REGULATORY REVISIONS AND OTHER INSTRUMENTALITIES FOR STRENGTHENING THE ESA
8-9-2010

The following is an informal document drafted to help in the consideration of possible regulatory revisions. It is not a set of final recommendations by the Society or any other organization.

Structure: The ideas are listed with the applicable statutory and regulatory language. For a copy of the full text of the Endangered Species Act and the regulations and policies that implement it, please go to the U.S. Fish and Wildlife Service ESA Document Library.[1]

§3
General Definitions[2]

The following include some items that might be taken up under definitions or under the section they interpret.

"Adverse Modification."[3]

> **Under 50 C.F.R. 402.2:** "Destruction or adverse modification of designated critical habitat" is defined as a direct or indirect alteration that appreciably diminishes the value of the critical habitat for both the survival and recovery of the species.[4]

1. "Destruction or adverse modification" of critical habitat could be explicitly defined as any action that diminishes the current or future value of critical habitat for recovery of a listed species in the wild.[5] That is, define "adverse modification" of critical habitat to prohibit federal actions that prevent or otherwise impede species recovery.[6]

2. Use of the term "both the survival and recovery" has led to confusion and inadequate analyses. The term should be dropped altogether and the FWS should use statutory language supplied by Congress: ESA defines critical habitat as areas "*essential* to the conservation of

[1] http://www.fws.gov/endangered/esa-library/
[2] Any concepts not attributed to other groups or SCB Approved Recommendations are draft ideas formulated for discussion purposes only.
[3] 50 C.F.R. 402.02.
[4] 50 C.F.R. 402.02.
[5] The Society for Conservation Biology, Recommendations for actions by the Obama Administration and the Congress to advance the scientific foundation for conserving biological diversity at 5 (Dec. 3, 2008).
[6] Center for Biological Diversity, IMPLEMENTATION OF THE ENDANGERED SPECIES ACT: A ROAD MAP FOR THE NEXT ADMINISTRATION, (draft), (July 10, 2008).

the species."[7] Using the terminology directly from ESA, the definition of "destruction or adverse modification" of critical habitat would be a direct or indirect alteration of critical habitat which appreciably diminishes the value to the species in question of habitat essential to the conservation of that listed species.[8]

Using the term "conservation of a listed species" avoids the pitfalls of the previous term and is sufficiently broad as the term "conservation" includes recovery (Section 3(3) of the Act). Thus the Agency should clarify in consultation policies or regulations that federal actions that substantially reduce probability of recovery by their modification of critical habitat are deemed "adverse modifications."[9]

"Appreciably reduce."[10]

> **Under § 17.22(b)(2)(i)(D):** A permit for an incidental taking shall be issued if, among other things, the Director finds that "The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild."[11]

"Appreciably reduce" should be specifically defined because, among other things, under current Conservation Plan regulations, if there are changed circumstances not provided for in the plan,[12] or unforeseen circumstances occur[13], the Director cannot require any conservation or mitigation measures to address these circumstances without the consent of the permittee. If plans were to build in a margin of error or require some eventual steps toward recovery, then they would be less likely to appreciably reduce the likelihood of recovery in the wild. Therefore in order to find that a proposed plan will be acceptable, the plan itself should include on site or off site measures to increase population, genetic diversity, occupied habitat or other measures of health of the species affected.[14]

"Biological Assessment"[15]

> **Under 16 U.S.C. § 1536(c)(1):** "To facilitate compliance with the requirements of subsection (a)(2) of this section, each Federal agency shall, with respect to any agency action of such agency for which no contract for construction has been entered into … request of the Secretary information whether any species which is listed or

[7] § 1532(5)(A).
[8] *See* Cheong, Holly E., *The Essential Nature of Critical Habitat: Defining Adverse Modification Using Terminology from the Endangered Species Act* at 18, available at http://works.bepress.com/holly_cheong/1/
[9] Center for Biological Diversity, IMPLEMENTATION OF THE ENDANGERED SPECIES ACT: A ROAD MAP FOR THE NEXT ADMINISTRATION, (draft), (July 10, 2008).
[10] § 17.22(b)(2)(i)(D).
[11] § 17.22(b)(2)(i)(D).
[12] § 17.22(b)(5)(ii).
[13] § 17.22(b)(5)(iii).
[14] SCB Draft idea.
[15] 16 U.S.C. § 1536(c)(1).

proposed to be listed may be present in the area of such proposed action. If the Secretary advises, based on the best scientific and commercial data available, that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action."

