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Public Comments Processing
Attn: FWS–R8–ES–2020–0151
U.S. Fish and Wildlife Service
MS: PRB/3W
5275 Leesburg Pike
Falls Church, VA 22041– 3803.

Submitted electronically at <http://www.regulations.gov>

**Re: Docket No. FWS–R8–ES–2020–0151
Comments on Proposed Rule to Designate critical habitat for the Coastal
Distinct Population Segment of the Pacific Marten (Humbolt Marten)**

Dear Ms. Ericson:

Please accept the following comments from the Center for Biological Diversity (Center) and the Environmental Protection Information Center (EPIC) in response to the U.S. Fish and Wildlife Service’s (USFWS or Service) proposed rule to designate critical habitat for the coastal distinct population segment of the Pacific marten (interchangeably known as the “coastal marten” and “Humboldt marten”) under the Endangered Species Act (ESA) at 86 Fed. Reg 58831 (Proposed Rule).¹ Our organizations are encouraged by the Service’s proposal to designate 1,413,305 acres in northwestern California and southwestern Oregon as critical habitat for Humboldt martens. However, given the ongoing threats to this species, we are concerned that the proposal doesn’t go far enough. Specifically, we are concerned that the proposed habitat units lack sufficient connectivity to ensure the long-term survival of the species. Likewise, because the Service solely considered occupied habitat, the proposed habitat units are inadequate for the small, isolated populations of Humboldt martens to survive – especially considering the growing

¹ 86 Fed. Reg. 58831 (Oct. 25, 2021).

threat of climate change and the associated increase in the severity and occurrence of wildfire. We are also troubled that the proposal excludes more than 76,544 acres of land owned by the timber company Green Diamond Resources.

The Center is a nonprofit, public interest environmental organization dedicated to the protection of imperiled species and the habitat and climate they need to survive through science, policy, law, and creative media. The Center is supported by more than 1.7 million members and online activists throughout the country. The Center works to secure a future for all species, great and small, hovering on the brink of extinction.

EPIC is a community based, non-profit organization founded in 1977 to advocate for the science-based protection and restoration of Northwest California's Forests. Based out of the rural region of Humboldt County, EPIC's goal is to protect Northwestern California so that people may live harmoniously in a community of all beings, one that respects and cares for the landscape in a way that demonstrates a serious commitment to the well-being of the future generations.

I. The proposed critical habitat for Humboldt Marten is limited to currently occupied habitat, which is inadequate to ensure the conservation of the species as defined under Section 3 of the ESA.

The Proposed Rule contains inherent contradictions about the scope and purpose of critical habitat. Critical habitat is defined in section 3 of the ESA as:

- (1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features
 - (a) *Essential to the conservation of the species* [emphasis added], and
 - (b) Which may require special management considerations or protection;and
- (2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.²

Conservation, as defined under section 3 of the Act, means “to use and the use of all methods and procedures that are *necessary to bring an endangered or threatened species to the point at*

² 16 U.S.C. § 1532(5)(A)

which the measures provided pursuant to the Act are no longer necessary [emphasis added]".³ The Proposed Rule cites both statutory provisions. However, in justifying its decision to solely include currently occupied habitat, the Service explains:

The occupied areas identified encompass the varying habitat types and distribution of the species and provide sufficient habitat to allow for *maintaining and potentially expanding the populations* [emphasis added].⁴

The Service does not explain how a critical habitat designation aimed merely at "maintaining" and "potentially expanding" Humboldt marten populations will result in recovery sufficient to remove the protections of the ESA. Indeed, maintaining the status quo while the relevant habitat remains vulnerable to climate change, more frequent and severe wildfires, and ongoing logging, will ensure the Humboldt marten remains imperiled and protected under the ESA in perpetuity.

The Service should reevaluate its assessment of unoccupied habitat considering its conservation goal to bring Humboldt martens "to the point at which the measures provided pursuant to the Act are no longer necessary" as required under Section 3 of the ESA.

