Babbitt v. Sweet Home Chapter of Communities: When is Habitat Modification a Take Part II

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Such is the strange philosophy of the white man! He hews down the forest that has stood for centuries in its pride and grandeur, tears up the bosom of mother earth, and causes the silvery watercourses to waste and vanish away. He ruthlessly disfigures God's own pictures and monuments, and then daubs a flat surface with many colors, and praises his work a masterpiece.¹

Environmentalists nationwide cheered and breathed a sigh of relief this past summer when the U.S. Supreme Court handed down its landmark decision in Babbitt v. Sweet Home Chapter of Communities ("Sweet Home").² In an opinion significantly reaffirming the scope and importance of the Endangered Species Act ("ESA")³ in protecting our nation's fish and wildlife resources, the Court reversed the D.C. Circuit Court of Appeals' decision holding that destruction or modification of a species' habitat may not lawfully be prohibited under the ESA.⁴ Thus, the imminent judicial threat⁵ to the ESA's ability to protect species' habitat and to the numerous habitat conservation planning processes underway nationwide has now abated. Nevertheless, the Supreme Court's opinion leaves unanswered a number of crucial questions as to how the rule prohibiting destruction or modification of species' habitat will be applied in particular circumstances. Perhaps more significantly, some are arguing that dicta in the Court's opinion indicates that the Court will be inclined to construe the prohibition against habitat modification narrowly in the future. This article summarizes the Sweet Home opinion and then analyzes the implications of that decision for protection of endangered species and their habitats. The article concludes that the ESA's prohibition against habitat modification should not be construed narrowly, for to do so would fail to effectuate the purposes of the ESA and cause significant harm to listed species.

⁵ The ESA is also under attack in Congress, which is currently considering several ESA reauthorization bills that would overturn the Supreme Court's opinion and reinstate the D.C. Circuit's holding in Sweet Home. While President Clinton has threatened to veto any such bill, it would be premature at best to assume a Presidential veto will save the day. A detailed discussion of the ESA reauthorization bills, however, is beyond the scope of this article.
⁶ The USFWS is one of the two federal agencies charged with respon-
I. The Sweet Home Opinion

As discussed in Part I of this article, the issue in Sweet Home was whether a United States Fish and Wildlife Service ("USFWS") regulation defining the term "take," especially "harass," "pursue" and "wound," as including destruction and modification of endangered and threatened species' habitat, is a reasonable interpretation of the ESA. The Supreme Court upheld the definition, for a number of reasons.

Examining the text of the ESA, the Court found three basic reasons why the statutory language supports the reasonableness of the USFWS' interpretation of "harm." First, the Court held that the USFWS definition of "harm" is supported by the ordinary meaning of that term. The dictionary definition of the verb "harm" is "to cause hurt or damage to:" In the context of the ESA, the Court stated, that "definition naturally encompasses habitat modification that results in actual injury or death to members of an endangered or threatened species."9

The Court, on several grounds, rejected the landowners' argument and the D.C. Circuit's opinion that the definition of the term "harm" should be limited to direct applications of force against a species. First, it stated that the dictionary definition of harm is not limited to direct or willful actions. Second, several of the other verbs in the definition of "take," especially "harass," "pursue" and "wound," may refer to actions or effects that do not require direct applications of force. Third, the Court stated that interpreting the word "harm" to exclude indirect injuries demeans that term independent meaning apart from the other verbs in the definition of "take," thus rendering it superfluous. Contrary to the D.C. Circuit's opinion, the Court noted, the doctrine of noscitur a sociis does not require words grouped together in a list to be given the same or similar meaning, but rather states that each word must "gather[] meaning from the words around it."10 The statutory context of the term "harm," the Court said, "suggests that Congress meant that term to serve a particular function in the ESA, consistent with but distinct from the functions of the other verbs used to define 'take.'"11 The USFWS' interpretation of "harm" as including indirect means of injuring species is consistent with this congressional intent. Finally, the Court noted that the D.C. Circuit's interpretation erroneously read a requirement of specific intent to take a species into the act, which is inconsistent with the fact that a civil or criminal section 9 violation requires only a knowing act.12

Next, the Court held that the USFWS' definition of "harm" is reasonable "given Congress' clear expression of the ESA's broad purpose to protect endangered and threatened wildlife...."13 The Court cited two authorities in support of this conclusion. First, the Court observed that it had previously described the ESA as "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."14 It further noted that the Tennessee Valley Authority v. Hill case held that "[t]he plain intent of Congress... was to halt and reverse the trend toward species extinction, whatever the cost," and that this intent "is reflected not only in the stated policies of the Act, but in literally every section of the statute," including section 9.15 Second, the Court cited section 1531(b) of the ESA, which states that the fundamental purpose of the ESA is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved."16

The Court also held that Congress implicitly affirmed the USFWS' definition of harm when it amended the ESA in 1982 to include a permit procedure providing for the "incidental take" of a species.17 The language of this provision, the Court said, "strongly suggests that Congress understood section 9 (i) to prohibit indirect as well as deliberate takings."18 The Court also observed that the incidental take permit procedure requires a permit applicant to prepare a detailed habitat conservation plan which includes measures to minimize and mitigate the impact of the permitted activity on endan-

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9. "The plain intent of Congress... was to halt and reverse the trend toward species extinction, whatever the cost," Sweet Home, 115 S. Ct. at 2414.
10. Sweet Home, 115 S. Ct. at 2412.
16. Sweet Home, 115 S. Ct. at 2413 (citing 16 U.S.C. §1531(b)).
19. Id.
The Court found further support for its conclusions in the legislative history of the 1973 ESA. The Court noted that, although the legislative history does not discuss the meaning of the term “harm,” various statements in the Committee Reports do make clear that “Congress intended 'take' to apply broadly to cover indirect as well as purposeful actions.” The Court also found it significant that the term “harm” was added to the Senate version of the ESA on the floor, noting that “[a]n obviously broad word that the Senate went out of its way to add to an important statutory definition is precisely the sort of provision that deserves a respectful reading.” The Court did not find it significant that a definition of take which included “destruction, modification or curtailment” of a species’ habitat or range was deleted in the Commerce Committee hearing on the ESA. The Court observed that there was no explanation of the deletion, and that the definition was significantly broader than the USFWS regulation. The deleted provision would have made habitat modification a categorical violation of the take prohibition, “unbounded by the regulation's restriction to habitat modifications that actually kill or injure wildlife” and unqualified by “the regulation's limiting adjective ‘significant.’”

Finally, the Court noted that the legislative history of the 1982 amendment to the ESA, which authorizes the USFWS to issue permits for the “incidental taking” of an endangered species, further supports the validity of the USFWS harm regulation. Both the House and Senate Committee reports make clear that “Congress had habitat modification directly in mind,” since both reports identify as the model for the incidental take permit process a habitat conservation plan for a housing project in California that would have harmed the endangered Mission Blue butterfly through development of its habitat. Further, the House Report states that “[b]y use of the word ‘incidental’ the Committee intends to cover situations in which it is known that a taking will occur if the other activity is engaged in but such taking is incidental to, and not the purpose of, the activity.” This reference to the foreseeability of incidental takings, the court said, undermines the plaintiffs’ argument that the 1982 amendment only covered accidental killings of endangered species that occur in the course of hunting and trapping other animals.

The Court rejected the D.C. Circuit’s holding that section 5’s grant of land acquisition authority to the federal government and section 7’s requirement that federal agencies avoid jeopardizing listed species and adversely modifying or destroying their designated critical habitat are the exclusive means by which Congress intended habitat to be protected under the ESA. As to section 5, the Court observed that:

[This] procedure allows for protection of habitat before the seller’s activity has harmed any endangered animal, whereas the Government cannot enforce the § 9 prohibition until an animal has actually been killed or injured. The [USFWS] may also find the § 5 authority useful for preventing modification of land that is not yet but may in the future become habitat for an endangered or threatened species.

The Court also distinguished section 7 from section 9 on several grounds. In contrast to section 9, section 7 applies only to the federal government; it imposes a broad, affirmative duty to avoid adverse habitat modification; and it is not limited to habitat modification that actually kills or injures wildlife. The Court deemed “unexceptional” any overlap that sections 5 and 7 may have with section 9 in particular cases.

In conclusion, the Court stated:

20. Id. at 2416 (“'Take' is defined ... in the broadest possible manner to include every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife”) (quoting S. Rep. No. 307, 93d Cong., 2d Sess. 7 (1973)). "Take" is defined in "the broadest possible terms"; "take" includes "harassment, whether intentional or not." Id. at 2416 (quoting S. Rep. No. 412, 93d Cong., 2d Sess. 11, 15 (1973)).
22. Id. (citing Hearings on S. 1992 and S. 1983 Before the Subcomm. on Environment of the Senate Subcomm. on Commerce, 92d Cong., 1st Sess. 27 (1973)).
24. Id. at 2418 (citing H.R. Conf. Rep. No. 835, 97th Cong., 2d

25. Id. at 2417 (quoting H.R. Rep. No. 567, 97th Cong., 2d Sess. 31 (1982)).
26. Id. at 2417–18.
29. Sweet Home, 115 S. Ct. at 2415.
30. Id.
31. Id.
32. Id. at 2418.
When Congress has entrusted the Secretary with broad discretion, we are especially reluctant to substitute our views of wise policy for his. See Chevron, 467 U.S. at 865–66. In this case, that reluctance accords with our conclusion, based on the text, structure, and legislative history of the ESA, that the Secretary reasonably construed the intent of Congress when he defined "harm" to include "significant habitat modification or degradation that actually kills or injures wildlife."32

Justice O'Connor concurred in the judgment based on two understandings of the harm regulation. First, she stated, "the challenged regulation is limited to significant habitat modification that causes actual, as opposed to hypothetical or speculative, death or injury to identifiable protected animals." Second, Justice O'Connor said, "regardless of difficult questions of scintor, the regulation's application is limited by ordinary principles of proximate causation, which introduce notions of foreseeability."33 These limitations caused Justice O'Connor to "call into question" the Ninth Circuit's ruling in Palila II.34 However, because the plaintiffs had only brought a facial challenge to the harm regulation and Justice O'Connor could envision many valid circumstances in which the regulation might apply, she joined in the Court's opinion. Her concurring opinion contains a very interesting discussion of her view of the regulation's purported "particular animals," and "proximate cause" limitations, which is discussed further in the analysis below.

