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CONFERENCE DRAFT

Reforming Section 10 and the Habitat Conservation Program

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One of the central dilemmas of the Endangered Species Act is how to foster species conservation and recovery on private land. Much of the habitat thought to be occupied by endangered species is on private land. According to some estimates, more than two thirds of listed endangered species can be found on private land.[1] And even in areas where there is substantial federal land that contains critical habitat, the federal land often is part of a patchwork of federal, state, local and purely private holdings. (Importantly, the Act treats state and locally-owned land as private land.) In such cases, any comprehensive recovery plan would need to extend to private land.

In theory, the Endangered Species Act powerfully addresses the risks posed to endangered species by private development and other economic activity on private land. Section Nine of the Act prohibits the "taking" of

[1] See Jodi Hilty & Adina M. Merenlender, "Studying Diversity on Private Land," *Conservation Biology* 17, no. 1 (2003): 133 (stating that ninety-five percent of endangered plant and animal species have some habitat on private land); David S. Wilcove & Joon Lee, "Using Economic and Regulatory Incentives to Restore Endangered Species: Lessons Learned from Three New Programs," *Conservation Biology* 18, no. 3 (2004): 640 (explaining that an estimate that "private lands harbor at least one population of two-thirds of all federally-listed species . . .is almost certainly an underestimate").

endangered species on private land, and broadly defines "take."[2] The Fish and Wildlife Service's regulation implementing Section 9 clearly encompass private development activity that kills or prevents the reproduction of protected species members,[3] and the United States Supreme Court upheld that regulation in *Sweet Home v. Babbitt*.[4]

In practice, however, there have been relatively few Section Nine enforcement actions brought by the government or Section Nine citizens' suits brought by private citizens. One reason that government regulators and citizen groups may have found bringing Section Nine actions to be relatively unattractive to pursue is that there generally is much less information available to the government or the public regarding what is happening on private land than there is regarding what is happening on federal land. In addition, aggressive regulation of private land generally is much more controversial politically and troubling to judges than aggressive regulation of federal land. Indeed, the United States Supreme Court in *Sweet Home* expressed some concerns about the legality of any aggressive applications of Section 9 pursuant to the FWS regulation.[5] Moreover, the sheer number of private holdings with endangered species populations, when coupled with

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[2] The Act defines "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C.A. §§ 1532(19), 1538(a)(1).

[3] The Department of Interior regulation defines "harm" to include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. § 17.3

[4] 515 U.S. 687 (1995)

[5] Of course, even a modest threat of a government or citizen suit under Section Nine may deter some landowners from "taking" or arguably taking species on their land. Thus, Section Nine certainly does have an impact beyond those cases in which litigation is initiated under Section Nine. Measuring that impact, however, would be exceedingly difficult.

the high costs of government enforcement or citizen suit litigation, means that only a fairly small percentage of plausible Section Nine actions could ever be brought.

Perhaps because there have been relatively few Section 9 actions, most of the attention with respect to the preservation of species on private land has focused on a different section of the Act -- Section 10. Enacted as part of amendments to the Act in 1982, Section 10 allows the Secretary of the Interior to permit incidental takings of endangered species that otherwise would be illegal under Section Nine. An "incidental take" is one where the harm to the species is not intentional -- that is, it is not the goal of the landowner's action -- but is rather incidental to the landowner's activities on the land (such as clearing scrub with habitat as part of an effort to build a new residential subdivision). According to Section 10, the Secretary may grant an incidental take permit only in conjunction with an approved habitat conservation plan or HCP.[6]

Section 10 anticipates a two-part process -- an application by a landowner that includes a conservation plan, and the discretionary approval of the conservation plan by the Secretary based on certain required findings. The landowner's submitted conservation plan must specify, among other things, “the impact which will likely result from [the] taking,” “what steps the applicant will take to minimize and mitigate such impacts,” “the funding that will be available to implement such steps” and “what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized.” The Secretary may grant the permit only

[6] See 16 U.S.C. Sec 1539, (a) (2) (A)(2009).

upon finding that the "taking will be incidental," "the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking," "the applicant will ensure that adequate funding for the plan will be provided," and, it would seem most critically, "the taking will not appreciably reduce the likelihood of the survival or recovery of the species in the wild."[7]

What is not in the text of Section 10 is important, particularly in light of the controversies regarding the HCP program that are discussed below. Section 10 does not really mandate serious public participation in the HCP formation and approval process: the section merely references the need for "public comment" prior to final decision by the Secretary. Nor is there any provision regarding the quality of the scientific review needed for an HCP to be approved, or the role of any scientific advisory committees. The funding provision does require that the landowner/applicant prove adequate funding for the carrying out of the steps in the plan, but says nothing about funding for measures not included in the plan that may prove to be necessary to secure the species survival or recovery. For example, where a plan just prohibits a landowner from draining or contaminating a wetland on his land that provides habitat to an endangered bird population, Section 10 on it face would not seem to require that the landowner reserve funds to finance the replenishment of the wetland or creation of substitute wetlands in the event it dries up during an extended heat wave or drought.