II. The proposed critical habitat does not provide sufficient connectivity between units to ensure population recovery.

Today, fewer than 400 Humboldt martens remain in a handful of highly isolated fragments of the species' historic habitat. The Proposed Rule calls for five units of protected critical habitat where the martens are known to still live. This includes acreage in Coos, Curry, Douglas, Josephine, Lane and Lincoln counties in Oregon and Del Norte and Siskiyou counties in Northern California. It's unclear how these isolated populations will be able to recover without protected connectivity corridors – established to the extent possible – between otherwise disconnected habitat units.

Dispersal of Humboldt martens across the landscape facilitates gene flow. It is the mechanism by which the species maintains and expands their distribution and population size.⁵ The

³ 16 U.S.C. § 1532(3)

⁴ Proposed Rule, p. 558839.

⁵ Slauson, K.M., G.A. Schmidt; G.A., W.J. Zielinski, P.J. Detrich, R.L. Callas, J. Thrailkill, B. Devlin-Craig, D.A. Early, K.A. Hamm, K.N. Schmidt, A. Transou, and C.J. West. 2019a. A Conservation Assessment and Strategy for the Humboldt Marten in California and Oregon. Gen. Tech. Rep. PSW-GTR-260. Arcata, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, p.48.

Proposed Rule asserts that “successful dispersal requires functional connections between habitat patches capable of supporting reproduction across the landscape.”⁶ Yet, the Proposed Rule uses a habitat connectivity model developed by the Service that incorporates OGSi data along with a minimum patch size of habitat to create “cores” of suitable habitat.⁷ While the Proposed Rule alleges there is some connectivity within the five habitat units, broader dispersal – wherever possible – will be necessary for the long-term survival of the Humboldt marten.

Connectivity and the ability of Humboldt martens to effectively disperse are threatened on many fronts. The Proposed Rule states:

Where landscapes are heavily disturbed through intensive logging, juvenile dispersal may be especially costly, as evidenced by lower survival and poorer body condition of martens dispersing through regenerating vs uncut landscapes.⁸ Little else is known about what constitutes dispersal habitat for martens, but the combination of reduced foraging efficiency and increased predation risk in predominantly clearcut landscapes may strongly influence dispersal dynamics of martens.⁹

In addition to habitat loss, motor vehicle strikes also threaten the ability of Humboldt martens to disperse. On the central Oregon coast, the most common verified mortality source for martens has been vehicular strikes along Highway 101. Because the central coastal population of Humboldt martens in Oregon is so small and isolated, mortality from vehicle strikes poses a serious threat to the survival of the population that should not be downplayed.¹⁰ In a recent study of Humboldt marten populations in the Oregon Dunes, a population viability analysis determined that:

[I]t wouldn't take much to wipe out such a small population within 30 years. For a population of 30, about the size of the subpopulation south of the Umpqua River, research models show that if two martens die annually the risk of

⁶ Proposed Rule, p. 58836.

⁷ Schrott, G.R. and J. Shinn. 2020. A Landscape Connectivity Analysis for the Coastal Marten (*Martes caurina humboldtensis*). GIS modeling effort for coastal marten habitat. Dated May 2020. U.S. Fish & Wildlife Service, Arcata, CA. 123 pp.

⁸ Johnson, C.A., J. M. Fryxell, I.D. Thompson, and J.A. Baker. 2009. Mortality risk increases with natal dispersal in American martens. *Proceedings of the Royal Society of Biological Sciences* 276:3361–3367.

⁹ U.S. Fish and Wildlife Service, 2019. Species Status Assessment Report for the Coastal Marten (*Martes caurina*), Version 2.1. September 2019. Arcata, CA.

¹⁰ Moriarty, K.M., J.D. Bailey, S.E. Smythe, and J. Verschyl. 2016. Distribution of Pacific Marten in Coastal Oregon. *Northwestern Naturalist*. 97(2) 71–81.

extinction is 32 percent, but if three die each year, that risk shoots up to 99 percent.¹¹

The Service should consider protecting connectivity corridors for Humboldt martens between habitat units and within habitat units (for example, via wildlife crossing structures) to facilitate dispersal and population growth. This may entail including unoccupied habitat. In doing so, we suggest the Service consult the Oregon Connectivity Assessment and Mapping Project (OCAMP), which began in early 2020.¹² OCAMP is a multi-year, collaborative effort to analyze and map statewide wildlife habitat connectivity at fine resolutions for up to 60 species, including martens. These species' connectivity models will then be compiled to highlight priority wildlife corridors for all species in Oregon.