Justice Scalia, joined by Justices Rehnquist and Thomas, dissented. They reasoned that Congress intended the section 9 take prohibition to prohibit only affirmative conduct intentionally directed at particular endangered animals, such as hunting and trapping. They contended that three features of the USFWS harm regulation are inconsistent with their reading of the scope of the ESA's take prohibition. First, they stated, the regulation unlawfully dispenses with the notions of proximate cause and foreseeability, prohibiting habitat modification "that is no more than the cause-in-fact of death or injury to wildlife."35 Second, the dissenting Justices said the regulation subjects persons to liability for omissions as well as affirmative acts. Third, and most importantly, they stated that by including impairment of breeding within the definition of harm, the regulation unlawfully encompasses injury inflicted upon populations as well as individual animals. The dissenters explained that "[i]mpairment of breeding does not 'injure' living creatures; it prevents them from propagating, thus 'injuring' a population of animals which would otherwise have maintained or increased its numbers."36

II. Analysis of the Sweet Home Opinion: Where Are We Now and Where Do We Go From Here?

The Court's holding finally puts to rest the critical question of whether destruction or modification of listed species' habitat can be prohibited under section 9. This ruling is indeed a significant victory for proponents of the ESA. Had the Court ruled the other way, the Act's effectiveness in preventing habitat destruction, which is the primary cause of species extinction37 and a key problem Congress intended to address in enacting the ESA,38 would have been eviscerated. If the Supreme Court had upheld the D.C. Circuit's decision, habitat destruction would have been addressed almost exclusively through the section 7 consultation process and the

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32. Id. (O'Connor, J., concurring) (emphasis added).
33. The Palila case cited by Justice O'Connor was actually the last in a series of four opinions resulting from two separate actions concerning "take" of the endangered palila bird. In the first case, plaintiffs sought to enjoin the Hawaii Department of Land and Natural Resources from maintaining feral sheep and goat herds in the critical habitat of the endangered palila bird, arguing that such actions violated § 9 of the ESA. Specifically, plaintiffs contended that defendants' acts and omissions were harming the palila by destroying and degrading its habitat, and thereby interfering with its essential breeding, feeding and sheltering behaviors. The district court agreed, holding that the undisputed facts clearly established a taking within the meaning of the USFWS' harm regulation. Palila v. Hawaii Dept of Land & Natural Resources, 471 F. Supp. 963, 995 (D. Haw. 1979). This ruling was affirmed by the Ninth Circuit, which held that "the defendants' action in maintaining feral sheep and goats in the critical habitat is a violation of the [ESA] since it was shown that the palila was endangered by the activity." Palila v. Hawaii Dep't of Land & Natural Resources, 699 F.2d 495, 497 (9th Cir. 1981) ("Palila I").
34. Id. at 2422.
35. Id. at 2421.
36. Id. at 2422.
section 5 federal land acquisition authority. Neither section is wholly effective in protecting listed species' habitat. Section 7 applies only to formally designated critical habitat and is only invoked when a federal agency action threatens to adversely modify or destroy that habitat. Moreover, funds for federal land acquisition under section 5 are inadequate for preserving all the habitat necessary to protect endangered and threatened species.

Absent some kind of authority to restrict habitat modifying activities of non-federal landowners, who collectively own a large percentage of the nation's land base, the ESA could never hope to hold the line on extinction. A contrary ruling in the Sweet Home case would have released these landowners from all or nearly all liability for destroying or modifying habitat of endangered and threatened species. Thus, as noted in Part I of this article, non-federal landowners would no longer have had to prepare habitat conservation plans and obtain incidental take permits under section 10(a)39 for land development and other habitat modifying activities, unless these activities would have directly resulted in a "take." Thus, in this broad sense, the significance of the Court's opinion cannot be overstated. There can no longer be any question that activities that destroy or adversely modify habitat are at least facially prohibited under the ESA, whether on federal or non-federal lands, regardless of whether the harm to the species can be characterized as "direct" or "indirect."

Unfortunately, however, this general statement offers little concrete guidance for a complex and diverse world. Because the Sweet Home plaintiffs were challenging the harm regulation on its face, the Court was not adjudicating the regulation's validity in any particular factual context. As a consequence, the Court assumed the existence of certain facts in order to decide the case. First, the court assumed that plaintiffs had no intent to harm endangered and threatened species by their logging activities. Second, the Court assumed that the logging activities nevertheless would have the effect of "detrimentally changing the natural habitat of... listed species and that, as a consequence, members of those species will be killed or injured."

In light of the absence of a factual context for the case, many critical questions remain unanswered as to how the rule prohibiting destruction or modification of species' habitat may lawfully be applied in particular circumstances. It remains to be seen how the lower courts will follow the Supreme Court's somewhat obscure direction in Sweet Home. Several passages in the Court's opinion seem to imply that it may be inclined to construe the USFWS' harm regulation narrowly if faced with a challenge to the regulation in a particular factual situation. This is exemplified by the following statement:

Respondents advance strong arguments that activities that cause minimal or unforeseeable harm will not violate the ESA as construed in the "harm" regulation. Respondents, however, present a facial challenge to the regulation [citation omitted]. Thus, they ask us to invalidate the Secretary's understanding of "harm" in every circumstance, even when an actor knows that an activity, such as draining a pond, would actually result in the extinction of a listed species by destroying its habitat.41

Again, at the conclusion of the opinion, the Court observed:

In the elaboration and enforcement of the ESA, the Secretary and all persons who must comply with the law will confront difficult questions of proximity and degree; for, as all recognize, the Act encompasses a vast range of economic and social enterprises and endeavors. These questions must be addressed in the usual course of the law, through case-by-case resolution and adjudication.42

What follows is an analysis of some of the specific issues raised in the Sweet Home majority, concurring and dissenting opinions that will likely arise in future "as-applied" challenges to the harm regulation.

A. When Is Habitat Modification the Proximate Cause of Death or Injury to a Species?

An issue raised in all three Sweet Home opinions is whether the harm regulation can and should be read to preclude liability for habitat modification that is not the proximate or foreseeable cause of death or injury to a listed fish or wildlife species. This is perhaps the only question that was clearly

40. Sweet Home, 115 S. Ct. at 2412.
41. Id. at 2414.
42. Id. at 2418.
answered in the affirmative by the majority. Likewise, Justice O'Connor concurred in the majority opinion based on the explicit understanding that liability for take only attaches to those habitat modifying activities that are the proximate cause of harm to a species. Finally, the dissenters also agreed that take liability must be limited by ordinary principles of proximate cause, although they disagreed that the wording of the harm regulation could be read to encompass such a limitation.

It is uncertain how this proximate cause limitation will affect the application of the harm regulation in a particular case. On the one hand, one could argue that the effect will not be too significant, since the proximate cause principle simply precludes liability for "bizarre" consequences. Proximate cause is fundamentally based on "considerations of the fairness of imposing liability for remote consequences." Viewed in this light, the proximate cause limitation may only act to limit liability for long or attenuated chains of causation in which it is obviously unfair to hold a landowner liable for a taking. One such example cited by Justice O'Connor is the "farmer whose fertilizer is lifted by a tornado from tilled fields and deposited miles away in a wildlife refuge."

On the other hand, as Justice O'Connor acknowledges, "[p]roximate causation is not a concept susceptible of precise definition" and is normally decided on a case-by-case basis. In other words, what is and is not a "proximate cause" of a particular activity is in the eye of the beholder. This is particularly true when proximate cause is viewed in terms of "foreseeability" (a term used in both the majority and concurring opinions), as opposed to "duty" or "remote" cause. That a landowner has a duty to protect endangered and threatened species is clearly established by the ESA. Likewise, the determination of "remote cause" would appear to be relatively straightforward, cutting off liability for take only in extreme and absurd circumstances. On the other hand, whether the adverse effects of habitat modification on a given species are deemed to be "foreseeable" will depend upon the judge's scientific understanding of the direct relationship between species survival and habitat preservation, and whether the judge believes that a reasonable person may be charged with constructive knowledge of this relationship, both in the abstract and in the context of a particular case.

