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Via Email

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RE: Recommendations on draft permitting guidelines for the eastern indigo snake under the Revised Florida Section 6 Cooperative Agreement

Dear Mr. Jennings:

Defenders of Wildlife understands that the U.S. Fish and Wildlife Service (Service) and the Florida Fish and Wildlife Commission (Commission) are considering permitting guidelines for the eastern indigo snake (*Drymarchon couperi*) under the revised Florida Section 6 Cooperative Agreement finalized in May 2012. We have spoken extensively with both agencies about the draft guidelines and submit these recommendations on conservation measures to incorporate into the document. We recognize that the public comment period on the guidelines is at least four months away, but write at this early stage to help the agencies ensure that the document sets high standards for conserving the eastern indigo snake or any other species that may be chosen as the first test case.

I. Defenders' position on the cooperative agreement

In 2011, Defenders worked extensively with the Service and the Commission to improve the draft cooperative agreement, especially the provisions on conservation measures and transparency of permitting decisions. We cautiously supported this initiative as a pilot project for enhancing species recovery, engaging states as conservation partners, and promoting efficient implementation of the Endangered Species Act (ESA). We were pleased to see that under the final agreement, any permits issued "must include impact avoidance, minimization, and mitigation measures in a manner consistent with the conservation (i.e., recovery) of the species,"

"the permit must have a scientific or net conservation benefit," and "the permitted activity must have no net negative impact on survival and recovery of the species in the wild."[1] Because the agreement falls short of defining these concepts, however, our ultimate endorsement of this tool will depend on how the agencies implement the permitting guidelines.

Both agencies have created high expectations for the permitting guidelines, partly in response to skepticism among some conservationists about the legality and implementation of the cooperative agreement. In a Tampa Bay Times op-ed, the Commission's executive director, Nick Wiley, and the Service's Southeast regional director, Cindy Dohner, emphasized that "the agreement will allow both agencies to concentrate our resources on what matters most: conserving Florida's unique fish and wildlife for the continuing benefit of Floridians from the Panhandle to the Keys."[2] The directors promised "a suite of measures to avoid and minimize impacts to the species" and noted that a "majority of [public] comments [on the draft agreement] supported a more efficient process for permit issuance that would neither compromise the stringency of rules already in place, nor hamper the recovery and conservation of imperiled species." In finalizing the cooperative agreement, the Service further stated that the conservation benefits under the cooperative agreement would be "greater" than those under the ESA and that the "Commission would be able to ensure long-term conservation commitments through the use of conservation easements pursuant to Fla. Stat. §704.06, when appropriate."[3]

Given these promises, we expect the permitting guidelines to elaborate on how the agencies will ensure "no net negative impact" and generate a "net conservation benefit." The guidelines must contain more than just generic statements about these standards; they must set clear and robust conservation requirements tailored to the unique circumstances of the eastern indigo. Specificity of this sort will allow the public, including the conservation community, to assess whether this experiment in incidental take authorization truly acts as a tool to enhance species recovery. Specificity is also needed to ensure that the guidelines are consistent with the administrative record for the cooperative agreement. Based on preliminary conversations with Service and Commission staff assigned to this project, however, we have concerns that the current approach for developing the eastern indigo guidelines falls short of both agencies' promises on the cooperative agreement. What follows are thoughts and recommendations for improving those guidelines and delivering on those promises.

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[1] Cooperative Agreement between the United States Department of the Interior Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission for the Conservation of Endangered and Threatened Fish and Wildlife (May 14, 2012), 6-7.

[2] Nick Wiley and Cindy Dohner, *Joining forces to protect Florida fish, wildlife*, Tampa Bay Times (April 11, 2013).

[3] Letter from Cynthia K. Dohner to Jamie Rappaport Clark re: Draft Florida Cooperative Agreement (Nov. 9, 2011) ("Is the Service intending to require that the state permitting requirements provide conservation benefits to the affected species that are equal to or greater than those required under the ESA? Response: Greater.").