Section 10, indeed, says almost nothing about what happens *after* the plan is approved. There is no cap on the length of the permit, and no

[7] 16 U.S.C. Sec 1539, (a) 2 (B) (2009).

requirement of periodic reviews by the Secretary as to compliance with a plan or, perhaps even more important, as to the actual condition of the species population (regardless of whether there is plan compliance). The Act provides only that "The Secretary shall revoke a permit issued under this paragraph if he finds that the permittee is not complying with the terms and conditions of the permit."[8] That provision does not, in itself, require the Secretary to take measures to find out if there is compliance, or to find out whether compliance has proved insufficient to assure species survival and recovery.

Section 10 and the entire concept of incidental permits and habitat conservation plans had little practical impact prior to the Clinton Administration: Only a dozen or so HCPs were approved in the first decade after Section 10's enactment in 1982. And almost all of these involved relatively small parcels of land, and had a single-species focus. Then, during the Clinton Administration, Secretary of Interior Babbitt made HCPs a centerpiece of species conservation. Approximately 300 HCPS had been approved by the end of 2000, including a number of large-scale HCPs encompassing vast areas of land. HCP activity continued during the Bush Administration, such that more than 200 additional HCPs had received approval by the end of 2007.[9] It does appear, however, that there were fewer proposals for ambitious HCPs during the Bush Administration, and less attention in policymaking and academic circles to HCPs and their merits. HCPs have not been a "hot topic" in recent years.

[8] 16 U.S.C. Sec 1539 (a) (2) (C)(2009).
[9] Alejandro E. Camacho, "Can Regulation Evolve? Lessons from a Study in Maladaptive Regulation," UCLA Law Review 55 (2007): 308.

This may change: We may be at a moment of renewed attention to the HCPs process and HCP outcomes, and perhaps fundamental HCP reform. The HCP program is an example of what I have elsewhere called "contractarian regulation" -- regulation in which the government and an entity that would otherwise be subject to command-and-control regulation contract into an alternative regulatory arrangement that allows the entity to avoid some formal requirements while allowing the government to require actions on the part of the entity that go beyond the scope of current formal legal mandates. In contractarian regimes, the private actors are willing to enter into "voluntary" contract-like arrangements and take on binding commitments thereby because the threat of the imposition of command-and-control regulation is real enough that it is worthwhile to contract out of that threat.[10] To the extent that "the Services" (the Fish and Wildlife Service of the DOI and NOAA, at the Department of Commerce) under the Obama administration credibly can communicate a greater willingness to consider Section 9 enforcement actions than they could under the Bush Administration (which is plausible), landowners may well be more willing to engage in the HCP process than they have previously been. From the perspective of environmental groups and concerned policymakers and citizens, moreover, renewed attention to HCPs also makes sense because the general limitations in achieving preservation via Section Nine and other provisions of the ESA remain (e.g., lack of information about private land, formal limitation of regulatory authority to habitat of listed species only), and, with climate change and continuing urbanization, the threats of species extinction are greater than they ever have been.

[10] David A. Dana, "The New 'Contractarian' Paradigm in Environmental Regulation," *University of Illinois Law Review* 2000 (2000): 35-58.

This Chapter provides a framework for HCP reform. The Chapter first briefly reviews the history of HCP regulations and guidance, and what we know about HCPs in practice (which is limited). It offers a range of reforms to address problems in the current HCP approach, including requirements that the Services assemble a better database regarding current HCPs and report to Congress on the program periodically; greater reliance on programmatic regulations adopted after notice and comment; development of guidelines for assessing the likely or possible environmental impacts of HCPs upfront, at the time an HCP is proposed, and the development of separate rules, processes and requirements for HCPs depending on the possible range of impacts; enhancing citizen enforcement of at least high-impact HCPs by means of explicit authorization of citizen suits to enforce HCPs, reliance on scientific advisory board (SAB) review to address the scientific legitimacy objection with respect to high-impact HCPs; development of public-private insurance to address the long-term uncertainty posed by high-impact HCPs; and development of rules and plans for greater reliance on conservation banks to address the long-term uncertainty posed by smaller-scale, lower-impact HCPs.

The last two reforms would probably be the most controversial but perhaps the most important. There is extraordinary uncertainty as to whether HCPs will really work in stabilizing species populations let alone achieving recovery, and that uncertainty is not simply an artifact of flaws in how particular HCPs may have been put together to date. We really know surprisingly little about how particular species populations in particular settings will fare under different circumstances; and even when we know a

great deal, achieving species conservation and recovery can be daunting. The federal government has spent billions on salmon recovery, and the very limited success so far may soon be undone by climate change.[11]Uncertainties abound not just as to how species populations will fare but as to our understanding in the future of the importance of a given species for different ecosystems. There are limits to how much any program can deal with this long-term uncertainty but so far, the HCP program has basically just ignored it.[12]

HCP Programs: A Brief History of Administrative Regulations and Guidance

It is unclear whether, in 1982, when Section 10 was enacted, Congress intended Section 10 to be the means by which the ESA would be effectively transformed. On the one hand, the House Conference Committee Report for the Amendments does suggest that the HCP process will "measurably reduce conflicts . . . and will provide the institutional framework to permit cooperation between the public and private sectors in the interest of endangered species and habitat conservation" and directs the Secretary of the Interior to "encourage creative partnerships between the public and private

[11] See, e.g., Rocky Barker, "Efforts to save salmon may be undone by climate change," *Miami Herald*, May 12, 2009, www.miamiherald.com/news/environment/story/1044060.html; see also Matthew Daly, "Feds Seek Delay in Developing NW Salmon Plan," *AP*, May 1, 2009, available at http://www.wildsalmon.org. (describing ongoing controversy over federal recovery plan).