The open-ended nature of the proximate cause limitation thus introduces an element of uncertainty into the "take" calculus which could result in a more narrow application of the take prohibition with respect to habitat modifying activities. Moreover, because the proximate cause principle is based primarily on notions of fairness to landowners and not on the biological needs of endangered species and the scientific realities of the consequences of modification of a species' habitat, it could result in fewer protections for species. Finally, the proximate cause principle may complicate of proximate or legal cause "operate to relieve the defendant whose conduct is a cause in fact of the injury, where it would be considered unjust to hold him legally responsible.

43. See id. at 2412 n.9 ("[w]e do not agree with the dissent that the regulation covers results that are not 'even foreseeable... no matter how long the chain of causality between modification and injury.' Respondents have suggested no reason why... the 'harm' regulation... should not be read to incorporate ordinary requirements of proximate causation and foreseeability") (citation omitted); id. at 2414 n.13 ("[t]he dissent incorrectly asserts that the Secretary's regulation... 'dispenses with the foreseeability of harm'.... [t]he regulation merely implements the statute, and it is therefore subject to the statute's 'knownly involves' language [citation omitted], and ordinary requirements of proximate causation and foreseeability").

44. See id. at 2418 ("the regulation's application is limited by ordinary principles of proximate causation, which introduce notions of foreseeability"); id. at 2419 ("private parties should be held liable only if their habitat-modifying actions proximately cause death or injury to protected animals"); id. at 2420 ("[b]y use of the word 'actually,' the regulation clearly rejects speculative or conjectural effects, and thus itself wastes principles of proximate causation... [t]he harm regulation applies where significant habitat modification... proximately (foreseeably) causes actual death or injury to identifiable animals") (O'Connor, J., concurring) (emphasis in original).

45. Id. at 2421, 2429–30.


47. Sweet Home, 115 S. Ct. at 2420 (O'Connor, J., concurring); see also Witkin, Summ. of Cal. Law, Torts § 968 (9th ed. 1995) (rules
cate resolution of any case involving take of a species through habitat modification by making proof of harm (i.e., death or injury) to that species more difficult. Application of the proximate cause principle will raise new questions regarding how close the causal connection must be between a habitat modifying activity and harm to a species, and how to determine whether an activity is a "substantial factor" in bringing about the harm (especially where there are multiple causes of such harm).52

The potential risk to species posed by the proximate cause principle is illustrated by several excerpts from the Court's opinions. For example, both Justice O'Connor and the dissenting justices appear to agree that application of the proximate cause principle would preclude liability for "a farmer who tills his field and causes erosion that makes silt substantial factor" in bringing about the harm (especially where there are multiple causes of such harm).53

In light of the ESA's strong policy of "institutionalized caution" and the Court's holding in T.V.A. v. Hill, both of which require the balance of equities to be struck in favor of protecting endangered species, courts should not be able to cut off §9 liability simply on the basis that holding the landowner liable would be "unfair" since this determination has nothing to do with protection of species. Rather, liability should only be circumscribed in cases where there is an intervening cause of harm or a similar clear break in the chain of causation.54

52. See, e.g., Pyramid Lake Paiute Tribe v. United States Dep't of the Navy, 898 F.2d 1410, 1420 (9th Cir. 1990) (evidence did not establish that Navy's annual diversions upstream from Pyramid Lake, which lowered the lake level, was the cause of decline in population of endangered cui-ui fish in Pyramid Lake. Moreover, evidence failed to distinguish the impacts resulting from the Navy's diversions from other diversions, including the plaintiffs own).

53. Sweet Home, 115 S. Ct. at 2420, 2423.

54. Indeed, this is the very purpose of the "incidental take" permit procedure enacted by Congress in 1982. 16 U.S.C. §1539(a)(1)(B). As discussed in section I of this article, the Court itself concluded that Congress enacted §10(a) specifically to provide an exception to the §9 take prohibition as it applied to habitat modifying activities. Sweet Home, 115 S. Ct. at 2418. Under the §10(a) procedure, any person may apply for a permit to incidentally "take" species lawfully, provided he or she prepares a habitat conservation plan specifying, among other things: (1) the likely impacts of the taking; (2) steps the applicant will take to monitor, minimize and mitigate these impacts; and (3) alternatives that were considered and why these alternatives were rejected. 16 U.S.C. §1539(a)(2)(A). The USFWS must approve the permit application if it finds that: (1) the taking is incidental to an otherwise lawful activity; (2) the applicant will minimize and mitigate the impacts of the taking to the maximum extent practicable; and (3) the taking will "not appreciably reduce the likelihood of survival and recovery of the species in the wild." 16 U.S.C. §1539(a)(2)(B).

The fact that this incidental take permit procedure exists, and the maxim prohibiting a reading of a section of statute which would render another section of that statute superfluous, both counsel against a restricted reading of the scope of the take prohibition. It is significant that the standard for granting an incidental take permit is the equivalent of the §7 "no jeopardy" standard (H.R. Conf. Rep. No. 835), which is less stringent than the "take" prohibition. See Paul D. Ort, What Does It Take to Take and What Does It Take to Jeopardize? 7 TULANE ENVTL. L.J. 197, 209, 215 (1993). If the §9 take prohibition is interpreted, through the proximate cause limitation, to preclude liability for many types of habitat modifying activities which have adverse effects on (i.e. jeopardize the continued existence of) listed species, this would render the §10(a) permit procedure a nullity. Because the §10(a) permit procedures allows an exception to the §9 take prohibition, the take prohibition must be more stringent than the standard for granting such a permit, otherwise the permit procedure makes no sense.


56. Palila II, 852 F.2d 1106.


58. Palila II, 852 F.2d at 1110.
[In my view, then, the "harm" regulation applies where significant habitat modification, by impairing essential behaviors, proximately (foreseeably) causes actual death or injury to identifiable animals that are protected under the [ESA]. Pursuant to my interpretation, Palila II—under which the [Ninth Circuit] Court of Appeals held that a state agency committed a "taking" by permitting feral sheep to eat mamane-naio seedlings that, when full grown, might have fed and sheltered endangered palila [birds]—was wrongly decided according to the regulation's own terms. Destruction of the seedlings did not proximately cause actual death or injury to identifiable birds; it merely prevented the regeneration of forest land not currently inhabited by actual birds.59

Although this statement appears to reflect a fundamental misunderstanding of the facts of Palila II,60 it nevertheless vividly highlights the negative biological impact that application of the proximate cause principle can have on section 9 cases. If lower courts adopt an approach similar to Justice O'Connor's, these limitations would preclude a finding of liability for degradation of habitat that is currently unoccupied, but which could or might be utilized by a species on the basis that the requisite degree of causation was not established.61 Of course, as any biologist knows, the fact that habitat is not currently occupied by a species does not necessarily mean that it is not crucial to the species' survival.62 But proving this connection may be difficult.63 Furthermore, Justice O'Connor's view of the proximate cause principle implicitly sanctions piecemeal destruction of a species' habitat, leading to "death by a thousand cuts."

Finally, all nine Justices appear to agree that proximate cause is established, and therefore liability for "take" is appropriate, in circumstances where an individual destroys the last remaining habitat of the species (thereby causing its extinction), or an individual member of a species is directly killed by a habitat-modifying action (i.e. through cutting down a tree in which a bird is nesting).64 However, if the proximate cause standard limits liability for habitat modification to these narrow circumstances, the term "harm" would practically be read out of the statute altogether, since any injury that does not rise to the level of death (unless intentionally directed at a particular animal) would not be the proximate cause of the activity in question. Such a restricted reading of the harm regulation almost certainly would not be supported by the majority and concurring Justices, however, since it essentially resurrects the D.C. Circuit opinion overturned in Sweet Home case.

A better causation standard, at least in cases involving civil and criminal penalties, is actual, or "but for," cause.65 The actual cause inquiry asks whether a particular habitat modifying activity has "some prohibited impact" on an endangered species (i.e. "actually kills or injures" that species).66


60. The undisputed facts in the Palila cases were that the palila bird's entire known population (about 2,200 birds in 1986) was limited to the remaining mamane-naio forests, and the bird occupied about 10% of its historical range. The experts agreed that the palila was dangerously close to extinction, and that all remaining mamane forest was essential for the bird's survival. Under these circumstances, any further degeneration of the forest was bound to cause death or injury to existing individual birds, not merely prevent future occupation of "potential habitat" by presently nonexistent birds. Palila, 471 F. Supp. at 988-90.

61. See, e.g., Sweet Home, 115 S. Ct. at 2415 (§ 5 distinguishable from § 9 in part because § 5 can be used to prevent modification of land not currently occupied by a species); Morrill v. Lujan, 802 F. Supp. 424, 431-32 (S.D. Ala 1992) (holding that plaintiff had failed to establish causal link between development of endangered Perdido Key beach mouse's habitat and harm to mouse in part because there was no evidence that the mouse actually occupied the habitat).


63. See, e.g., Morrill, 802 F. Supp. at 431 (holding that unlawful take of species not shown where habitat unoccupied, even though USFWS had concluded in a biological opinion that destruction of this habitat would jeopardize the continued existence of the mouse pursuant to § 7).

64. The dissenting Justices would add the further requirement that the actor possess a specific intent to take the species in question. Sweet Home, 115 S. Ct. at 2424; see also id. at 2414-15 n.13 ("[u]nder the dissent's interpretation of the Act, a developer could drain a pond, knowing that the act would extinguish an endangered species of turtles, without even proposing a conservation plan or applying for a permit under §§ 10(a); unless the developer was motivated by a desire 'to get at a turtle... We cannot accept that limitation'); id. at 2420 ("the landowner who drains a pond on his property, killing an endangered fish in the process, would likely satisfy any formulation of the [proximate cause] principle") (O'Connor, J., concurring); id. at 2424 ("to chop down the very tree in which [an animal] is nesting, or even to destroy its entire habitat in order to take it (as by draining a pond in order to get at a turtle), might neither wound nor kill, but would directly and intentionally harm") (Scalia, J., dissenting).