III. The proposed critical habitat does not adequately consider the growing impacts of climate change and wildfire.

The words “climate change” appear in the Proposed Rule exactly twice.¹³ Those two mentions appear in the Service’s request for comments. Given the existential threat posed by climate change to biodiversity, it is remarkable that the proposed critical habitat contains no relevant analysis. The Service should examine the current and predicted impacts of climate change on the proposed critical habitat – particularly as it relates to increases in the severity and occurrence of wildfire. The proposed critical habitat should then be modified and expanded to account for potential catastrophic loss due to climate change and wildfire.

Climate change is causing widespread harm to life across the planet, disrupting species’ distribution, timing of breeding and migration, physiology, vital rates, and genetics—in addition to increasing species extinction risk.¹⁴ Climate change is already affecting 82% of key ecological processes that underpin ecosystem function and support basic human needs.¹⁵ Climate change-related local extinctions are widespread and have occurred in hundreds of species, including

¹¹ Kantor, Sylvia; Moriarty, Katie. 2019. Searching for Martens in Coastal Oregon. Science Findings 215. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 5 p.

¹² Oregon Connectivity Assessment and Mapping Project. Available at: <https://oregonconservationstrategy.org/success-story/the-oregon-connectivity-assessment-and-mapping-project-ocamp/>

¹³ Proposed Rule, p. 58832.

¹⁴ Warren, Rachel et al., Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise, 106 Climatic Change 141 (2011).

¹⁵ Scheffers, Brett R. et al., The broad footprint of climate change from genes to biomes to people, 354 Science 719 (2016).

almost half of the 976 species surveyed.¹⁶ Nearly half of terrestrial non-flying threatened mammals and nearly one-quarter of threatened birds are estimated to have been negatively impacted by climate change in at least part of their range.¹⁷ Furthermore, across the globe, populations of terrestrial birds and mammals that are experiencing greater rates of climate warming are more likely to be declining at a faster rate.¹⁸ Genes are changing, species' physiology and physical features such as body size are changing, species are moving to try to keep pace with suitable climate space, species are shifting their timing of breeding and migration, and entire ecosystems are under stress.¹⁹

Species extinction risk will accelerate with continued greenhouse gas pollution. One million animal and plant species are now threatened with extinction, with climate change as a primary driver.²⁰ At 2°C compared with 1.5°C of temperature rise, species' extinction risk will increase dramatically, leading to a doubling of the number of vertebrate and plant species losing more than half their range, and a tripling for invertebrate species.²¹ Numerous studies have projected catastrophic species losses during this century if climate change continues unabated: 15 to 37% of the world's plants and animals committed to extinction by 2050 under a mid-level emissions scenario;²² the potential extinction of 10 to 14% of species by 2100;²³ global

¹⁶ Wiens, John J., Climate-related local extinctions are already widespread among plant and animal species, 14 PLoS Biology e2001104 (2016).

¹⁷ Pacifici, Michela et al., Species' traits influenced their response to recent climate change, 7 Nature Climate Change 205 (2017). The study concluded that "populations of large numbers of threatened species are likely to be already affected by climate change, and ... conservation managers, planners and policy makers must take this into account in efforts to safeguard the future of biodiversity."

¹⁸ Spooner, Fiona E.B. et al., Rapid warming is associated with population decline among terrestrial birds and mammals globally, 24 Global Change Biology 4521 (2018).

¹⁹ Parmesan, Camille & Gary Yohe, A globally coherent fingerprint of climate change impacts across natural systems, 421 Nature 37 (2003); Root, Terry L. et al., Fingerprints of global warming on wild animals and plants, 421 Nature 57 (2003); Parmesan, Camille, Ecological and evolutionary responses to recent climate change, 37 Annual Review of Ecology Evolution and Systematics 637 (2006); Chen, I-Ching et al., Rapid range shifts of species associated with high levels of climate warming, 333 Science 1024 (2011); Maclean, Ilya M. D. & Robert J. Wilson, Recent ecological responses to climate change support predictions of high extinction risk, 108 PNAS 12337 (2011); Warren, Rachel et al., Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise, 106 Climatic Change 141 (2011); Cahill, Abigail E. et al., How does climate change cause extinction?, 280 Proceedings of the Royal Society B 20121890 (2012).