[12] The problem of uncertainty is as applicable to species on federal land as it is to species on non-federal, private land, but at least to date, no one has claimed that the federal government is ever relieved under the terms of the Act from responding to uncertainty with new protective measures on federal land, whereas the HCP program, as implemented, appears in some cases (via the No Surprises Rule) to have provided just such an assurance to private landowners.

sectors and among governmental agencies . . . . "[13] On the other hand, the legislative history re-affirms that HCPs are not intended to weaken the (very strong) mandates of the ESA, and the language of Section 10 itself does not codify a new or expanded vision for the ESA. The modest experience with HCPs in the ten or so years after the adoption of the 1982 amendments, moreover, tends to underscore how modest these amendments on their face appear to be.

Beginning in 1994, however, Secretary Babbitt undertook a remarkable transformation of the HCP program that had as its apparent mission transforming the ESA itself from a single-listed-species management tool to a multi-species, ecosystem management tool that would encompass species and species clusters that had not yet diminished to the point of qualifying as endangered or that possibly had in fact diminished that much, but had not made it onto the government's list, for whatever reason. Secretary Babbitt's approach reflected a consensus that had emerged regarding species preservation, a consensus that the singular focus of the ESA on a single species at a time -- and then only on a single species once it was on the verge of extinction and had been listed after an arduous and often litigation-intensive process -- was untenable, from a biological point of view, from an economic point of view, and ultimately from a political point of view. According to Secretary Babbitt, the ESA's "train wreck" approach to ecological interventions was akin to a transportation safety regime that only came into play moments before two speeding trains were about to collide (the two trains being a species on the brink and human economic

[13] H.R. Conf. Rep. No. 97-835, at 31 (1982).

development at odds with preservation of the remnant population of that species).

In the new consensus, earlier was better in terms of intervention, and broader was better, in terms of the number of species and natural conditions that garnered attention. In the new consensus, too, isolated animal populations on tiny fragments of land were unsustainable and hence undesirable. What was needed, according to the new consensus, were large tracts of habitat or, where that was impossible, smaller areas connected by protected habitat corridors.

Under Secretary Babbitt, the Department of Interior (DOI) openly seized upon the Section 10 permitting process and the HCP program to address some of the perceived flaws in the basic approach of the ESA as written by Congress. In particular, the DOI promoted multi-species HCPs that sometimes included the dedication of land for habitat corridors; some species included in plans were not yet listed. Further, the DOI focused on providing incentives for landowners to take actions where there were as of yet no listed species at all on the private land. In these arrangements, landowners would receive protection against any future regulatory interventions in return for their efforts to enrich habitat for species that were not yet listed or to create habitat that would be suitable for new populations of listed species.

As the HCP program developed in its ambitions, the cost of preparing and complying with an HCP was one of landowners' more significant concerns, but the uncertainties of future regulatory treatment and regulatory

burdens were an even bigger one. The DOI acted forcefully to address the uncertainty-of-future-regulatory-treatment concern, giving rise to a "No Surprises" Rule controversy that has not yet abated.

In 1994, the DOI announced and then adopted the so-called No Surprises Rule, without any meaningful opportunity for public comment. The Rule has been subject to a series of legal challenges, which later compelled DOI to accept public comments and codify the Rule in regulations (it is also part of the HCP handbook). But throughout the protracted, multi-part litigation, the substance of the Rule has remained the same.[14] Nonetheless, genuine questions can be raised as to whether the courts should have permitted the No Surprises Rule to stand, and whether the questionable legal legitimacy of the No Surprises Rule has undermined the legitimacy of the HCP program to date. The plain text of the ESA does not seem to authorize the Secretary of Interior to promise no surprises, no matter what, as the No Surprises Rule does. Moreover, as a matter of basic democratic theory, it is arguably troubling for regulators at any given point in time to promise, in what purports to be a contractually binding way, that the same regulatory treatment will be afforded ten or twenty or even fifty years hence.[15]

Under the Rule, landowners who participate in an HCP receive a guarantee that even if the plan fails to result in the survival (let alone

[14] For a good discussion of the history of the No Surprises Rule, see Karin P. Sheldon, "Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act," *NYU Environmental Law Journal* 6 (1998): 279.

[15] See generally David A. Dana & Susan P. Koniak, "Bargaining in the Shadow of Democracy," *University of Pennsylvania Law Review* 148 (1999): 473.

recovery) of a species population on the affected land, the landowners will not be asked to do more except "under extraordinary circumstances" and even then, what the landowners can be asked to do is quite limited and any costs must be born by the government. Under the Rule, the government cannot ask for the dedication of new land or other conservation measures of a sort not already provided for in the plan even upon a showing of extraordinary circumstances. Only if the government can show extraordinary circumstances can it ask for modifications on land already dedicated for conservation, and, even then, the government must pay for such modifications. Moreover, the protections for landowners apply to both listed and non-listed species that are included in the habitat conservation plan. And compliance with the plan -- and hence receipt of No Surprises protection -- is presumed on the part of the holder of a valid incidental take permit under Section 10. Finally, the DOI maintained that there is no maximum time limit on HCPs -- and indeed, HCPs have been approved that last decades -- and also no time limit on the No Surprises guarantee.