65. Use of the "but for" causation standard is problematic in cases involving injunctive relief due to difficulties in proving that a prospective activity will be the future "cause in fact" of harm to a species.

66. See Defenders of Wildlife v. Administrator, EPA., 882 F.2d 1294, 1300-01 (8th Cir. 1989) ("[a] taking occurs when the challenged activity has 'some prohibited impact on an endangered species'") (quoting Palila I, 639 F.2d at 497).
By contrast, the proximate cause inquiry is based on an unpredictable, non-biological policy analysis, performed on a case-by-case basis. Relying on such a policy-based analysis to limit liability for harm is inappropriate when Congress has already made the hard policy choice: that protecting listed species is "to be afforded the highest of priorities." Under these circumstances, it is improper for the courts to arrogate to themselves the authority to limit an individual's liability for harming a species for non-biological reasons, through the uncertain vehicle of a proximate cause standard. If a habitat modifying activity is the actual cause of harm to a listed species (i.e. death or injury), liability should attach. The circumstances under which habitat modification may be deemed to "actually kill or injure" a species are discussed below.

B. When Does Habitat Modification "Actually Kill or Injure" a Species?
The USFWS harm regulation expressly limits take liability to those habitat modifying activities which "actually kill[] or injure wildlife." A key issue after the Sweet Home opinion is how the actual injury requirement will be interpreted and applied in specific cases. This issue involves several subissues, each of which is addressed below: (1) Does future or threatened habitat modification satisfy the "actual injury" requirement?; (2) If so, what degree of risk must be posed by the threatened future harm and how imminent must the threat be?; (3) What is "actual injury" in the context of habitat modification? Is impairment of a species' chances of recovery sufficient, or must a decline in the number of individual members of the species be shown?; (4) May actual death or injury through habitat modification be proven by reference to population statistics, or must one demonstrate harm to identifiable individual animals?; and (5) What type and extent of habitat modification will result in a finding of actual death or injury? Interestingly, depending upon which way a given fact pattern is analyzed, all of these issues also can be reframed as proximate cause problems.

1. Does threatened future habitat modification qualify as "actual injury"?
The majority opinion in Sweet Home provides minimal guidance on the question whether threatened future harm qualifies as actual injury. The majority simply observed that, by its own terms, the USFWS harm regulation only applies in circumstances where the activity in question "actually harms" a species. It is not clear how literally the Court is inclined to read the "actual harm" limitation. The Ninth Circuit has held that this limitation does not preclude suits to enjoin prospective harm to a species, provided the harm is at least reasonably certain to occur. One passage in the Sweet Home opinion, however, raises the question whether the Court would agree that the Ninth Circuit's reading of the harm regulation is a reasonable construction of section 9's take prohibition. In distinguishing section 5's land acquisition authority from section 9's take prohibition, the Court stated: "the § 5 procedure allows for protection of habitat before the seller's activity has harmed any endangered animal, whereas the Government cannot enforce the § 9 prohibition until an animal has actually been killed or injured." It is difficult to predict how much weight courts faced with an "as-applied" challenge to the USFWS harm regulation will give this statement. On the one hand, the passage appears to conflict with the holdings of those courts that have considered the precise question whether section 9 may be used to enjoin prospective harm to a species. On the other hand, however, the statement is merely dicta and therefore was not made in a context in which the Court was required to consider all of the ramifications of its opinion. Indeed, the Court did not seem to have the ESA's injunctive relief provisions, which specifically authorize suits by a private citizen or the U.S. Attorney General to prevent prospective harm.
in mind at all. All references in the opinion are to the civil and criminal penalty provisions. Even the Ninth Circuit has held that a threat of harm is insufficient to sustain civil or criminal penalties.

Finally, the majority may have been using the phrase “actual injury” to preclude section 9 liability for “hypothetical or speculative” injury (but not necessarily imminent or likely prospective injury). Section 5 authorizes the Government to acquire land for endangered species protection without making any showing that land acquisition will forestall future harm to the species. By contrast, the “actual injury” requirement of the section 9 harm regulation does require a showing that a habitat modifying activity has caused or is likely to cause death or injury to a species. As the Ninth Circuit has explained:

The [USFWS’s] use of the term “actually” [in the harm regulation] was not intended to foreclose claims of an imminent threat of injury to wildlife. Rather, because the [USFWS] was concerned that the [original] definition of “harm” could be read to mean habitat modification alone, the [USFWS] inserted the phrase “actually kills or injures wildlife” to preclude claims that only involve habitat modification without any attendant requirement of death or injury to protected wildlife.

[Defendant] points out that [plaintiff’s]

claim is barred because the [USFWS] noted that a claim for a “potential injury” to wildlife would not be actionable. The word “potential” means “existing in possibility.” Thus, “potential injury” denotes only injury that may or may not occur. In contrast, [plaintiff] alleges that [defendant’s] project creates an imminent threat of death or injury to [an endangered species]. The word “imminent” means “ready to take place; near at hand.” The two assertions are clearly distinct ... [C]ourts have concluded that the [USFWS] juxtaposed the terms “actually” and “potentially” to specify the degree of certainty that harm would befall a protected species, as opposed to the timing of the injury.

The propriety of the Ninth Circuit’s interpretation of the “actual injury” limitation is borne out by the Sweet Home Court’s affirmation of T.V.A. v. Hill (a case in which harm to an endangered species was imminently threatened, but had not yet actually occurred), as well as by the Court’s factual assumptions in the case. Interpreting section 9 to require a showing of wholly past or present, ongoing harm would be “contrary to the letter and spirit” of the ESA. Moreover, as a practical matter, such an interpretation would lead to the absurd result that a citizen suit to enjoing a section 9 violation would be rendered moot before it became ripe.

The meaning of the “actual injury” requirement versus “speculative” or “potential” harm, is discussed below.

73. Forest Conservation Council, 50 F.3d at 785 (citing 16 U.S.C. § 1540(e)(6) and (g)(1)). Certainly, the Court was not thinking of the ESA’s citizen suit provision, given its reference to the “Government.”

74. 16 U.S.C. § 1540(a)(1) and (b)(1) provide that “[a]ny person who knowingly violates any provision of the ESA or its implementing regulations shall be liable for specified civil and/or criminal penalties. 16 U.S.C. § 1540(e)(6) and (g)(1)(A), by contrast, authorize the U.S. Attorney General or any person to “seek to enjoin any person ... who is alleged to be in violation of any provision” of the ESA or its implementing regulations.

75. Forest Conservation Council, 50 F.3d at 786 n.3.

76. Id. at 2418 (citing National Wildlife Fed’n, 23 F.3d at 1512 and n.8 [“while we do not require that future harm be shown with certainty before an injunction may issue, we do require that a future injury be sufficiently likely”, “what we require is a definitive threat of future harm to protected species, not mere speculation”] (emphasis in original); compare American Bald Eagle v. Babbitt, 9 F.3d at 166 (“courts have granted injunctive relief only where petitioners have shown that the activity ... will actually, as opposed to potentially, cause harm to the species”). The difficulty with distinguishing between a “definitive” or “imminent” threat claim is barred because the [USFWS] noted that a claim for a “potential injury” to wildlife would not be actionable. The word “potential” means “existing in possibility.” Thus, “potential injury” denotes only injury that may or may not occur. In contrast, [plaintiff] alleges that [defendant’s] project creates an imminent threat of death or injury to [an endangered species]. The word “imminent” means “ready to take place; near at hand.” The two assertions are clearly distinct ... [C]ourts have concluded that the [USFWS] juxtaposed the terms “actually” and “potentially” to specify the degree of certainty that harm would befall a protected species, as opposed to the timing of the injury.

77. Id. at 2412 (“we must assume aqundo that [logging] activities will have the effect ... of detrimently changing the natural habitat of ... listed species and that, as a consequence, members of those species will be killed or injured. Under respondents’ view of the law, the Secretary’s only means of forestalling that grave result—even when an actor knows it is certain to occur—is to use his section 5 authority to purchase lands upon which the survival of the species depends. The Secretary, or the other hand, submits that the section 9 prohibition on takings, which Congress defined to include ‘harm,’ places on respondents a duty to avoid harm that habitat alteration will cause the birds unless respondents first obtain a permit pursuant to section 10’ [emphasis added].

78. Id. at 2412 (“In Hill, we construed section 7 as precluding the completion of the Tellico Dam because of its predicted impact on the survival of the snail darter [citation omitted]. Although the section 9 ‘take’ prohibition was not at issue in Hill, we took note of that prohibition; placing particular emphasis on the Secretary’s inclusion of habitat modification in his definition of ‘harm.’ In light of that provision for habitat protection, we could not understand how TVA intends to operate Tellico Dam without harming the snail darter.”) (quoting T.V.A. v. Hill, 437 U.S. at 184 n.30).