²⁰ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, IPBES secretariat, Bonn, Germany (2019), available at <https://ipbes.net/global-assessment>.

²¹ Intergovernmental Panel on Climate Change, Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (2018), <https://www.ipcc.ch/sr15/>

²² Thomas, Chris. D. et al., Extinction risk from climate change, 427 Nature 145 (2004).

²³ Maclean, Ilya M. D. & Robert J. Wilson, Recent ecological responses to climate change support predictions of high extinction risk, 108 PNAS 12337 (2011).

extinction of 5% of species with 2°C of warming and 16% of species with business-as-usual warming;²⁴ the loss of more than half of the present climatic range for 58% of plants and 35% of animals by the 2080s under the current emissions pathway, in a sample of 48,786 species;²⁵ and the loss of a third or more of animals and plant species in the next 50 years.²⁶

As summarized by the Third National Climate Assessment, “landscapes and seascapes are changing rapidly, and species, including many iconic species, may disappear from regions where they have been prevalent or become extinct, altering some regions so much that their mix of plant and animal life will become almost unrecognizable.”²⁷

Climate change is also increasing the frequency and intensity of extreme weather events, particularly heat waves and heavy precipitation events.²⁸ In the contiguous United States, extreme temperatures are expected to increase even more than average temperatures, with more intense heat waves and 20 to 30 more days per year above 90°F by mid-century for most regions under a higher emissions scenario.²⁹ Rising temperatures have exacerbated recent historic droughts by reducing soil moisture and contributing to earlier spring melt and reduced water storage in snowpack.³⁰ As conditions become hotter and drier, climate change is

²⁴ Urban, Mark C., Accelerating extinction risk from climate change, 348 *Science* 571 (2015).

²⁵ Warren, Rachel et al., Quantifying the benefit of early climate change mitigation in avoiding biodiversity loss, 3 *Nature Climate Change* 678 (2013).

²⁶ Román-Palacios, Cristian & J.J. Wiens, Recent responses to climate change reveal the drivers of species extinction and survival, 117 *PNAS* 4211 (2020).

²⁷ Melillo, Jerry M. et al. (eds.), *Climate Change Impacts in the United States: The Third National Climate Assessment*, U.S. Global Change Research Program (2014), <https://www.globalchange.gov/browse/reports/climate-change-impacts-united-states-third-national-climate-assessment-0> at 196.

²⁸ Coumou, Dim & Stefan Rahmstorf, A decade of weather extremes, 2 *Nature Climate Change* 491 (2012); Intergovernmental Panel on Climate Change, *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Special Report of the Intergovernmental Panel on Climate Change (2012), <https://www.ipcc.ch/report/managing-the-risks-of-extreme-events-and-disasters-to-advance-climate-change-adaptation/>; Herring, Stephanie C. et al., Explaining extreme events of 2016 from a climate perspective, 99 *Bulletin of the American Meteorological Society* S1 (2017); U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment, Vol. I* (2017), <https://science2017.globalchange.gov/> at 18-20; Intergovernmental Panel on Climate Change, *Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (2021), <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/> at SPM-10.

²⁹ U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment, Vol. I* (2017), <https://science2017.globalchange.gov/> at 185, 199.