The No Surprises Rule is a helpful prism through which to understand key areas of controversy about HCPs: the controversy over the scientific grounding for HCPs, over the inclusion (or not) of biological goals, metrics and adaptive management as part of the plans themselves, and the quality or (or lack thereof) of monitoring for and reporting on compliance. Given the No Surprises guarantee, it seems especially important that HCPs be based on good data collection and best scientific understandings, as it will be costly or impossible for the government to force a departure from the plan. Yet there is significant evidence that some HCPs, including ones with potentially great environmental consequences, have been based on little or inadequate

gathering and assessment of biological data. Second, given that No Surprises means in effect no new measures outside the plan, it would seem very important that the plan itself build in measures that take into account possible changes in conditions and uncertainties, such as plan requirements of meeting biological goals and undertaking adaptive management. Yet clear biological goals and metrics for meeting the goals and meaningful adaptive management requirements appear to be the exception rather than the rule in HCPs, even major HCPs, or at best, the empirical evidence on these points is incomplete. Finally, if compliance with the plan is to a large degree all the government can ever demand and compliance is presumed, it would seem key that landowners be required to engage in close monitoring and report the results in a way that would allow enforcement actions to be taken despite the presumption of compliance. But monitoring of compliance of HCPs, despite the fact that HCPs do all contain monitoring requirements, appears to be highly inconsistent.[16] Enforcement by means of citizen suits (or the threat of such suits) is undermined by the facts that HCP agreements generally have not identified citizens or citizen groups as third-party beneficiaries of the agreements and hence it is doubtful whether citizen groups have standing to sue to enforce the terms of an HCP and to

[16] See Camacho, supra note 9, at 323 (explaining that the "program's monitoring and adaptation requirements have provided applicants and the Services considerable flexibility and incentives to ignore monitoring and evade adaptation"). The most comprehensive study to date, a study conducted by the American Institute of Biological Sciences and the National Center for Ecological Analysis and Synthesis based on a sample of 43 HCPs, found that only 22 of the 43 plans reviewed had a clear monitoring program and that monitoring of HCPs is generally inadequate. See http://www.fws.gov/Endangered/hcp/response.htm (describing the study and the Fish and Wildlife Service's comments on it).

implement agreements entered into by the federal government and the landowner.[17]

Criticisms of HCPs in the wake of the No Surprises Rule crystallized around a 1998 report from Defenders of Wildlife, the title of which, *Frayed Safety Nets*, summarizes its central thesis regarding the reliability of HCPs in ensuring species protection.[18] In 1999, the DOI reportedly expressed a willingness to reform the HCP program to address concerns that had been raised by these studies and other reports of problematic HCPs.

At the very end of the Clinton Administration, the DOI did adopt some very general, informal "guidelines" that addressed some of the concerns raised by environmentalists. These guidelines were never adopted as formal agency regulations (although they were added as an as an addendum to the Department's HCP handbook after receipt of public comment[19]). Moreover, the guidelines are vague and aspirational, not prescriptive: the guidelines emphasize the importance of including in plans biological goals, adaptive management mechanisms, monitoring mechanisms, and public participation provisions, but do not commit the agency to include any particular kinds of provisions or measures in all or

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[17] In addition, the citizen suit provision of the Act itself refers to citizen suits for violations of "any provision of [the Act] or regulation issued under the authority thereof," 16 U.S.C Sec 1540(g)(2009), and it is unclear whether a provision in an HCP implementing agreement is a requirement within the meaning of Section 11.

[18] See Laura C. Hood, "Frayed Safety Nets: Conservation Planning Under the Endangered Species Act" (1998), available at www.defenders.org/. Reaching similar conclusions, a study in the *American Scientist* found HCPs, overall, to be woefully lacking in scientific grounding. See Laura Watchman et al, "Science and Uncertainty in Habitat Conservation Planning," *American Scientist* 89 (2001): 351 - [ ].

[19] See http://www.fws.gov/endangered/pdfs/HCP/final_notice.pdf.

some categories of HCPs. Similarly, the guidelines acknowledge concerns about the long duration of some HCPs, but do not commit the agency to any particular duration limit for all HCPs or any categories of HCPs.

Moreover, we have absolutely no way of knowing whether the DOI has changed any of its practices with regard to new or existing HCPs since 2000. Congress has not required reporting to it on the HCP program, and no reports have been forthcoming. Private NGOs and academics have not filled the void. Perhaps one reason this is so is that DOI has not facilitated public or NGO assessments by making what data it does have readily available: there is no good, easy, accessible source on the specifics of each HCP, including the specifics of any HCP amendments or any data on how ~~the~~ well or not well the plan is working. The only centralized database for HCPs, the DOI's Environmental Conservation Online site, [20] is inadequate. It includes many approved HCPs, but for each HCP, only the barest bones information -- the name, the date of approval, the duration, and at best a few words of description -- is provided. There is no way to discern the actual contents of any HCP, including the biological bases and goals of the HCP (to the extent there are any clearly stated in the plans) and the required conservation measures. Nor is there any way to discern how HCPs within a single region geographically and ecologically relate to one another.