79. Id. at 2412 (“we must assume argundo that [logging] activities will have the effect ... of detrimently changing the natural habitat of ... listed species and that, as a consequence, members of those species will be killed or injured. Under respondents’ view of the law, the Secretary’s only means of forestalling that grave result—even when an actor knows it is certain to occur—is to use his section 5 authority to purchase lands upon which the survival of the species depends. The Secretary, or the other hand, submits that the section 9 prohibition on takings, which Congress defined to include ‘harm,’ places on respondents a duty to avoid harm that habitat alteration will cause the birds unless respondents first obtain a permit pursuant to section 10’ [emphasis added].

80. Forest Conservation Council, 50 F.3d at 785

81. Id.
is the primary issue before the Ninth Circuit in the
appeal of Marbled Murrelet v. Pacific Lumber Company.\textsuperscript{82} In that case, plaintiffs sought to enjoin implementa-
tion of a plan to harvest timber on a 137-acre parcel of old growth forest in Humboldt County on the
ground that the timber harvest would “take,” i.e. “harm” and “harass,” the threatened marbled murre-
let by destroying its habitat. The court held an eight-day non-jury trial to determine whether the
murrelet occupied the timber stand at issue and if so, whether the harvest would in fact result in a
“take.” In its findings of fact and conclusions of law, the court answered both of these questions in the
affirmative and permanently enjoined the proposed timber harvest.

The court found that plaintiffs had met their burden of establishing that the proposed harvest will harm and harass the murrelet because the “log-
ging activities will result in the destruction and degradation of occupied murrelet habitat, such
that marbled murrelets will actually be killed or injured by the logging operations through significant
impairment of their breeding, feeding and sheltering behavior.\textsuperscript{83} The court cited the following
facts in support of this conclusion:

(1) The timber harvest plan’s proposed removal of 40–60% of the old growth trees
on the site “will significantly impair the marbled murrelet’s breeding behavior,”
thus decreasing the chance of successful nesting.\textsuperscript{84}

(2) Removal of 40–60% of the old growth trees “will result in loss of a substantial
portion of the nesting opportunities for murrelets returning to the area from sea to
nest.”\textsuperscript{85} Returning murrelets will become disoriented, and will be subjected to
increased competition. Nest sites that do remain will be degraded and substandard.
As a consequence, many murrelets will likely fail to find suitable nest sites, and
those that do may not be able to successfully raise their young.

(3) The resulting open and fragmented

Based on these facts, the court concluded that plaintiffs had demonstrated a “definite threat of
future harm to the marbled murrelet” sufficient to warrant imposition of a permanent injunction.\textsuperscript{87}
Pacific Lumber Company is now seeking to overturn the district court’s opinion, inter alia, on the ground
that a plaintiff is not entitled to injunctive relief under the ESA unless he or she proves that harm to
a species has already been sustained or is currently being sustained. In support of this contention,
Pacific Lumber cites the paragraph in Sweet Home wherein the Court distinguishes between the section
9 take prohibition and the section 5 land acquisition authority on the basis that the former only
applies “once an animal has actually been killed or injured.”\textsuperscript{88} Pacific Lumber asserts that plaintiffs
failed to meet this standard because they offered no proof that “any specific marbled murrelet had ‘actu-
ally been killed or injured’ by timber harvesting.... Rather, [plaintiffs] offered evidence of theoretical or
possible future harm to unidentified birds.”\textsuperscript{89}

In their opposition brief, plaintiffs (appellees) argue, inter alia, that the phrase “actual injury”
implies nothing about the timing of the injury, but was included in the harm regulation simply to pre-
clude a claim that habitat modification alone, without attendant death or injury (whenever that injury
may occur), violates the take prohibition.\textsuperscript{90} Further, they argue, the Sweet Home Court’s statement cannot
reasonably be read to preclude claims of future injury, since it clearly refers to the government’s
enforcement of the ESA’s penalty provisions. As such, plaintiffs say, the Court’s statement does not
apply to the provisions authorizing a citizen or the government to seek injunctive relief, which were
enacted for the specific purpose of preventing harm to species before it occurs.\textsuperscript{91}

The plaintiffs’ argument is clearly the more rea-

\textsuperscript{82.} 880 F. Supp. 1343 (N.D. Cal. 1995), appeal docketed, No.
95-16504 (9th Cir. Nov. 6, 1995).

\textsuperscript{83.} Id. at 1365–66.

\textsuperscript{84.} Id. at 1366.

\textsuperscript{85.} Id.

\textsuperscript{86.} Id.

\textsuperscript{87.} Id. at 1367 (citing National Wildlife Fed’n, 23 F.3d at 1512,
n.8).

\textsuperscript{88.} Sweet Home, 115 S. Ct. at 2415.

\textsuperscript{89.} Brief for Appellant at 14–15, Marbled Murrelet v. Pacific
Lumber Co., No. 95–16504 (9th Cir. 1995).


\textsuperscript{91.} 16 U.S.C. § 1540(e)(6), (g)(1), 89th Cong., 2d Sess. 24 (1982) ("[i]njunctions provide greater
opportunity to attempt resolution of conflicts before harm to a
species occurs .... The ability to enjoin a prospective violation of the

343
sonable interpretation of the ESA's take prohibition. Pacific Lumber's reading of the statute would lead to the absurd result that a citizen could not sue to enjoin a take until after it is too late to protect the species from such imminent harm. Moreover, as plaintiffs point out, Pacific Lumber's interpretation of the Sweet Home decision would overrule sub silento T.V.A. v. Hill, which involved prospective harm. However, given the Sweet Home Court's favorable reference to the T.V.A. v. Hill opinion in the context of the habitat modification issue, such a result could not have been intended. In Sweet Home, the Court characterized the holding in T.V.A. v. Hill in the following manner:

In Hill, we construed § 7 as precluding the completion of the Tellico Dam because of its predicted impact on the survival of the snail darter [citation omitted]. ... Although the § 9 “take” prohibition was not at issue in Hill, we took note of that prohibition, placing particular emphasis on the [USFWS'] inclusion of habitat modification in [its] definition of “harm.” In light of that provision for habitat protection, we could “not understand how TVA intend[ed] to operate Tellico Dam without harming the snail darter.

Therefore, neither Sweet Home nor the “actual injury” requirement precludes suits to enjoin prospective harm to an endangered or threatened species.

2. What degree of risk justifies a finding of actual harm?

If the ESA permits suits to enjoin prospective harm to a species, the next difficult and unanswered question is the degree of risk that must be posed by a given activity before an injunction will issue. In Palila II, the Ninth Circuit Court of Appeals held that an activity that could harm a species may properly be enjoined as a violation of the take prohibition. The court rejected the defendants’ argument that only activities that would “result in the immediate destruction of the palila’s food sources” satisfy the “actual injury” limitation of the USFWS harm regulation. The court reasoned that the harm regulation's inclusion of habitat destruction which could or is likely to result in death or injury to a species is consistent with the overall purposes of the ESA to provide a means for conserving the ecosystems upon which threatened and endangered species depend for survival. More recently, in Forest Conservation Council, the Ninth Circuit affirmed its prior conclusion, holding that a violation of the take prohibition may be established where the threat of future injury is “reasonably certain” to occur.

Although the “likelihood of future harm” issue is not directly addressed in the Sweet Home majority opinion, the Court does assume that the plaintiffs' habitat modifying activities would have the effect of killing or injuring listed species. In addition, as mentioned previously, the Court also cites approvingly to T.V.A. v. Hill, a case in which destruction of an endangered species' last remaining habitat was virtually certain to harm that species. Further, in rejecting the plaintiffs' facial challenge to the harm regulation, the Court stated: “they ask us to invalidate the [USFWS'] understanding of ‘harm’ in every circumstance, even when an actor knows that an activity, such as draining a pond, would actually result in the extinction of a listed species by destroying its habitat.”

Some might contend that these aspects of the Sweet Home opinion portend a ruling requiring a degree of certainty of future harm contrary to the Ninth Circuit’s interpretation of the actual harm limitation. However, it is difficult to place this much weight on the Supreme Court’s statements. First, the Court does not directly address the degree of risk to a species that must exist in order for the take prohibition to be invoked. Second, a literal reading of the Court’s statements is inconsistent with other portions of the opinion wherein the Court explicitly rejects an interpretation that limits the take prohibition to actions which directly kill or injure listed species. Only direct harm satisfies a reading of the

92. Sweet Home, 115 S. Ct. at 2413 (quoting T.V.A. v. Hill, 437 U.S. at 184 n.30 (emphasis added)).
93. Palila II, 852 F.2d at 1108.
94. Id.
95. Id.
96. 50 F.3d at 784; accord National Wildlife Fed’n, 23 F.3d at 1512 (“[w]hile we do not require that future harm be shown with certainty before an injunction may issue (under § 9), we do require that future harm be sufficiently likely”) (emphasis in original).
97. Sweet Home, 115 S. Ct. at 2412.
98. Id. at 2414; see also American Bald Eagle, 9 F.3d at 166 (“courts have granted injunctive relief only where petitioners have shown that the alleged activity ... if continued will actually, as opposed to potentially, cause harm to the species”).
99. See, e.g., Sweet Home, 115 S. Ct. at 2413 (“unless the statut-
take prohibition which requires proof of certain death or injury. This is because it cannot be proven with 100% certainty that harm will necessarily occur unless the activity will result in: (1) immediate death (as when a bulldozer crushes a member of a species or destroys its last remaining habitat); or (2) immediate destruction of all the species’ remaining food sources or breeding sites. The latter types of activities ultimately lead to certain death by starvation or failure to reproduce.