³⁰ U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment, Vol. I* (2017), <https://science2017.globalchange.gov/> at 45, 236.

contributing to an increase in extreme fire weather, area burned by wildfire, and a lengthening of the wildfire season, particularly in the western United States.³¹

Although the Service doesn't address climate change directly in the Proposed Rule, it does acknowledge that "wildfire is the natural disturbance that affects by far the greatest area of habitat".³² Fire provides ecologically important disturbance features used by martens such as snags, hollowed trees, and downed logs. However, "fires can also remove large areas of suitable marten habitat that can take many decades to recover".³³ Indeed, marten density declines when the area of suitable habitat across the landscape is reduced to less than 70 percent because of wildfire, forest management, or other stand-replacing disturbance.³⁴

Should one or more of the five habitat units be impacted by a large-scale fire, the Proposed Rule contains no provisions to ensure Humboldt martens can survive as the habitat recovers. The Service should analyze the proposed critical considering the historic, recent, and projected fire activity in the region. Maps like the Oregon Wildfire Risk Explorer – which is designed to increase wildfire awareness and give a comprehensive view of wildfire risk and local fire history – should be consulted when reviewing the proposed critical habitat.³⁵ The Service should consider expanding critical habitat areas to include unoccupied habitat that may be necessary to ensure the survival of isolated Humboldt marten populations in the event of wildfire.

Likewise, the Service should consider how climate change will impact suitable habitat in the coming critical decades to the Humboldt marten's recovery. The California Department of Fish and Wildlife reports that climate change could push martens further towards the coast and northwards, but the habitat corridors for their successful dispersal do not currently exist.

Climatic conditions in the range of Humboldt martens appear to be changing in recent decades due to an influx of greenhouse gas emissions resulting from human activities. These changes are projected to continue, and modeling

³¹ U.S. Global Change Research Program, Impacts, Risks, and Adaptation in the United States, Fourth National Climate Assessment, Vol. II (2018), <https://nca2018.globalchange.gov/>.

³² (Proposed Rule, p. 58838).

³³ *Id.*

³⁴ Thompson, I.D., J. Fryxell, and D.J. Harrison. 2012. Improved Insights into Use of Habitat by American Martens. In: Biology and Conservation of Martens, Sabers, and Fishers. A New Synthesis. Edited by K.B. Aubrey, W.J. Zielinski, Martin G. Raphael, Gilbert Proulx, and S. W. Buskirk. Comstock Publishing Associates Cornell University Press, Ithaca, New York at 209, 217, 228.

³⁵ The Oregon Wildfire Risk Explorer is a partnership among Oregon Department of Forestry, Oregon State University Institute for Natural Resources, OSU Libraries and Press, the US Forest Service, and a wide variety of stakeholders throughout Oregon. Available at: https://tools.oregonexplorer.info/oe_htmlviewer/index.html?viewer=wildfireplanning

suggests changes in precipitation patterns, temperature, and daily coastal fog intrusion will result in the contraction of suitable Humboldt marten habitat northwards and towards the coast.³⁶

The critical habitat for Humboldt martens should incorporate projected shifts in suitable habitat due to climate change and be expanded accordingly.

IV. The proposed critical habitat inappropriately excludes property owned by Green Diamond by relying on a 2020 critical habitat exclusions rule that is being rescinded.

The Proposed Rule appropriately designates most of the occupied habitat of the Humboldt marten in California as critical habitat. However, the Service excludes habitat recognized as vital to the conservation of the species. The Service's exclusion of Green Diamond Property appears to rely on rules that the Biden administration is working to rescind and has agreed not to implement. Furthermore, under previously adopted joint regulations, the Service has failed to present an adequate case for exclusion.

The exclusion of Green Diamond property is particularly questionable given the Service's acknowledgement that "[f]orest management is the human disturbance that has the greatest effect on marten habitat in terms of scale and severity. The loss of marten habitat as a result of timber harvest is considered the likely cause of the continued low population levels in California since the State banned trapping in 1946".³⁷

A. The Proposed Rule improperly relies on the 2020 critical habitat exclusions rule.

The Proposed Rule appears to rely on the 2020 critical habitat exclusions rule, found at 50 CFR § 17.90, that adopted new exclusions specifically for the Service. However, the Biden Administration has begun formal rulemaking to remove the 2020 rule and revert to the previously adopted critical habitat exclusion rules found at 50 CFR § 424.19.³⁸ The applicable exclusions at 50 CFR § 424.19 lack an explicit requirement to consider whether to exclude habitat because of a state-issued permit, such as the Safe Harbor Agreement that Green Diamond received from the State of California. The Service should explain its process and reanalyze its Proposed Rule pursuant to the relevant joint regulations at 50 CFR 424.19.