Is Stakeholder Participation The Answer?

[20] See U.S. Fish and Wildlife Service, Conservation Plans and Agreements Database, http://ecos.fws.gov/conserv_plans/public.jsp.

Some commentators seem to suggest that the lack of mandatory, sustained public participation in HCPs is the primary problem with them.[21] They argue that HCPs should move from a bilateral negotiation model to a multilateral consensus or collaboration model. Absent such participation, the argument goes, it is simply too easy for agency officials to be, if not captured, unduly influenced by, and too easy on, landowners. And collaboration will produce useful information and insights that otherwise would have been ignored.

More public participation would be valuable on the level of individual HCPs, and perhaps there should be statutory and regulatory requirements for enhanced public participation. (I ~~think~~ make one suggestion along these lines, below.) But the emphasis on public participation as *the* key reform is mistaken for several reasons. First, who constitutes the "public" and legitimate public representatives is extremely contested. If environmental NGOs are part of the public, is the local chamber of commerce as well? Even as among NGOs, there are often a range of viewpoints and concerns, so that it is impossible to equate any single, given NGO with the "environmentalist" point of view or certainly with "the public interest."

Second, any inclusion of a broad range of "stakeholders" in land use outcomes may make agreement extremely difficult to achieve or at least too costly to achieve for landowners to tolerate, and inclusion without agreement

[21] See, e.g.,Holly Doremus, "Preserving Citizen Participation in the Era of Reinvention: the Endangered Species Act Example," *Ecology Law Quarterly* 25 (1999): 707-717; Anne B. Hulick, "Habitat Conservation Plans: Protecting Species, Enhancing Democratic Legitimacy and Promoting Stewardship Are Not Mutually Exclusive Goals," *UCLA Environmental Law and Policy* 25 (2006): 441-471.

or consensus may add nothing but delay and hard feelings. As Brad Karkkainen has observed, it is "highly unrealistic" to assume that we can put a group of "stakeholders" in a room and have them reach a win-win solution "insofar as it assumes that a Pareto-superior solution will be available for every problem."[22] Moreover, even when intensive public participation in fact would not lead to breakdowns in plan development and long delays, it will be hard for landowners to feel assured, *ex ante*, that that will not be the case, and as a result of the uncertainty, they may avoid participating in the HCP process.

Third, in some cases there will not be strong local stakeholders who want to and are equipped to engage in meaningful public participation. Some proposed HCPs will be in parts of the country with relatively weak local NGOS and upon which national NGOs have not focused; NGOs also may not be available or willing or able to commit to sustained participation with regard to the many proposed HCPs in the future that may involve very small land areas or arcane technical issues or decidedly non-charismatic fauna. Indeed, it may be that reforms in the HCP process are most critical for the category of HCPs that involve beneath-the-NGO/public-radar locations and natural resources. Even where there is a great deal of NGO interest, moreover, the NGOs that are involved may lack the sophistication and resources to provide key technical and scientific information and argue on the basis of such information or to effectively explain why more scientific information and analysis are required. And even when a NGO can produce such information, the information may be tainted by the perception

[22] Bradley C. Karkkainen, "Collaborative Ecosystem Governance: Scale, Complexity, and Dynamism," *Virginia Environmental Law Journal* 21 (2002): 239.

that the NGO is biased against any economic development or resource extraction.

The problem with looking to public participation as the *key* reform is illustrated by imagining what I am supposing (but certainly cannot prove) is a reasonably typical HCP negotiation scenario: the agency officials want to pragmatically but aggressively pursue conservation aims through an HCP but they also need to obtain the landowner(s) consent and the landowners are driving a hard bargain. In such a scenario, sustained public participation could be helpful in generating information regulators could use and in giving regulators some support as they seek concessions from the landowners. But other things would be helpful too, and perhaps much more helpful, namely: Congressional or agency regulatory requirements that make certain kinds of provisions mandatory and hence something the regulators can explain absolutely must be included in the plan, and proposed plan review by scientific experts who have the training public participants may well lack and whose analysis landowners cannot dismiss as biased, unlike the analysis of public participants that landowners can label (and genuinely may perceive as) nothing more than NIMBY-ists or environmental extremists.

What Congress Can and Should Do

One essential category of Congressional reforms of the HCP program would be information-forcing. The first thing Congress can do is amend Section 10 to require the Services to collect and make public a complete database on HCPs. Congress, too, should require the Services to report to Congress on a periodic basis on both the provisions of individual HCPs and

the performance or results of HCPs. By requiring performance reporting, Congress would incentivize the agency to pay more attention to monitoring and reporting by permitees, and to demand data in support of permittee reports. Government agencies such as DOI's Fish and Wildlife Service invariably have more tasks than their resources allow them to pursue, and given that, they have a natural tendency not to prioritize efforts and investigations that could show that plans they approved have caused environmental damage without producing offsetting or indeed any environmental benefits. No organization seeks out criticism. That is why a statutory mandate to report to Congress periodically on HCP performance is needed. Reports to Congress also could result in more effective participation by NGOs in ongoing debates over substantive reforms in the HCP program.