1. Include in a new regulation a definition of "biological assessment" that places the burden on the action agency for presenting the best available scientific and commercial data and the best available scientific methods for interpreting that data in the context of the proposed action, including climate change and other stresses that are likely to require adaptive management. Require also that the BA include alternatives for assisting in recovery. A biological assessment should also take into consideration the incidental takes allowed by other parties – especially those within the same geographic area – in order to more accurately assess takes in the aggregate.

2. Set forth in regulations in sufficient detail all of the information that an action agency should develop and present so as to give notice of it and to shift the burden of evidence to the entity seeking to affect the listed species and internalize the cost of the necessary research within the project budget, be it private or public, rather than place the primary burden on the FWS.

3. A biological assessment should also include a description of actions to build and maintain the data base concerning the species, as well as monitoring and mitigation actions that can help bring about recovery wherever the species is recoverable, so as to address both the 7(a)(1) and (2) duties of the agencies.

"Jeopardy"[16]

Under 16 U.S.C. §1536(b),Opinion of Secretary
(3)(A) Promptly after conclusion of consultation under paragraph (2) or (3) of subsection (a) of this section, the Secretary shall provide to the Federal agency and the applicant, if any, a written statement setting forth the Secretary's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) of this section and can be taken by the Federal agency or applicant in implementing the agency action.

Under 50 C.F.R. § 402.14(h)(3): " the biological opinion shall include… The Service's opinion on whether the action is likely to

[16] 16 U.S.C. § 1539(a)(3)(A).

jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "jeopardy biological opinion"); or, the action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a "no jeopardy" biological opinion).

A "jeopardy" biological opinion shall include reasonable and prudent alternatives, if any. If the Service is unable to develop such alternatives, it will indicate that to the best of its knowledge there are no reasonable and prudent alternatives."

Clarify that recovery is the measure of jeopardy in §7 consultations.[17] [18]

"Net Conservation Benefit"[19]

Under 16 U.S.C. § 1536(a) Exceptions
(a) Permits
(1) The Secretary may permit, under such terms and conditions as he shall prescribe--

(A) any act otherwise prohibited by section 1538 of this title for scientific purposes or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations pursuant to subsection (j) of this section; or

(B) any taking otherwise prohibited by section 1538(a)(1)(B) of this title if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

(2)(A) No permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefore submits to the Secretary a conservation plan that specifies--

(i) the impact which will likely result from such taking;

(ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps;

(iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and

(iv) such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan.

[17] SCB Draft idea.
[18] This is also mentioned below under §7.
[19] 50 C.F.R. § 17.22.

> Under 50 C.F.R. §17.22(c)(2)(ii): "The implementation of the terms of the Safe Harbor Agreement is reasonably expected to provide a net conservation benefit to the affected listed species by contributing to the recovery of listed species included in the permit, and the Safe Harbor Agreement otherwise complies with the Safe Harbor policy available from the Service;"

1. Under § 17.22(c) Safe Harbor Agreements, §17.22(c)(2)(ii) Safe Harbor issuance criteria, the regulations should be more precise regarding what impact of the taking will be tolerated.

2. Requiring a 'net' benefit is too vague, and should either be expressed as a percentage term or a stronger descriptor such as 'measureable, significant net' benefit.[20]

Not "prudent" or "determinable"[21]

> **16 U.S.C. § 1533(b)(6)(C)(ii):** "A final regulation designating critical habitat of an endangered species or a threatened species shall be published concurrently with the final regulation implementing the determination that such species is endangered or threatened, unless the Secretary deems that (ii) critical habitat of such species is not then determinable, in which case the Secretary, with respect to the proposed regulation to designate such habitat, may extend the one-year period specified in subparagraph (A) by not more than one additional year, but not later than the close of such additional year the Secretary must publish a final regulation, based on such data as may be available at that time, designating, to the maximum extent prudent, such habitat."