II. Implications of choosing the eastern indigo snake

We understand that the agencies chose the eastern indigo snake as the first test case largely because of the anticipated permitting workload for the species and its frequent co-occurrence with gopher tortoises, for which the Commission has many years of permitting experience under state law. Nonetheless, we were surprised by the selection of a species with a 32 year-old recovery plan, which the Service acknowledges requires updating, and without proposed or final recovery criteria.[4] The current plan hardly sets the foundation for the Service to fulfill the requirement that "the permitting guidelines for a species will be developed within the context of recovery plans or similar landscape level conservation plans that are designed to provide for the survival and long term viability and recovery of the species."[5] Our concern would be alleviated if the Service was to revise the recovery plan before issuing proposed permitting guidelines, but we understand this will not happen. With no clear path to recovery, it will be especially challenging to set permitting standards that are "consistent with the conservation (i.e., recovery) of the species" and that will "have no net negative impact on survival and recovery." For example, the Service has not identified priority habitats for recovery, making it difficult to determine which areas can be disturbed without impeding recovery. Also unknown are the "viability of existing populations" and "population trend data," making it difficult to determine baseline conditions for evaluating net benefit.[6]

Given these significant data gaps, both agencies should adopt a highly precautionary approach to incidental take permitting under the permitting guidelines for the eastern indigo, if it selects this species. A precautionary approach is consistent with the Service's Section 7 Handbook, which instructs the agency to "provide the benefit of the doubt to the species if important scientific data are lacking" or "if the nature of the effects cannot be determined."[7] A non-precautionary approach might result in the Service authorizing habitat disturbance in areas that it later determines are needed for recovery. Alternatively, those areas might be dismissed in recovery planning specifically because they have been degraded by permitted activities under the cooperative agreement. In that unfortunate scenario, the cooperative agreement dictates the scope of recovery, rather than the reverse. Until the Service revises the recovery plan and finalizes recovery criteria, a precautionary approach that focuses on avoidance of all potentially important areas for recovery is needed to ensure "no net negative impact" to recovery.

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[4] U.S. Fish & Wildlife Service, Five-Year Review: Summary and Evaluation for Eastern Indigo Snake (*Drymarchon couperi*) (April 2008) (hereafter "Five-Year Review").
[5] U.S. Fish & Wildlife Service, Intra-Service Biological Opinion: Amended Florida Section 6 Agreement (Dec. 30, 2011).
[6] Five-Year Review at 4. U.S. Fish & Wildlife Service, Multi-Species Recovery Plan for South Florida, 4-573 (May 18, 1999).
[7] U.S. Fish & Wildlife Service and National Marine Fisheries Service, Endangered Species Consultation Handbook, E-2 (March 1998).

III. Conservation standards

The final cooperative agreement is vague on the exact level of conservation required of permittees. At a minimum, permittees must have "no net negative impact on survival and recovery." The agreement, however, also commits to improving a species' status by requiring all permits to create a "scientific or net conservation benefit." Put simply, the situation must improve, not just remain the same. For clarity, the permitting guidelines should focus on "net conservation benefit" because it subsumes "no net negative impact."

It is imperative for both agencies to provide a clear and robust definition of "net conservation benefit." The definition should go beyond minor improvements to the status quo, which would not guarantee the complete offset of adverse impacts. If the status quo would result in a 20 percent loss of abundance, a slight improvement could mean a 10 percent loss. A loss still occurs and the species is made worse off, possibly jeopardizing recovery.