Congress should also codify specific biological data gathering requirements as part of HCPs proposals, more specific monitoring requirements for HCPs, requirements of biological goals and metrics for goals to be included in HCPs, and requirements for adaptive management mechanisms in HCPs. Such requirements might be too expensive to be sensible for all HCPS, so Congress should also direct the DOI to develop regulations for categorizing HCP proposals upfront according to possible environmental impacts, and to develop different tiers or grades of goal-setting and adaptive management depending on the impact categorization.

The mandatory tiering of HCP proposals by likely or possible environmental impact would be a substantial and important reform in and of itself. The DOI has established some special processes for very small-scale,

very-low-impact HCPs but otherwise has formally applied the same requirements to massive regional HCPs and ones that affect a relatively few parcels of land. The one-size-fits-all approach does not track the real heterogeneity of the subject matter of HCPs. Moreover, by mandating upfront tiering based on possible impacts and rooted in actual evidence, a tiering regulation will help ensure that every HCP proposal is formulated around some kind of initial biological survey or data collection -- which should always be the case, but has not necessarily always been so. Finally, as in the NEPA impact review process, it is critical that HCP proposals be assessed based on likely or possible impacts taking into consideration not just the land at issue but also cumulative effects and related effects (such as the precedent the HCP will set for the management of parcels with similar conditions, and interactions between private land and federal land).[23]

Congress should also require that high-impact HCPs include a provision authorizing citizen groups to being a suit against the HCP permittee for substantial, continuing non-compliance with HCP requirements.[24] Citizen suits have been a central part of American environmental law and enforcement, but the ESA does not on its face authorize citizen suits for HCP non-compliance and (as noted above) HCP

[23] On the problem of cumulative effects, see Frayed Safety Nets, supra note 18, at 56-58; on NEPA, see L.W. Canter, "Cumulative Effects and Other Analytic Challenges of NEPA." In: Ray Clark & Larry W. Canter, *Environmental Policy and NEPA* (Florida: St. Lucie Press, 1997), 115-138.

[24] See Donald Bauer & William Robert Irvin, *The Endangered Species Act: law, policy, and perspectives*, (Chicago, Ill. : ABA Section of Environment, Energy, and Resources, 2002) 356 (explaining the legal ambiguity surrounding citizen suit to enforce HCP provisions, and urging the adoption of "[r]egulations requiring that HCPs identify citizens as third-party beneficiaries" in order to "ensure effective enforcement of the ESA.")

plans and implementing agreements have not authorized them. The possibility of a citizen suit is a powerful incentive for compliance, and provides an important back-up for the contingency of regulatory failure due to lack of resources or political pressures. By the same token, however, allowing citizen suits may discourage landowners from participating in the HCP program. That is why citizen suits should be limited to high-impact HCPs (where landowners have the most to gain from the HCP process and compliance is the most important to ensure) and why suits should be limited to substantial non-compliance and why the presumption of compliance under the No Surprises Rule should continue to apply, such that a citizen group would have to have to have some hard evidence of substantial beyond its first court pleading.

Scientific Advisory Board Review

By statute, mandatory review by a scientific advisory board (SAB) should be instituted for approval of a habitat conservation plan, at least for any plan that is categorized as having moderate or high likely or possible impacts, individually or cumulatively. Periodic SAB review (5 or 10 year review) also may be appropriate for a statutory mandate. SAB review would not fully address the concerns of some critics that the HCP process does not contain enough opportunities for public participation and is not "democratic" enough, but it would allow a certain degree of highly valuable participation by independent, non-agency actors and would address the fundamental concern about HCPs that they are sometimes are not well-founded on basic scientific principles and/or data.

SAB members could not plausibly be discounted as NIMBY types or professional environmental activists; at the same time, they would have independence from both the government and landowners/permittees, and hence could be expected to give expression to some of the same concerns that the most sophisticated NGOs would be able to articulate. Moreover, because each SAB member would have a term (perhaps two or five years) and would review multiple HCPs, SAB members could develop an understanding of the HCP program a whole and a working relationship with agency officials. SAB reviewers could not be expected to do substantive scientific studies regarding proposed HCPs but they could raise questions and voice criticisms and ask for clarifications and the filling in of holes in a way that could produce better HCPs, and screen out the most plainly problematic HCP proposals.

SAB review, moreover, could facilitate meaningful public participation, just as could mandatory reports to Congress. SAB reviews of proposals would be made public, including negative or split or qualified reviews, and using those reviews, relevant NGOs and others could press their case against approval of a proposed HCP or for cancellation or revision of approved HCPs. One potentially useful statutory or regulatory mandate would be that the DOI would be required to explain why it was *not* adopting a SAB recommendation as part of its approval of an HCP, and would be required to solicit public comments on this decision not to follow SAB recommendations. Taken as a collective over time, moreover, SAB reviews may provide the public with a more candid picture of the HCP program than (inevitably somewhat self-serving) agency reports.