These exceptions to the requirement that critical habitat must be designated should be construed very narrowly.[22] The ESA provides that the Secretary *shall* designate critical habitat; to use these exceptions as broadly as they have been used in the past is contrary to the intent of Congress and the purpose of the ESA. Therefore, the regulations should require initial determination using the most though not all of currently occupied and occupiable habitat. In cases where critical habitat designation has been deferred, any incidental taking statements under Section 7(b)(4) should require agencies to contribute to the determination of critical habitat.

"Significant Portion of Range"[23]

> **16 U.S.C. §1532(20):** "The term "threatened species" means any species which is likely to become an endangered species within

[20] SCB Draft idea.
[21] 16 U.S.C. § 1533(b)(6)(C)(ii).
[22] SCB Draft idea.
[23] 16 U.S.C. § 1532(20).

the foreseeable future throughout all or a significant portion of its range."

1. Formally withdraw the Solicitor's Opinion of 16 March 2007, the distinct population policy affecting cross border populations (61 FR 4722), and propose an approach to both the "significant portion of range" and "distinct vertebrate population segments" that provides a more cautious approach to managing species at risk.[24]

2. The term "significant portion of its range" should be interpreted to include consideration of geographic extent, as well as biological significance.[25]

3. John Vucetich, Dan Rohlf, Carlos Carroll,[26] and others have proposed the following in regards to "significant portion of range": Any species that given a substantial portion, (for example, 30%) of its range, or a portion in which the species plays a key role, is probably significant in terms of the purposes of the ESA. One such purpose is to conserve the ecosystems on which threatened and endangered species depend (Section 2(b)); as well as "significant portions" in terms of the species' own long term viability. Especially now in a time of profound change, any species that is threatened in more than 30% of its historic range should be considered for a listing of some nature. This listing could be as threatened with considerable flexibility in the 4(d) rule and in prosecutorial guidelines, for example.

[24] SCB Recommendations
[25] CBD Recommendations
[26] Carlos Carroll, John A. Vucetich, Michael P. Nelson, Daniel J. Rohlf, and Michael K. Phillips, *Geography and Recovery under the Endangered Species Act*, In press, 2009, *Conservation Biology*. Abstract: The U.S. Endangered Species Act (ESA) defines an endangered species as one "at risk of extinction throughout all or a significant portion of its range." The prevailing interpretation of this clause, which focuses exclusively on the overall viability of listed species without regard to their geographic distribution, has led to development of listing and recovery criteria with fundamental conceptual, legal, and practical shortcomings. The ESA's concept of endangerment is broader than the biological concept of extinction risk in that the "esthetic, ecological, educational, historical, recreational, and scientific" values provided by species are not necessarily furthered by a species' mere existence, but rather by a species' presence across much of its former range. The concept of "significant portion of range" thus implies an additional geographic component to recovery that may enhance viability, but also offers independent benefits that Congress intended the act to achieve. Although the ESA differs from other major endangered-species protection laws because it acknowledges the distinct contribution of geography to recovery, it resembles the "representation, resiliency, and redundancy" conservation-planning framework commonly referenced in recovery plans. To address representation, listing and recovery standards should consider not only what proportion of its former range a species inhabits, but the types of habitats a species occupies and the ecological role it plays there. Recovery planning for formerly widely distributed species (e.g., the gray wolf [Canis lupus]) exemplifies how the geographic component implicit in the ESA's definition of endangerment should be considered in determining recovery goals through identification of ecologically significant types or niche variation within the extent of listed species, subspecies, or "distinct population segments." By linking listing and recovery standards to niche and ecosystem concepts, the concept of ecologically significant type offers a scientific framework that promotes more coherent dialogue concerning the societal decisions surrounding recovery of endangered species.