Finally, the Sweet Home Court’s references to certain future harm must be viewed in the context in which these statements are made. The Court is merely using an extreme example for purposes of illustrating the absurdity of invalidating the USFWS harm regulation in the context of a facial challenge. In such circumstances, a court is required to uphold a regulation unless there is “no set of circumstances under which the [regulation] would be valid.”

If section 9 is read to require an absolute certainty of harm before liability will attach, this will fail to effectuate the ESA’s purposes. By definition, an endangered species is on the brink of extinction. Therefore, “it should not be necessary for it to disclose to extinction before the prohibitions of section 9 come into force.” As the district court stated in Defenders of Wildlife v. Administrator, E.P.A., “[t]here is no level of threat that can be deemed ‘insignificant’ absent an incidental take [permit].” Moreover, limiting the take prohibition to cases where death or injury is certain to occur would lead to the bizarre result that an activity which would jeopardize the continued existence of the entire species under section 7 nevertheless would not constitute a take of any individual member of the species in violation of section 9! Such was the D.C. District Court’s remarkable conclusion in North Slope Borough v. Andrus. In that case, the court enjoined proposed offshore oil leasing activities under section 7, but refused to do so under section 9, stating that the government is not required to

halt all activity merely because there is a possibility that agency action will result in a “taking” at some future time … . [Injunctive relief should not herein issue unless danger to the protected species is sufficiently imminent or certain … . The lease sale itself threatens no species.

Finally, as a leading ESA commentator has stated, there is

no rational reason to consider future adverse impacts to endangered species as not constituting takings merely because they do not affect species immediately … . [It makes sense] to halt or modify activities as early as possible before takings occur, both to benefit endangered species and to avoid the potential waste of resources on an activity which may be enjoined in the future when a taking becomes imminent.

The degree of risk of future harm required to invoke the take prohibition is a key issue in the Marbled Murrelet appeal. Pacific Lumber is arguing that, assuming the “actual injury” requirement can be read to proscribe prospective harm, that harm must be certain to occur. In other words, Pacific Lumber contends, a plaintiff cannot obtain injunctive relief under section 9 unless he or she proves that the activity being challenged will in fact kill or injure particular members of the species. As Pacific Lumber’s brief demonstrates, if future harm must be conclusively demonstrated, this would require a de facto showing that the habitat modifying activity would directly harm a species.

642 F.2d 589 (D.C. Cir. 1980).

104. North Slope Borough, 486 F. Supp. at 362, accord California v. Watt, 520 F. Supp. 1359, 1387 (C.D. Cal. 1981), aff’d, on other grounds, 683 F.2d 1253 (9th Cir. 1982) (“Assuming arguendo that the proposed leasing activities do constitute a threat to the continued survival of species protected by the ESA, such a threat would still not constitute a taking”).


106. See Appellant’s Opening Brief at 18-23, Marbled Murrelet v. Pacific Lumber Co., No. 95-16504 (9th Cir. 1995).

107. Pacific Lumber’s opening brief reads the take prohibition as narrowly as the dissenting justices and the overturned D.C. Circuit opinion in Sweet Home. Pacific Lumber states:

The timber harvest is scheduled to occur after the birds’ breeding season when they are at sea and not present in the stand. Hence, any “harm” is necessarily indirect. In
However, contrary to Pacific Lumber's arguments, the Sweet Home Court did not require evidence that habitat modification would directly harm a species; quite the opposite—the court affirmed that a take may occur indirectly. Further, the court clearly stated that a habitat modifying activity must be the proximate cause of harm to the species. Under this standard, future harm only need be reasonably foreseeable, not absolutely certain. In light of this, a plaintiff should only be required to show that it is more likely than not that habitat modification will significantly impair species breeding, feeding and sheltering activities.108

The district court's findings in the *Marbled Murrelet* case are more than sufficient to establish that Pacific Lumber's proposed harvest of old growth redwood trees will actually harm the murrelet through significant impairment of its essential behavior patterns. The court found that the harvesting of the murrelet's critical nesting habitat "will result in a high probability that the remaining population of marbled murrelets in [the Owl Creek] region will become extinct," and that the survivability of the murrelet population in Owl Creek is important to the survivability of the entire California population.109 The court also found that "logging activities ... will result in the destruction and degradation of occupied habitat such that marbled murrelets will actually be killed or injured by the logging operations."110 That the actual injury requirement was met in the *Marbled Murrelet* case is further illustrated by the kind of injury necessary to satisfy that test, as discussed below.

3. What kind of injury justifies a finding of actual harm?

Another open question after Sweet Home is the nature and extent of injury necessary to invoke the "actual injury" requirement. Although it is clear that the death of an existing, individual protected animal falls within the harm regulation's permissible scope, it is not clear to what extent other, lesser forms of injury (such as impairment of species breeding, feeding and sheltering) may properly be proscribed. While the regulation on its face defines "actual injury" to include impairment of a species' essential behavioral patterns such as breeding, feeding and sheltering, the degree of impairment must be significant.111 As the preamble to the final harm regulation states, "[d]eath or injury may be caused by impairment of essential behavioral patterns which can have significant and permanent effects on listed species."112 The question thus turns on the degree of behavioral impairment required in order to satisfy the actual injury standard and the proper interpretation of "significant and permanent effects." Is harm to species' recovery sufficient to satisfy the actual harm limitation? Or is a decline in the population and death of individual members of the species required? If so, is any decline in numbers sufficient, or must the activity also pose a risk of extinction?

Under one interpretation, the majority opinion in Sweet Home can be read to imply that only activities posing a risk of extinction will meet the actual injury requirement.113 However, it is unwise to second guess the meaning of statements made in dicta, as they are simply illustrative examples, and do not necessarily indicate the Court's view of the permissible scope of the regulation. And again, it is important to remember that the Court was only addressing the propriety of the regulation in the context of a facial challenge. Further, the Sweet Home majority clearly indicates that indirect forms of injury to a species could violate the take prohibition (such as impairment of essential behavioral patterns), but otherwise provides no guidance as to the kind and extent of indirect injuries that would qualify under the statute.

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108. In effect, Pacific Lumber's argument changes the standard of proof required in a case involving the harm regulation from "preponderance of the evidence" to "clear and convincing evidence" or even "beyond a reasonable doubt." There is no basis or precedent for such a high standard of proof in § 9 cases.


110. Id.

111. 50 C.F.R. § 17.3.


113. See, e.g., *Sweet Home*, 115 S. Ct. at 2414 ("[r]espondents ask us to invalidate the [USFWS] understanding of 'harm' in every circumstance, even when an actor knows that an activity, such as draining a pond, would actually result in the destruction of a listed species by destroying its habitat"); id. at 2414 n.15 ("[u]nder the dissent's interpretation of the Act, a developer could drain a pond, knowing that the act would extinguish an endangered species of turtles, without even proposing a conservation plan or applying for a permit under § 10(a)") (emphasis added).
The concurring and dissenting opinions contain a more thorough analysis of what these justices believe constitutes injury in the context of habitat modification. Justice O'Connor agrees that impairment of essential behavioral patterns through habitat modification can constitute actual injury. She explains:

To raze the last remaining ground on which the piping plover currently breeds, thereby making it impossible for any piping plovers to reproduce, would obviously injure the population (causing the species' extinction in a generation). But by completely preventing breeding, it would also injure the individual living bird, in the same way that sterilizing the creature injures the individual living bird... One need not subscribe to the theories of "psychic harm"... to recognize that to make it impossible for an animal to reproduce is to impair its most essential physical functions and to render that animal, and its genetic material, biologically obsolete. This, in my view, is actual injury.

It is unclear whether Justice O'Connor believes that habitat modification that interferes with a species' breeding behavior satisfies the actual injury requirement only if it completely prevents breeding and is therefore certain to cause the species' extinction (or at least a substantial decline in the population), or whether she was simply using an extreme example in an attempt to discredit the dissent's analysis.

The dissent opinions that habitat modification which interferes with a species' breeding behavior can never result in actual injury to a particular animal, but can only harm populations of species and "hypothetical" individual animals by causing them not to come into being. In Justice Scalia's view, "impairment of breeding" can only injure individual animals if one believes that the harm regulation encompasses injuries that are not physical in nature:

[S]urely the only harm to the individual animal from impairment of that "essential function" is not the failure of issue (which harms only the issue), but the "psychic harm" of perceiving that it will leave this world with no issue (assuming, of course, that the animal in question, perhaps an endangered species of a slug, is capable of such painful sentiments). If it includes that psychic harm, then why not the psychic harm of not being able to frolic about—so that the draining of a pond used for an endangered animals' recreation, but in no way essential to its survival, would be prohibited by the Act?

Neither the concurring nor dissenting Justices apparently believe that habitat modification which impairs essential behavioral patterns in a manner which prevents or impedes a species' recovery would satisfy the actual injury limitation. As Justice O'Connor explains: "[t]hat a protected animal could have eaten the leaves of a fallen tree or could, perhaps, have fruitfully multiplied in its branches is not sufficient under the regulation. Instead, ... the regulation requires demonstrable effect (i.e. actual injury or death) on actual, individual members of the protected species."