There are precedents for using SABs in the conservation context. NOAA's fish recovery efforts in the Columbia River basin are reviewed by a standing SAB that also reports to the various Indian Tribes.[25] Moreover, some individual HCPs have utilized scientific advisory boards. A study by Hardin et al suggests that HCPs that were approved after SAB review had a higher degree of scientific quality than those that employed steering committees that were not dominated by scientists. The study concluded that:

One means of ensuring that current scientific information and approaches are used within the HCP process is through the increased use of independent scientists. When scientists, especially experts on the species covered by the plan, were consulted, adequate and even high-quality plans were often developed. . . . At present, scientific input is not required . . . and is often lacking in the conservation planning process, yet it seems both reasonable and feasible to include scientists in the HCP process[26]

Hardin et al do suggest, however, that SAB review may have modest impact overall because in those cases where the HCP proposal itself is deficient in data about the species population on the affected land, there is not much for the SAB to work with. SAB review, however, would be more effective if there were also (as I have proposed) specific, clear requirements for data collection as part of all HCP proposals. With these requirements as a backdrop, a SAB could strongly recommend against acceptance of a

[25] Independent Scientific Advisory Board background, http://www.nwcouncil.org/Fw/isab/background.htm.
[26] Elaine K. Harding et al, "The Scientific Foundations of habitat Conservation Plans: a Quantitative Assessment," *Conservation Biology* 15, no. 2, (2001): 499.

proposal until the required data were collected and, after they were collected, the SAB would what it would need to make an informed assessment.

There are, to be sure, some risks with SAB review. SAB review will add to the expense and delay to the HCP process, which may means that some landowners who might otherwise opt for participation in the HCP process would instead engage in quiet, preemptive destruction of habitat. Making the SAB process efficient, with reasonably quick turnovers during each review phase, is important to mitigate this risk. There is also a risk that SAB review will frame the question of HCP approval as one of science only when we know that normative questions beyond scientific analysis are implicated by HCPs. But attention to what the available science can tell us --and that admittedly is always limited to a some degree -- is a helpful grounding for debate and discussion of these normative questions, and SAB review can help prompt the generation and understanding of the available science.

Public-Private Insurance and Time Limits on HCPs

The No Surprises Rule responds to the plausible belief that landowners will not participate in HCPs if they face the possibility of crushing regulatory costs if approved plans do not secure species survival or recovery or otherwise meet political demands for conservation actions in the future. But the No Surprises Rule goes too far: it creates perverse incentives on the part of landowners and government regulators alike.

For landowners, the No Surprises Rule creates a powerful incentive to exclude from plans biological goals that should be part of plans, because landowners are not financially responsible for any conservation measures that may be required later that are outside or inconsistent with the original plan. The No Surprises approach also creates an incentive on the part of landowners not to invest and not to take actions voluntarily that may go beyond the strict terms of the plan but that my help its succeed in its basic goals, because, at most, landowners can be held responsible only for noncompliance with the plan. Where ongoing compliance with the plan may be hard for regulators to detect, the No Surprises Rule also may incentivize costs savings on the part of landowners in the form of intentional non- or sub-compliance with requirements that are plainly part of the plan.

At the same time, the No Surprises approach creates an incentive on the part of government actors *not* to know about plans that fail and species populations that are at risk. It encourages an ostrich, head-in-the-sand posture. Government agencies like DOI work within annual budgets and those budgets are fully allocated before the fiscal year starts; there is no extra money lying around. To the extent the No Surprises approach puts the full financial responsibility on the federal government for any conservation failures without providing any realistic funding resource for new conservation measures, the approach seems to ask regulators to go out and discover how plans they approved have imperiled species and then declare that there is nothing they can do to rectify the conservation failure. It is not realistic to expect that regulators will want to do that, and even if they did, there still would remain the question of where the money would come from to finance new conservation measures.

What is needed is a tool or institutional device that limits and mitigates the financial risks for both private and public actors while providing some incentive for landowners to take the extra step on their own to prevent failure (where that is possible) and for government regulators to pay attention to cases in which new conservation measures, outside of current plans, really may be justifiable. One such mechanism would be publically-supported but privately-operated insurance. Landowners would pay a premium for conservation-failure insurance, and a private insurer that operated the program would calibrate the annual premium (within a pre-set range, to limit financial uncertainty for landowners) based on the quality of the plan and quality of monitoring reports and the substantive meeting of biological goals. The private market has not and would not develop reasonably affordable insurance on its own given the nature of the risks involved, but private insurers have worked in conjunction with government re-insurance guarantees and underwriting in other contexts, such as in the context of insurance against the risk of nuclear accidents and terrorism.[27] In effect, landowners and the government would make investments toward a pool of insurance proceeds that could fund new conservation measures. Getting premiums rights and ensuring an adequate pool of insurance funds would not be easy, but some efforts in this regard would be an improvement over the No Surprises approach.

[27] See Terrorism Insurance Act of 2002, Pub L No 107-297 (requiring insurers not to exclude terrorism-relate claims and providing for the government to act as an excess insurer of terrorism-relate claims); Price -Anderson Act, 42 USC Sec 2210, as amended by the Energy Policy Act of 2005 (requiring nuclear power provider to carry an insurance and providing for federal payment of insurance claims in excess of the private insurance mandated by the statute)

Finally, DOI, through notice and comment rulemaking, should establish some criteria for time limits on HCPs. There should be some effort to connect levels of long-term uncertainty with time limits and a flat ban on plan lengths such as fifty years (the length of the massive Plum Creek HCP), which are almost certainly longer than an be defended given our current understandings and almost certainly longer than is needed to elicit cooperation from landowners.