§4 – Listing

> **Under 16 U.S.C. § 1533(a)(1),** generally: "The Secretary shall by regulation promulgated in accordance with subsection (b) of this section determine whether any species is an endangered species or a threatened species because of any of the following factors:
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> (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
> (B) overutilization for commercial, recreational, scientific, or educational purposes;
> (C) disease or predation;
> (D) the inadequacy of existing regulatory mechanisms;
> (E) other natural or manmade factors affecting its continued existence."

1. Direct action by the Secretary to require Interagency Personnel Assignments (IPAs) from his agencies to transfer qualified personnel to list species that are warranted but precluded until the list is no longer than two years' waiting.[27] For any species not listed by then, an official notice should be published in the Federal Register proposing the species to be listed as threatened and noting that decisions affecting that species will be reviewed by the Secretary once the species is listed, and noting further that the Secretary be informed of any proposed agency action that may affect the species sixty days in advance (except in cases of emergencies) in order to use his emergency listing powers.[28]

2. Estimate the historical, cultural, and biological benefits as well as the costs of listing determinations. At a national and international scale as well as the local level.[29]

3. Discontinue the practice of "split-listing".[30] The FWS has "split listed" certain species of animals. For example, wild chimpanzees are listed as endangered while captive animals are listed as threatened. Split listing can deny needed conservation benefits to those populations of a species receiving the less protective designation. More broadly, split listings may not reflect the general intent of the ESA. Split listings should be scrutinized to determine whether they are consistent with the ESA's conservation goals.

4. Prioritize species and ecosystems by degree of risk to the species and ecosystems.[31] This should include indicator species, umbrella species, species about which little is known,

[27] SCB Draft idea
[28] SCB Draft idea.
[29] SCB Recommendations at 4.
[30] Jeffrey Flocken, Nathan Herschler, Ya-Wei "Jake" Li, Preliminary Analysis on Regulatory Revisions for Strengthening the ESA, unpublished (June 2010).
[31] SCB Draft idea.

candidate species and imperiled ecosystems.[32] Employ multiple species listing rules to increase efficiency.[33]

5. Redefine "candidate species" to retain category 2 candidates and encourage conservation of candidate species throughout the Act.[34]

6. Revisit decisions for which there is significant and credible evidence of material, irregular procedures or effects such as recorded in reports by the GAO, Inspector General or Congressional Committee oversight hearings and reports of 2007-08.

The secretary will instruct the listing office to make this review a priority once the evidence comes to light. He must notify all action agencies, as well as the public through the Federal Register, that any action on their part affecting the species or habitat being reviewed may be subject to injunction or a revocation of the permit.[35] Such decisions include the Montana fluvial arctic grayling, American wolverine, Gunnison sage grouse and others.[36]

7. Require peer review of any negative finding that a species does not warrant listing prior to publication in the Federal Register. Current policy limits peer review to warranted findings only.[37] Require that peer reviewers have no conflict of interest.[38]

8. Develop and implement a schedule to issue final listing determinations for the 281 candidate species within the next three years.[39]

9. Promulgate guidance explicitly requiring global warming impacts to be considered and addressed in any future listing determinations, critical habitat designations, recovery plans, section 10 permits and section 7 consultations (Consider reserving section 9 for future use in exceptional circumstances).

§4 – Critical Habitat[40]

Under 16 U.S.C. § 1532(5)
(A) The term "critical habitat" for a threatened or endangered species means--

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the

[32] Defenders of Wildlife and the Sierra Club Legal Defense Fund, Endangered Natural Heritage Act Situations and Solutions For Strengthening the Endangered Species Act, 2d Ed (Jan. 12, 1997).
[33] CBD Recommendations
[34] Defenders & Sierra Club Recommendations
[35] SCB Draft idea.
[36] CBD Recommendations
[37] CBD Recommendations
[38] CBD Recommendations
[39] CBD Recommendations
[40] § 424.02(d).

conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.

(B) Critical habitat may be established for those species now listed as threatened or endangered species for which no critical habitat has heretofore been established as set forth in subparagraph (A) of this paragraph.