³⁶ California Department of Fish and Wildlife (CDFW). 2018. Report to the Fish and Game Commission: A Status Review of the Humboldt marten (*Martes caurina humboldtensis*) in California. June 21, 2018. 469 pp.

³⁷ Proposed Rule, p. 58838.

³⁸ 86 Fed. Reg. 58831, 58847 (Oct. 25, 2021).

B. The exclusion of Green Diamond property is inappropriate.

In excluding Green Diamond property from the proposed critical habitat designation, the Service made three findings: (1) that Green Diamond’s land contains physical or biological features essential to the conservation of the Humboldt marten; but exclusion was warranted because (2) the existing state-issued Safe Harbor Agreement (SHA) and other voluntary actions “will conserve and manage coastal marten habitat including the species PBFs” (and that, perhaps, the continued implementation of this state-SHA was at risk if critical habitat was designated); and (3) Green Diamond has been “working with the Service and the CDFW on development and implementation of the MOU and State SHA”.³⁹ Potential benefits of recognition of critical habitat on Green Diamond property are not contemplated in the Proposed Rule in violation of the ESA. Accordingly, we believe that the Proposed Rule does not provide sufficient grounds to exclude Green Diamond from its critical habitat designation.

1. Green Diamond land is capable of functioning as dispersal habitat.

As the Proposed Rule and the relevant science make clear, connectivity across Green Diamond’s property is essential to the conservation of the Humboldt marten and Green Diamond’s land is capable of serving as a connectivity corridor, especially with modifications to existing management to improve forest structure.⁴⁰

Schmidt and Shinn (2020) is a study of connectivity opportunities for Humboldt martens to move through or occupy habitat. This work builds on the analysis of Slauson et al. (2019) in that it provides a more fine-grained analysis of connectivity improvement areas.

The study first produced “habitat cores”—chunks of habitat large enough and of sufficient quality to support breeding populations of coastal martens. Then Schmidt and Shinn did a “least-cost corridor” analysis to identify the “easiest routes for dispersing martens to move through.”

Schmidt and Shinn identified numerous corridors across Green Diamond property that would function as marten connectivity corridors, particularly with changes in management to reduce fragmentation and younger forest conditions associated with increased marten predators.

³⁹ Proposed Rule at 58847; see also at 58849 (summarizing “Rationale for proposed exclusion.”)

⁴⁰ Schmidt & Shinn, 2020 and Slauson et al, 2019.

The Humboldt Marten Conservation Strategy is a report by the Humboldt Marten Conservation Group outlining a conservation strategy with the aim to produce “self-sustaining, interacting populations of Humboldt martens throughout their historical range.”⁴¹ To achieve this goal, Slauson et al. identified three necessary actions: “(1) protect existing populations and currently suitable habitat; (2) reestablish populations where currently suitable habitat conditions is inaccessible owing to existing dispersal barriers, and (3) restore suitable habitat conditions in specific areas to increase population size and distribution.”

Consistent with this strategy, Slauson et al. mapped “extant population areas,” “population reestablishment areas,” and “landscape connectivity areas.” Extant population areas “include the contemporary distribution of marten populations in the assessment area, plus areas of suitable habitat extending 2 km from verified marten locations.” Population establishment areas are those that are “not occupied by a...currently self-supporting population” but nevertheless “include habitat that currently appears suitable.” Landscape connectivity areas are those containing “forest habitat” that exists between “any combination of [extant population areas] and [population reestablishment areas]”—in other words, connectivity corridors necessary to allow for successful dispersal of individuals.

Slauson et al. recognized the “Lower Klamath [landscape connectivity area],” located “between the North Coastal California ESA to the northwest and the redwood and Prairie Creek PRA to the west.” Existing opportunities for successful dispersal across this area is limited because, *inter alia*, “the amount of young regenerating forest present...will likely influence the number of marten predators” and thus “marten survival and successful dispersal.” Successful dispersal through this area can be improved, however, through maintenance and enhancement of habitat connectivity.” Or, in other words, through changes in management of these lands, they can serve a vital role in the conservation of the marten. The Lower Klamath landscape connectivity area is dominated by lands owned by Green Diamond.