The concurring and dissenting Justices' view of what constitutes actual injury is in contrast to that of the Ninth Circuit. In National Wildlife Federation, the Ninth Circuit rejected the view that the injury sustained to a species must pose a threat of extinction, reasoning that "[t]his would be contrary to the spirit of the statute, whose goal of preserving threatened and endangered species can also be achieved through incremental steps." In fact, the court noted, a finding of harm is justified where habitat degradation causes injury that "prevents, or possibly, retards, recovery of the species." The district court opinion in the second Palila case also found that degradation of the Palila's critical habitat "is actually, presently injuring the Palila by decreasing food and resting sites so that the Palila population is suppressed to its current critically endangered

114. Id. at 2419 ("[b]reeding, feeding and sheltering are what animals do. If significant habitat modification, by interfering with these essential behaviors, actually kills or injures an animal protected by the Act, it causes 'harm' within the meaning of the regulation") (O'Connor, J., concurring).
115. Id. (emphasis added).
116. Id. at 2422 (Scalia, J., dissenting).
117. Id. at 2430 n.5 (emphasis in original). This viewpoint is of course completely at odds with basic biology, common sense, and every court decision that has interpreted the harm regulation. As Justice O'Connor points out: "[o]ne need not subscribe to theories of 'psychic harm' ... to recognize that to make it impossible for an animal to reproduce is ... actual injury." 119 S. Ct. at 2419.
118. Id. at 2419 (O'Connor, J., concurring).
119. 23 F3d at 1512 n.8.
120. Id. at 1513; accord Forest Conservation Council, 59 F.3d at 788 n.4. Although the Ninth Circuit has never been required to pass directly upon the issue of whether harm to recovery is actionable under § 9, this dicta nevertheless provides a clear indication of how the court would rule if faced with the issue.
levels. If the Mouflon continue eating the mamane forest, the forest will not regenerate and the Palila population will not recover to a point where it can be removed from the endangered species list. Thus, the presence of mouflon sheep ... threatens the continued existence and the recovery of the Palila species.121

The Ninth Circuit's approach to the actual injury clearly makes the most sense. If complete impairment of breeding injures an individual living creature, why wouldn't a lesser form of impairment of breeding which prevents the species from recovering also injure that creature?122 Indeed, the very purpose of the ESA is to "conserve" threatened and endangered species.123 "To conserve" is specifically defined as the use of all methods and procedures necessary to bring the species to the point of full recovery.124 Why then, in the words of the district court in Palila,125 should a species have to "dip closer to extinction" in order for the section 9 prohibition to come into force?126 Requiring a showing of complete impairment of a species' essential behavior necessitates a showing of a substantial threat or certainty of extinction, contrary to the express purposes of the ESA. It unjustifiably places the burden on the species to demonstrate its right to survive and reads the term "harm" out of the take prohibition altogether by requiring evidence of certain death of individual members of the species (see further discussion of proof of harm below). Moreover, the line between what constitutes harm to a species' chances of recovery and a species' prospects of survival is often indeterminably thin.127 Therefore, it is often difficult to determine when habitat modification will threaten a species' continued existence versus when it will "simply" threaten its recovery prospects. For these reasons, the take prohibition should not distinguish between activities that jeopardize a species' chances of survival and those that impair its chances of recovering to non-endangered levels.

4. How may actual harm through habitat modification be proven?

After Sweet Home, it is also unclear whether the harm regulation must be read to require proof of death or injury to specific, identifiable members of a species or whether harm may be established by proof of harm to the population as a whole. While the majority opinion does refer to "particular animals" and "members" of the species;128 these references cannot reasonably be read to address the issue of how harm may be proven. Rather, the references reflect the Court's understanding of the fact that section 9 protects individual animals, not just entire populations. Justice O'Connor's concurring opinion, however, indicates that she reads the USFWS harm regulation to require proof of harm to specific, identifiable individual animals in order to establish a "take."129 Justices Scalia, Rehnquist and Thomas also would limit the regulation in this manner.130

This "individual animals" proof issue creates an interesting paradox. On the one hand, in the abstract, it would appear that a prohibition against harm to an individual animal is a more stringent standard than a prohibition against harm to an entire population. This conclusion reflects section 9's more protective focus on individual animals, as compared with section 7's focus on jeopardy to the species as a whole.131 Thus, if an entire population has been harmed, one can logically infer that individual members of the species necessarily have been harmed as well.132 For this reason, proof of harm to a population is a legitimate means of establishing harm to individual animals through...
circumstantial evidence. This is consistent with the standard for granting an exception to the take prohibition under 10(a), which is essentially the equivalent of the section 7 jeopardy standard. If one's entitlement to a permit for incidental take of species is established by proof that the population as a whole will be protected, then one should likewise be able to establish that an unlawful take has occurred by proving that the population has been harmed.

On the other hand, if the Sweet Home opinion is read to mean that harm may only be established by proof of death or injury to specific, identifiable individual animals, this could lead to the absurd consequence that even an activity causing a species' population to decline would not be a "take" unless the corpses of individual animals were produced or there was no other occupied habitat remaining. It is very difficult to prove that harm has befallen or would befall specific, individual animals absent evidence of a dead body or evidence that the activity at issue would raze the last remaining habitat of the species, causing it to go extinct (as was the case in T.V.A. v. Hill). Without around-the-clock evidence of an individual animal's behavior, such as breeding, feeding and sheltering, it would be extremely difficult to determine whether an activity was impairing or would impair that behavior. In sum, it is much more difficult to prove that an identifiable individual has been or would be harmed by a particular activity than it is to establish that the activity is causing or would cause an overall decline in the species' population.

The error of interpreting section 9 to require proof of death or injury to individual members of the species is severalfold. First, as just explained, such an interpretation de facto requires proof of direct harm to the species, similar to the D.C. Circuit Court of Appeals' decision and the dissenting opinion Sweet Home, and contrary to the clear direction in the majority opinion. As the Sweet Home majority pointed out, "unless the statutory term 'harm' encompasses indirect as well as direct injuries, the word has no meaning that does not duplicate the meaning of the other words [in the definition of 'take']."

Second, a requirement that a section 9 violation be established through proof of death or injury to identifiable individual animals is inconsistent with both the plain language of the statute and the overall purposes of the ESA. Such a crabbed interpretation ironically turns section 9, with its more protective focus on harm to individual members of a listed species, into the poor stepchild of section 7, with a less protective focus on jeopardy to entire populations of species. In fact, such an interpretation of section 9 may render that section even less protective of species than section 7, allowing the former provision to be invoked only when an entire population faces certain extinction (or an individual member of a species will be killed directly). Section 7, on the other hand, merely requires proof that an activity is reasonably expected to reduce the likelihood of the species' survival and recovery. The potential for distortion of the purpose of section 9 is illustrated by the illogical holding in North Slope Borough v. Andrus, wherein the court held that the proposed offshore oil leasing activity would jeopardize the continued existence of the entire species, but would not result in a take of an individual member of that species.

Third, a restrictive interpretation of section 9 improperly nullifies the section 10(a)(2) and 7(b)(4) incidental take permit processes. As explained in footnote 54, section 10(a)(2) contains a limited exception to section 9's stringent take prohibition. Section 10(a)(2) authorizes the USFWS to issue a permit allowing a landowner to take individual members of a species as incident to an otherwise lawful activity. A so-called "incidental take" permit may be issued if, inter alia, the activity will not "appreciably reduce the species' likelihood of survival and recovery in the wild," which is the equivalent of the section 7 "jeopardy" standard. Significantly, the incidental take permit process was enacted to address the "concerns of private

("It is uncontested that a severe decline in the population of woodpeckers has occurred in the past ten years. 'Harm' does not necessarily require proof of the death of specific or individual members of the species (citing the Pullia cases, ... but as the numbers show themselves, large percentages of the few remaining birds have died."

133. 16 U.S.C. § 1539(a)(2)(B)(iv) (an incidental take permit will be granted if, among other things, it "does not appreciably reduce the likelihood of the survival and recovery of the species in the wild").

134. H.R. Conf. Rep. No. 835. USFWS regulations define "to jeopardize the continued existence of" as "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild.")

135. SeeAppellant's Opening Brief at 22, Marbled Murrelet v. Pacific Lumber Co., No. 15650 (9th Cir. 1979) ("[I]mpaired breeding' might result in fewer chicks, but it would not result in the 'actual injury' to 'particular animals' required to establish a section 9 violation").

136. Sweet Home, 115 S. Ct. at 2413.

137. 50 C.F.R. § 402.02.


landowners who are faced with having otherwise lawful actions ... prevented by the section 9 prohibitions against taking.\textsuperscript{141}

Section 7(b)(4) contains a similar process for authorizing incidental take in conjunction with the federal consultation process under section 7(a)(2). Congress recognized that, even an activity which would not jeopardize the continued existence of a species in violation of section 7 still could result in the take of individual members of that species in violation of section 9.\textsuperscript{142} For this reason, Congress authorized the USFWS to issue an "incidental take statement" to a federal agency or federal permit or license applicant if the taking would not jeopardize the continued existence of the species as a whole.\textsuperscript{143} Section 7(o) provides that any taking in compliance with the terms and conditions of an incidental take statement is not a violation of section 9.\textsuperscript{144}

The fact that a permit to take a species will be granted under section 10(a)(2) if the activity will not jeopardize the species' continued existence necessarily means that Congress intended the take prohibition to be substantially more stringent than the jeopardy standard. Likewise, the fact that Congress recognized that a take could still occur even in the absence of a jeopardy determination under section 7(a)(2), and was therefore compelled to enact a procedure authorizing such take under sections 7(b)(4) and 7(o), also means that the take prohibition is much stricter than the jeopardy threshold.

