reg. at 63,498. We agree that it is important to protect adequate foraging for red-cockaded woodpeckers, but it is unclear how banning the application of herbicide to only standing pine trees, while presumably allowing all

¹⁶⁹ Recovery Plan, Att. 1, at 36 (emphasis in original).

¹⁷⁰ Recovery Plan, Att. 1, at 294-96. For instance, the Recovery Plan specifies: “Declaring a cluster inactive or abandoned requires the expertise of a knowledgeable biologist or other individual familiar with the identification, life history, and ecology of red-cockaded woodpeckers. The individual must have ample experience with red-cockaded woodpeckers to recognize, and interpret, the sometimes confusing and subtle differences associated with cavity status. One visit is not sufficient to determine activity status, because of several of the species’ life history traits. Therefore a cluster-specific monitoring program must be established for at least each cluster in question, and preferably for all clusters on the property.” *Id.* at 295.

¹⁷¹ *Id.* at 295. An “abandoned cluster is one that has not shown any evidence of activity by red-cockaded woodpeckers for three years or more.” *Id.*

methods of application (not just limited hand application) to herbaceous groundcover or other woody plants, would be sufficiently protective. The Service also fails to offer sufficient substantiation of its choice of a 0.5-mile radius to allow the public to meaningfully analyze and comment on this selection and whether it is sufficiently protective of foraging habitat.

VI. Downlisting Would Deprioritize Resources from Red-Cockaded Woodpecker Conservation

Red-cockaded woodpeckers remain reliant upon resource-intensive management practices, but downlisting the species to threatened at this point in time would send the wrong message to state and federal agencies by suggesting the species is doing well-enough that these efforts can be reduced. By calling the species threatened, many resource managers may be forced to allocate fewer funds to red-cockaded woodpecker efforts.

As observed in the SSA, the gains in red-cockaded woodpecker abundance in recent years are “largely due to intensive management.”¹⁷² The SSA is explicit that even current management of red-cockaded woodpeckers fails to ensure recovery of the species, underscoring the continued need for funding and resources to be allocated to management actions: “recent research and experience strongly indicate that management of existing groups and foraging habitat by itself has not been sufficient to bring about the rates of increase necessary for recovery.”¹⁷³ Elsewhere, the SSA includes models projecting red-cockaded woodpecker populations under different scenarios, including low, medium, high, and Manager’s Expectation scenarios.¹⁷⁴ The Draft SSA explained that low management scenario assumes a baseline level of some past ecosystem management continuing into the future—yet even with such a “base” of management, the model predicts that under the low management scenario, “most of the many small populations of RCWs are put in serious risk of extirpation,” and “[r]ather than increase in resilience . . . the majority of the populations that currently have low resilience decline sufficiently to transition into the very low resilience category.”¹⁷⁵ The low management scenario “clearly demonstrates the dependence of growth of RCW populations on intensive management.”¹⁷⁶ The Final SSA does not include these observations, and instead focuses on its optimistic “Manager’s Future Management Scenario,” which was not devised with the proposed rule’s provisions in mind.¹⁷⁷

¹⁷² Final SSA at 74. The Draft SSA used stronger language, saying the current abundance was “largely, *if not exclusively*, due to intensive management.

U.S. FISH & WILDLIFE SERV., Draft Species Status Assessment Report for the Red-Cockaded Woodpecker (*Picoides Borealis*) Version 1.1 (Mar. 15, 2018) 60, Attachment 73 (emphasis added).

¹⁷³ Final SSA at 86.

¹⁷⁴ *Id.* at 134-35.

¹⁷⁵ Draft SSA, Att. 73, at 137.

¹⁷⁶ *Id.* at 136; *see also id.* at 152 (“Without such management, such that the species depends on ecosystem management alone, very little increase in the number of moderately to very highly resilient populations can be expected, and small populations of low or very low resilience are unlikely to persist.”).


¹⁷⁷ *See* Final SSA at 134 (“Future values of significant habitat and management model covariates for the Manager’s scenario were obtained by elicitation to property biologists, foresters, and managers. . . . Biologists and managers

If the Service downlists to threatened now, with its proposed rule that fails to ensure necessary minimum management could and would take place, red-cockaded woodpecker populations would quickly backslide as management reduced to a level more analogous with the SSA's "low" scenario. The perception of a positive trajectory associated with a downlisting could have severe consequences and suggests the next logical step would be delisting the species. Additionally, the downlisting could have real impacts for how resources are obtained and allocated by key partners in red-cockaded woodpecker recovery efforts. As we have previously highlighted, documents and emails from state wildlife authorities across the woodpecker's range clearly indicate that their capacity to continue to conserve the red-cockaded woodpecker is dependent on its federally listed status.

VII. Conclusion

The Service's proposal to downlist the red-cockaded woodpecker is premature and unsupported by the best available science. While the red-cockaded woodpecker has made progress toward recovery as a result of intensive management and coordination across state and federal agencies, the Service's instant proposal would halt and reverse much of that progress, in contravention of clear requirements of the ESA. The Service has not justified downlisting the red-cockaded woodpecker at this time—and its proposed rule would not ensure the necessary protections to conserve and recover the species in the future.

Sincerely,



Ramona H. McGee
Staff Attorney



Elizabeth Rasheed
Associate Attorney

On behalf of:

Alabama Audubon

Ansel Payne, PhD
Executive Director

Audubon Delta

Erik I. Johnson, Ph.D
Interim Senior Director of Conservation

responded to our elicitations with their future management estimates assuming the RCW remained a federally listed species and with associated resources, incentives, and related factors to continue species-specific management.”).

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