As the above description makes clear, the whole of Green Diamond’s California ownership is not necessary to recognize for habitat connectivity. As Schmidt & Shinn (2020) and Slauson et al. (2019) show, through landscape modeling, the Service can project likely habitat connectivity corridors that can and should be further developed through all existing tools, including the designation of critical habitat. We urge the Service to designate connectivity corridors that have been mapped by its own staffers, Schmidt and Shinn.

⁴¹ Slauson et al., 2019. The Humboldt Marten Conservation Group is a public-private partnership of both federal and state agencies (US Fish and Wildlife Service, California Department of Fish and Wildlife, US Forest Service, Redwood State and National Parks), the Yurok Tribe, and Green Diamond Resource Company.

2. The existing state safe harbor agreement and memorandum of understanding are inadequate to conserve habitat.

The Service found that the “continued operation of the” SHA “provides equal to or more conservation than a critical habitat designation.”⁴² We disagree. The state-issued Safe Harbor Agreement suffers from several flaws, many of which are the subject of ongoing litigation brought by our organizations against the California Department of Fish and Wildlife and many of which have been recognized by the Service previously. In short, the state-SHA doesn’t do much to forward marten conservation because many of the measures merely codified already ongoing management practices. Certainly, the state-SHA does not “reduce the benefits of including [Green Diamond’s lands] in the critical habitat designation.”⁴³

The Proposed Rule highlights many of the “[c]onservation measures” that it considered as part of its finding. Many of these measures do not improve habitat function. Take, for example, commitments to assisted dispersal. While assisted dispersal may be useful to the conservation of the species, the SHA has not resulted in assisted dispersal (as whether assisted dispersal is itself feasible and beneficial to the species is still under study, as the action can come with certain costs as well). Furthermore, assisted dispersal does not help protect PBFs within Green Diamond’s property necessary for unassisted dispersal, something that designation of critical habitat could do by triggering consultation where there may be a federal nexus.

Other purported benefits of the SHA are illusory. The marten reserve area, also highlighted in the Proposed Rule, is protected from harvest under the terms of the SHA. However, this land would not be harvested anyway because it consists of xeric serpentine areas that Green Diamond could not log because it is incapable of growing commercial timber. Other purported benefits, such as “[d]iscourage[ment]” of trespass “cannabis cultivation and use of pesticide” are likewise ridiculous. In the SHA, Green Diamond agrees to do what it already does: prohibit unauthorized cannabis production on its lands and take minimal steps, such as locking gates. Green Diamond also pledges to retain slash piles; again, something that is often done. (And retention of slash piles may benefit woodrats and provide a place for potential resting habitat, it also increases fire risk on Green Diamond’s land and on adjacent properties, so its potential benefit is moderated significantly. Green Diamond is also making extremely minor modifications to its “tree scorecard,” something that Green Diamond already employs, and the changes are so minor that CDFW staffers believed it would protect approximately one tree every two acres, a modification so minor that it would have no practical benefit for the marten.

⁴² Proposed Rule, p. 58846.

⁴³ *Id.* pp. 58846-58847.

These so-called conservation measures are so miniscule that the Service has previously rejected them as sufficient as terms for a Habitat Conservation Plan (HCP). When Green Diamond first approached the Service about a new multi-species HCP, they sought coverage for the Humboldt marten using similar terms as those accepted in the state-SHA. Only then, the Service rejected inclusion of the marten in the HCP because the purported benefits were too speculative for an HCP. Claiming now that these offer some great benefit is disingenuous.

Even if the state-SHA contains meaningful benefits for the marten, these benefits do not “reduce the benefits” of a critical habitat designation. Critical habitat fills a separate niche from potential benefits from the state-SHA. As discussed below, there are many potential benefits to designation that are distinct and different from the kind offered in the state-SHA.

As to the Conservation Group MOU, the marten’s habitat doesn’t enjoy any clear benefits. The Conservation Group primarily offers a vehicle for discussion of marten-related issues between major stakeholders. Moreover, since Slauson et al. (2019) was published, the group has not met. EPIC knows because we have been seeking to join the stakeholder group for over five years and were finally told we could join—now there is nothing to join.