This is the only interpretation that gives effect to Congress' inclusion of a "no jeopardy floor" in sections 10(a)(2) and 7(b)(4) as a "safety valve" release from the restrictive application of the take prohibition. If the section 9 take prohibition is interpreted to be less restrictive than the section 7 jeopardy standard (through imposition of highly uncertain "individual animal" proof requirements, a requirement of proof of certain extinction, or otherwise), then these permit processes would be nonsensical and superfluous. This is because the take prohibition would not be violated until after the jeopardy floor had been exceeded, and therefore there would be no legal requirement to obtain such permits in the first instance.

5. What extent of habitat modification justifies a finding of actual harm?

Finally, there is the question of how extensive habitat modification must be in order to trigger the take prohibition. The USFWS harm regulation defines harm to include only significant habitat modification. The Ninth Circuit has affirmed this limitation.\textsuperscript{145} The Supreme Court has likewise stated that "activities that cause minimal ... harm will not violate the [ESA] as construed in the 'harm' regulation."\textsuperscript{146} It is unclear what is "insignificant" or "minimal" harm. But since the Court has also stated that "every term in the regulation's definition of 'harm' is subservient to the phrase 'an act which actually kills or injures wildlife',"\textsuperscript{147} it is safe to assume that habitat modification which results in actual death or injury is, by definition, significant within the meaning of the harm regulation (regardless of the extent of the area adversely affected or destroyed), and vice versa.

C. Other Issues

There are two remaining issues regarding the proper interpretation of the take prohibition with respect to habitat modification. The first question pertains to the state of mind necessary to establish a "taking" through habitat modification. The majority in Sweet Home clarified that, at least in cases involving criminal and most civil penalties, a person need not specifically intend to harm an endangered species in order to be liable under section 9.\textsuperscript{148} Rather, the person need only intend the act that results in harm to the species. This interpretation is...
consistent with Congress' substitution, in the 1978 amendments to the ESA, of the term "knowingly" for "willfully" in the criminal and the higher civil penalty provision of the ESA. 149

The Court's opinion does not address the state of mind required to establish a section 9 violation in the context of an action for injunctive relief. However, it is significant that the harm regulation itself contains no intent requirement. Moreover, "with the exception of the provisions authorizing fines and criminal penalties, which require 'knowing' violations, nothing in the [ESA] itself indicates that a violator must know [of] or intend" to violate the law. 150 Nor should courts read such a requirement into the act. In fact, there should be no mens rea requirement for purposes of obtaining injunctive relief under the ESA. In T.V.A. v. Hill, the Supreme Court enjoined an action which would result in harm to an endangered species without any showing of intent. Requiring a plaintiff to prove that an actor knows that his or her action will result in a prohibited impact on an endangered or threatened species would place an undue burden on plaintiffs and would be contrary to both the letter and the spirit of the ESA.151

The second issue is whether a failure to act or an omission can ever be a taking. The final notice of the harm regulation states that use of the term "act" in the regulation is intended to be inclusive of both commissions and omissions. 152 Although this issue was not addressed in the Sweet Home majority opinion, the USFWS' decision to include omissions within the regulation's scope was one of the three key reasons put forth in the dissenters for invalidating the regulation.153

One district court has held explicitly that a failure to act violates the take prohibition. In Sierra Club v. Lyng,144 plaintiffs challenged the United States Forest Service's (USFS's) forest management practices as a taking of the endangered red-cockaded woodpecker. In its findings of fact, the court stated that the causes of the woodpeckers' decline included the USFS' failure to: (1) control hardwood midstory encroachment on pine trees which the woodpeckers used for nesting and foraging; (2) employ prescribed burning to control encroachment of young pines and hardwood trees; (3) provide an appropriate basal area in potential nesting stands; and (4) identify and preserve old growth trees appropriate for nesting. The court held that such failures to act, considered in conjunction with other USFS forest management practices and policies (namely clearcutting), amounted to a taking of the woodpeckers in violation of section 9. This holding, however, may in part reflect the court's understanding of the federal government's affirmative duty to conserve endangered and threatened species under section 7(a)(1).155

III. Conclusion: An Appeal To Uphold the Original Intent of the ESA

If an unduly restrictive reading of the term "harm" is adopted, this will completely fail to effectuate Congress' intent in enacting the ESA: to provide a means for conserving (i.e. recovering) endangered and threatened species and the habitats upon which they depend for survival. 156 There is no escaping the biological fact that species cannot survive without habitat. As a recent National Academy of Sciences report concluded: "If habitat is substantially reduced in area or degraded, species occurring in the wild will be lost." 157 Thus, any incremental destruction of habitat will have a cumulative adverse impact on a species' chances of survival. Viewed in this context, there can be no de minimus destruction of habitat. As long as we continue to lose species' habitat, we will continue to see a decline in our nation's biodiversity. Thus, because the biological reality is that any species depends on

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149. H.R. Rep. No. 1625, 95th Cong., 2d Sess. 26; H.R. Conf. Rep. No. 1804, 95th Cong., 2d Sess. 26. Although not at issue in the case, the Court did imply that it might be inclined to read the term "knowingly" into the "otherwise violates" civil penalty provision in § 1540(a)(1). The Court stated that the provision is "potentially sweeping," and that it has "imputed scienter requirements to criminal statutes that impose sanctions without expressly requiring scienter." Sweet Home, 115 S. Ct. at 2412 n.9. However, the Court said, the proper case to consider whether to do so would be a challenge to enforcement of that provision itself. Id.

150. Cheever, supra note 131 at 189.

151. See also United States v. Nguyen, 916 F.2d 1016, 1018 (5th Cir. 1990) (violation of ESA is a general intent crime; prosecution need not prove that the defendant knew species was endangered or threatened or that it was illegal to take such species).


153. Sweet Home, 115 S. Ct. at 2422.


155. 16 U.S.C. § 1536(a)(1); see Lyng, 694 F. Supp. at 1270.

156. 16 U.S.C. § 1531(b).

habitat to survive, species cannot be artificially separated from their habitat through fine legal distinctions which fail to take into account this reality.

Congress has already made the hard policy choice: that protecting biodiversity is a goal that is important enough to outweigh other societal goals, including unrestricted economic development.\textsuperscript{158} In enacting the ESA, Congress recognized that species protection is not an easy or a simple matter, and that it often requires our society to make hard choices and sacrifices. Nevertheless, Congress required these choices and sacrifices to be made.\textsuperscript{159} What the cries for a “balanced interpretation” of the ESA fail to recognize is that species would not be endangered or threatened if the scales had not already been heavily tipped against them. The very definition of “endangered” means that the species is on the brink of extinction and that even incremental adverse impacts can have a serious impact on the species’ chances of survival.\textsuperscript{160} A narrow reading of the take prohibition, however, essentially sanctions a game of russian roulette with our nation’s imperiled species, contrary to congressional intent. By erecting numerous legal obstacles to protection from harm, such a reading unlawfully places the burden on the species to demonstrate its right to survive, when in fact, given its precarious condition, all presumptions should be in the species’ favor.

Now, on the eve of reauthorization of the ESA, we as a nation have another policy decision to make. We must either decide to do what it takes to meet the ESA’s goal of protecting our nation’s priceless biodiversity, or we must determine that loss of biodiversity is an inevitable consequence of ever-increasing economic development that simply must be tolerated. This policy choice cannot and should not be made by the courts, through an increasingly narrow interpretation of the take prohibition. Rather, this is a legislative decision, and unless and until Congress speaks to this issue again, the courts are obligated to effectuate Congress’ intent as reflected in the current ESA.

\textsuperscript{158} T.V.A. v. Hill, 437 U.S. at 194 ("Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities").


\textsuperscript{160} 16 U.S.C. § 1532(6) ("endangered species” means a species which is in danger of extinction throughout all or a significant portion of its range).

Analyzes provisions of the ESA and regulations of the Fish and Wildlife Service that define when a taking has occurred, especially with regard to habitat destruction or modification. Areas of ambiguity are highlighted and interpretive solutions are suggested. The inter-circuit conflict on the issue is explored, and a method of resolving the constitutional issues is presented. The article also discusses the issues surrounding deference to executive agency decision.


Examines the inter-circuit split presented by the Ninth Circuit's Paila cases and the D.C. Circuit's Sweet Home decision with respect to the deference due the Fish and Wildlife Service regulations that define 'harm' under the ESA. Whether the doctrine put forth in *Chrin U.S.A v. Natural Resources Defense Council* was properly followed in each case is analyzed.


A short and concise account of why Sweet Home is significant. Identifies the key legal issues in the controversy, as well as a few of the other ramifications of the decision, such as balance of powers problems.


Gives ESA background relevant to the Sweet Home decision, then a summary of the facts and the Court's analysis. The decision is considered critically, and its ramifications are discussed.


Describes the most important provisions of the ESA and how they relate to the Sweet Home II decision of the D.C. Circuit. The D.C. Circuit's decision is carefully scrutinized, and an argument is then presented on how the United States Supreme Court should decide the issue.


Provides a comprehensive resource on the federal and California Endangered Species Acts, the State Natural Communities Conservation Planning Program, and other biodiversity protection statutes.