We recommend the agencies consider adopting the following definition of net conservation benefit: the long-term benefits to the species resulting from a permitted activity must (1) more than offset the adverse impacts to the species resulting from that activity and (2) be consistent with the recovery of the species. The Service should evaluate beneficial and adverse impacts using the same biological metric, and ensure that the metric informs the Service about the status of the species, rather than only its habitat. For example, assume a permitted activity results in the loss of 100 adult snakes in suboptimal habitat, which diminishes the population growth rate by four percent. The mitigation for that impact should (1) increase the growth rate by more than four percent and (2) be sited in an area deemed important to recovering the species. The first measure provides the Service with a numeric "apples to apples" comparison of losses to gains. The second measure ensures that those gains are directed in a manner that directly furthers recovery goals for the species. We do not believe that simply counting acres of habitat lost and gained is adequate, unless the Service has a method to describe the relationship between changes in acres and impacts to populations. Our concern is heightened because unlike with some other listed species, the Service has not finalized a metric to classify eastern indigo habitat by quality or likelihood of occupancy. It thus becomes difficult for the Service, the Commission, and the public to evaluate how habitat loss impacts demographic factors or recovery prospects.

We recognize that our proposed definition of net conservation benefit might be challenging to apply to data-poor species like the eastern indigo. For example, establishing a causal link between habitat and population-level impacts for the snake is difficult because of limited life history and occurrence data. Mitigation siting decisions are also complicated by the absence of identified priority habitats for recovery. But these reasons should not dissuade the agencies from adopting a meaningful definition of net conservation benefit. They should instead encourage the agency to prioritize research, monitoring, and recovery plan revisions, so that enough data become available in the near future to empirically demonstrate a net benefit. This is

possible only if the Service adopts a meaningful definition at the outset.

IV. The importance of requiring impact avoidance

In our discussions with your agencies about the eastern indigo permitting guidelines, we were deeply concerned by suggestions that the guidelines would focus on minimization and mitigation, with little or no role for avoidance. There are several problems with devaluing avoidance. First, the five-year review and species spotlight plan for the eastern indigo are clear that habitat loss is the primary threat to this wide ranging species. Yet according to the Service's environmental assessment for the draft cooperative agreement, the agency authorized incidental take of 13,374 acres of eastern indigo habitat from 2006 to 2010 alone, the equivalent of 10,114 football fields.[8] Given that residential development in Florida is projected to be more extensive in the next five years than in 2006 to 2010, the importance of strong avoidance requirements cannot be overstated.[9] Further, the Service has not dismissed any populations for recovery purposes, so significant levels of additional habitat loss are likely inconsistent with the species' recovery. For these reasons, avoidance must be the primary conservation tool under the permitting guidelines.

Avoidance is also important to preserving enough intact habitat to support viable populations. The 1982 recovery plan estimated that at least 4,000 hectares (9,884 acres) are needed to sustain one viable population of the species, and Moler (1992) estimated that habitat of at least 2,500 acres is needed to provide conservation benefits for the species. "Adult eastern indigo snakes have very large activity ranges; most estimates of home range vary from several hundred to several thousand acres (hectares) and indigos can move considerable distances."[10] Cumulatively, the 13,374 acres of incidental take from 2006 to 2010 exceed the acreage needed to sustain an entire viable population of eastern indigos.

Mitigation alone does not appear adequate to create these large expanses of suitable habitat because there is extremely limited evidence of its biological effectiveness for the eastern indigo. Despite at least 19 habitat conservation plans (HCPs) covering the species, totaling well over 50,000 acres of enrolled areas, we have found practically no documentation of effective mitigation for the species.[11] Without this evidence, mitigation should not displace avoidance as

[8] Environmental Assessment for Endangered Species Act Section 6 Cooperative Agreement between Florida Fish and Wildlife Conservation Commission and U.S. Fish and Wildlife Service (June 2011), 15.
[9] Smith S.K. and Rayer S., Projections of Florida Population by County, 2015–2040, with Estimates for 2012, University of Florida Bureau of Economic and Business Research, Vo. 46:165 (March 2013), available at: http://www.colliergov.net/modules/showdocument.aspx?documentid=48765
[10] Five-Year Review at 14.
[11] See list of all habitat conservation plans for the eastern indigo snake, available at http://ecos.fws.gov/speciesProfile/profile/displayAllDocuments!hcp.action?spcode=C026. Management Systems International, An Independent Evaluation of the U.S. Fish & Wildlife Service's Habitat Conservation Plan Program (Sept. 2009) (noting in a review of the HCP program that "performance data are not tracked and individual HCP