Conservation Banking

Smaller-scale, lower-impact HCPs pose special regulatory challenges for several reasons. First, unless cost pooling arrangements can be made, economies of scale and investment values are such that the landowners in such cases will not invest too much in developing or implementing an HCP. They may be unable to afford reasonable plan mitigation/conservation measures, let alone the insurance premiums I have just suggested. And these smaller plans also pose huge enforcement/compliance issues: neither regulators nor NGOs can be expected to pay much attention to them or perhaps even keep track of them, and as a result, the temptations on the part of some landowners to skimp on compliance investments may be very powerful.

One response to the small-scale-plan challenges is to suggest that we have no small-scale HCPs.[28] Another, preferable approach, would be to allow reasonable, smaller-scale HCPs and seek to ensure compliance

[28] See Doremus, supra note 21 at 716 (suggesting that "Congress should give serious thoughts to limiting the HCP process to regional or area-wide plans").

through selective auditing, while also openly recognizing that the uncertainties of achieving biological goals through these sorts of plans can only be limited to a point through formal monitoring requirements. To offset the biological "slippage" inherent in small scale plans, DOI could require landowners with such plans to make one-time financial contributions to a conservation mitigation bank, preferably in the same region and preferable containing similar mixes of species.

A conservation mitigation bank typically has been and would be a large land holding managed for conservation purposes. Because such bank holdings are large and largely if not necessarily exclusively dedicated to conservation, they are an ideal site for the application of adaptive management techniques and relatively easy for regulators to oversee. As Ruhl et al explain, "[c]onservation banks, in comparison to the piecemeal approach [to species mitigation], generally can be expected to result in larger preserves and thus better habitat connectivity."[29] Conservation banks, in effect, can serve as insurance for failure or lack of conservation achievement in smaller scale HCPs.

There is a limited track record for conservation banks to date, however, and many theoretical objections to their use. Like wetland mitigation banking, but even more so, conservation banking raises difficult questions of locality and incommensurability: one pair of endangered birds in one location is not, ecologically or in terms of benefits to the surrounding human community, necessarily the same as another pair hundreds of miles

[29] J.B. Ruhl et al, "A Practical Guide to Habitat Conservation Banking Law and Policy," *Natural Resources & Environment* 20 (Summer 2005): 28.

away. Nor is conservation banking free from the objection that the conservation they afford might have happened anyway because they invariably involve preservation of habitat rather than creation of it and they may be located in areas with low-development demand or where there are already other development restrictions. Assessing how many credits should be required and how much they should costs as a component of any given HCPs also may prove difficult.

The DOI has approved specific conservation banks, but there has been no attempt to develop regulatory criteria for judging bank success or efforts to measure and report on success or lack of it. There is not even an official, complete database of approved banks. As to the question of how and when conservation banking should be used as part of HCPs, there have been no notice-and-comment regulations, and the guidance documents that have been issued are incomplete and somewhat confusing, at least according to some critics. To the extent the guidance suggest anything it suggests a restrictive attitude toward the use of conservation banks.[30] Adopting rules after notice and comment that clarify criteria for banks and the use of conservation banking in HCPs would help make conservation banking a helpful insurance policy element for small scale HCPs. Conservation banking can be part of the response to the long-term uncertainty problem posed by some kinds of HCPs.

[30] For a good overview of policies and data regarding conservation banks by two DOI officials, see Edward Mailett & Benjamin Simon, Discussion Paper: Characteristics of Federal Conservation Banks (Sept. 2007), available at [http://docs.google.com/gview?a=v&q=cache:dzlEN-pX4wIJ:www.fws.gov/economics/Discussion%2520Papers/Discussion%2520Paper%2520_%2520%2520Conservation%2520Banks.pdf+Characteristics+of+Federal+Conservation+Banks&hl=en&gl=us].

CONCLUSION

The HCP program is a major way that conservation on private land has been achieved in the United States, including conservation that moves beyond the limited approach of the ESA in focusing only upon trainwreck instances where a species is on the brink of extinction. We do not how well or not HCPs are working but we can find out, with some straightforward reforms, such as a mandated public database, and we can ensure that future HCPs are produced with scientific review and include key components such as biological goals and adaptive management. We can also address the excessive inattention to long-term uncertainty in the HCP program through insurance mandates and conservation banking.

To a very substantial extent these reforms must in the first instance be legislative, not regulatory. The statutory basis of the HCP program as it is now is quite modest, and for a reformed HCP program to avoid the legal legitimacy questions that now surround the HCP program, it needs Congressional authorization. Moreover, because some of the reforms proposed would force agencies to do what as a natural matter they do not want to do (e.g., engage on non-discretionary reporting to report to Congress) and would require new government funding (e.g.,the public funding for public-private conservation-failure insurance), one cannot expect the agencies to act without Congressional action first. Moreover, the HCP program and the proposed reforms raise fundamental normative questions that deserve public debate and deliberation and, while notice and comment rulemaking can be an important site of such debate and deliberation, Congress, as a national elected body, is the better suited for debate and

deliberation (for all Congress' flaws). Much of the hard work of HCP reform will be done via agency rulemaking and other initiatives, but we need Congress to take on the project of HCP reform.