Moreover, the Proposed Rule fails to provide any discussion of how designation of critical habitat might impact the effectiveness of this state-SHA or how the state-SHA might diminish the importance of critical habitat designation. There is no balancing of the benefits of exclusion versus the costs of exclusion. The Service cannot merely reference the existence of a state-SHA as reason to exclude critical habitat.

3. “Maintaining Partnership” is not a reasonable justification to exclude Green Diamond property from critical habitat.

The Proposed Rule appears to state that designation of critical habitat could risk the ability of the Service to “maintain[] partnership” with Green Diamond. This is a poor reason to exclude land within Green Diamond’s ownership from the critical habitat designation. Green Diamond is a timber company with over 1.2 million acres across eight states. It is a major timber player. That Green Diamond would somehow disengage from collaboration with the Service over critical habitat designation for a small portion of its California holdings is highly unlikely.

Either way, the Service fails to provide the necessary “qualitative[] or quantitative[] descri[ption]” required by law as to how designation of critical habitat would impact the

Service's ability to "maintain partnership" with the company.⁴⁴ Similarly, the Proposed Rule contains no cost/benefit analysis weighing the potential benefits of exclusion against those of designation.⁴⁵

4. The Proposed Rule fails to conduct a costs and benefits analysis as required by rules.

As the plain text provides, the Secretary may exclude habitat only "upon a determination that the benefits of such exclusion outweigh the benefits of specifying the particular area as part of the critical habitat."⁴⁶ The Proposed Rule contains no such explicit discussion or determination. The Service never meaningfully discusses the "impact" to Green Diamond or to the Service from designation, as discussed above.

The Proposed Rule also fails to meaningfully consider potential benefits. The entirety of the discussion appears limited to one sentence on page 58846 of the Proposed Rule. The potential benefits outlined are not specific to the Humboldt marten and instead are broad statements about critical habitat: "increased public awareness of the presence of the coastal marten and the importance of habitat protection" and "where a federal nexus exists, increased habitat protection for the coastal marten." Surely there are more: increased funding for potential conservation partners to protect Humboldt marten habitat through conservation easements of purchases in fee simple; additional recognition of high-value marten habitat for consideration in impact analysis documents, such as timber harvest plans; and the ability of Green Diamond to better plan timber operations to balance timber production with marten conservation.

The Service is also bound to consider the equivalent, relevant harm suffered by the marten and the public from exclusion.⁴⁷ The impacts of failing to designate critical habitat here are more extreme than the purported "impacts" counseling against designation. In addition to the loss of benefits to the marten from critical habitat designation, there are other important impacts associated with exclusion. Green Diamond is a large and politically powerful timber company. The Service's exclusion of habitat not only does harm to the marten, but there is also harm to the reputation of the Service, as any exclusion will rightly be seen as caving to political and economic pressure, and harm to the ESA itself, as it is, again, seemingly subject to the whims of moneyed interests. One of the largest public perceptions is that the Endangered Species Act is selectively applied, with more harm directed to the less powerful than to companies like Green Diamond.

⁴⁴ 50 CFR 424.19 (b).

⁴⁵ 50 CFR 424.19(c).

⁴⁶ 50 CFR 424.19(c).

⁴⁷ See 50 CFR § 424.19(b) ("The Secretary will...compare the impacts with and without the designation....")

V. Conclusion

We appreciate that the Service has taken this step toward protecting habitat essential to the survival of the Humboldt marten. Given the nature of the threats to this species, we encourage the Service to consider: 1) protecting unoccupied habitat as critical habitat as part of a meaningful effort to bring Humboldt martens to the point at which the measures provided pursuant to the ESA are no longer necessary; 2) protect and improve connectivity corridors between and within habitat units to the maximum extent possible; 3) fully analyze the impacts of climate change and related wildfire activity on the proposed critical habitat area and modify and expand accordingly; and 4) reconsider the exclusion of Green Diamond property pursuant to the relevant rules.

Thank you for considering our comments. Please feel free to contact us with any questions or concerns.

Respectfully,

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