the primary tool for conserving the species under the cooperative agreement. In determining the appropriate balance of avoidance, minimization, and mitigation needed to achieve a net conservation benefit, the Service should allow avoidance to play the primary role in ensuring that the species is not inadvertently made worse off as a result of a permitted activity, and mitigation to ensure that the species is made better off. Put another way, avoidance serves as the backstop, while compensatory mitigation moves the needle forward, such that a net conservation benefit is achieved.

Some within the Service may believe that avoidance should be optional under the cooperative agreement because the Service cannot require avoidance under a habitat conservation plan. We emphatically disagree with this belief. Irrespective of the Service's interpretation of section 10(a)(1)(B) of the ESA, the cooperative agreement is not legally bound by the same restrictions. The take authorization for the agreement stems from a section 7 incidental take statement, not a section 10 permit. The "federal action" subject to consultation was the approval of the cooperative agreement, which states that a permit "*must include impact avoidance*, minimization, and mitigation measures…." And as noted earlier, Mr. Wiley and Ms. Dohner wrote in the Tampa Bay Times that permitting guidelines "will include a suite of measures to *avoid* and minimize impacts to the species."[12] Thus, nothing less than strong avoidance requirements must be included in the permitting guidelines.

Clear and strong avoidance requirements are also important because the Commission does not appear to have had much opportunity to exercise its authority to regulate habitat disturbance under its new permitting rules for state listed species.[13] Without a strong signal from the Service that avoidance is required, the Commission may lack the political support needed to impose and enforce avoidance requirements on its own under the cooperative agreement.

Finally, to the extent the Service is considering repatriating displaced snakes to Project Orianne or other *in situ* conservation measures, we urge the agency not to rely on those measures to offset habitat disturbance. Repatriation is a minimization measure because the underlying impact has occurred. More importantly, it does nothing to address the primary threat of habitat loss.

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data records often contain incomplete sets of data; data that are supposed to be collected often are not and thus many HCP records are incomplete.").

[12] Nick Wiley and Cindy Dohner, *Joining forces to protect Florida fish, wildlife*, Tampa Bay Times (April 11, 2013).

[13] Florida Administrative Code, 68A-27.001(4) ("The term 'harm' in the definition of take means an act which actually kills or injures fish or wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering").

V. Summary of key recommendations

If the agencies, after reading this letter, still decide to pursue permitting guidelines for the eastern indigo, the following recommendations described in the letter must be adopted in order for the guidelines to be consistent with the Service's administrative record for the cooperative agreement and the commitments made by Mr. Wiley and Ms. Dohner:

- Adopt a highly precautionary approach to authorizing habitat disturbance.
- Conservation requirements must achieve a "net conservation benefit," which should (1) more than offset the adverse impacts to the species resulting from a permitted activity and (2) be consistent with the recovery of the species.
- Create a strategy to prioritize research, monitoring, and recovery plan revisions for the eastern indigo, so that enough data become available to demonstrate a net conservation benefit. Secure funding for these activities.
- To achieve a net conservation benefit, rely primarily on impact avoidance to preserve currently intact habitat. Until the Service and the Commission offer evidence of mitigation effectiveness specific to the eastern indigo, it is premature to rely primarily on this technique to conserve the species.

Thank you for considering our recommendations, which we hope will help the agencies ensure that the cooperative agreement becomes a successful tool to further recovery. If you have any questions or wish to discuss further, please contact Ya-Wei (Jake) Li at YLi@defenders.org or (202) 772-3219, or Laurie Macdonald at LMacdonald@defenders.org or (727) 823-3888.

Sincerely,

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