Under § 424.12 , Criteria for designating critical habitat, unless the designation of critical habitat falls under the "imprudent" rule[41] then the rule states that, "Critical habitat shall be specified…at the time a species is proposed for listing."[42]

Species cannot survive and recover without critical habitat; however it is a complex issue for each species when determining how much habitat the species must have and no less. At the same time the Department must be mindful of the burden of the designation for some stakeholders.

1. **Initial or Presumptive Habitat Designation.**[43] Promulgate a new regulation to establish a proposed designation at the time of listing proposals and then an initial designation at listing that would stand until the final recovery plan and complete critical habitat designation could be completed. This initial designation should err on the side of caution and include all or most currently occupied habitat and unoccupied habitat suitable for recovery. If critical habitat is not designated within the regulatory time frame, then the initial habitat becomes the final critical habitat. If the informal habitat is substantially larger than what is speculated for the final critical habitat, then there will be pressure to designate the habitat and finish the recovery plan.

   Initial habitat designation would be advantageous for several reasons such as avoiding uncertainties; streamlining the agency process, and motivation for the final critical habitat to be more quickly designated.

   First, having an initial designation would avoid many uncertainties that those who bear the burden of the Act must face. For example, if all species received some dedicated habitat at the time of listing, then the public would have some idea of the extent of the habitat.

   Second, if FWS were to designate initial habitat, this would both protect the species while giving FWS more time to develop the final designation. Also, this would be an opportunity for universities and other sources to contribute (during comment for the listing) and take some of the initial work off the backs of the FWS.

[41] § 424.12(a)(1)(i)-(ii).
[42] § 424.12.
[43] SCB Draft idea.

Finally, if critical habitat is not designated within the regulatory time frame, then the initial habitat designation becomes the final critical habitat designation.

2. **Critical habitat *per se***.[44] The regulations could note that as an adjunct to number one above, the default method of establishing the initial habitat designation, would be habitat per se -- simply the area in which the species is found. As in, a fresh water fish in a contained body of water – that body of water is de facto critical habitat. These methods would of course continue to be informed by the cost assessment, which should be a full life cycle, net cost-benefit assessment at the national or global level as well as at the ecosystems level.

3. **Comprehensiveness** Estimate the full benefits as well as the costs of critical habitat determinations, including historical, cultural, and biological benefits.[45]

4. **Science-Based Review** Review and revise politically suspect (i.e., noted in GAO, IG reports or 2007-08 Congressional testimony as such) critical habitat designations, including designations for bull trout, California red-legged frog, Canada lynx and others.[46]

5. **Unoccupied Habitat** Revisit the apparent policy of preventing designation of critical habitat for unoccupied habitat.[47]

6. **Cost and Benefits** Revisit the apparent policy of inflating economic costs and not acknowledging the economic and conservation benefits of designating critical habitat.[48]

7. **Strengthen Designations** Issue a policy requiring coordination of critical habitat designations and recovery planning, and designate any habitat determined in a recovery plan to be essential to a species' recovery as critical habitat.[49]

8. **Existing Information** Revisit the apparent policy of excluding or disqualifying habitat deemed essential to species recovery from designation as critical habitat based on either existing or future conservation plans.[50]

9. **Consideration of Genetic Diversity**[51] A loss of genetic diversity can adversely impact threatened and endangered species. Inbreeding has been shown to be linked to increased risk of extinction from environmental variations and stochastic events.[52] In January 2005, Dale

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[44] SCB Draft idea.
[45] SCB Recommendations at 4.
[46] Center for Biological Diversity, IMPLEMENTATION OF THE ENDANGERED SPECIES ACT: A ROAD MAP FOR THE NEXT ADMINISTRATION, (draft), (July 10, 2008).
[47] CBD at 3.
[48] CBD at 3.
[49] CBD at 3.
[50] CBD at 3.
[51] Jeffrey Flocken, Nathan Herschler, Ya-Wei "Jake" Li, Preliminary Analysis on Regulatory Revisions for Strengthening the ESA, unpublished (June 2010).
[52] A recent long-term study on sockeye salmon provides the first quantification of portfolio effects resulting from population and life history diversity. *Population diversity and the portfolio effect in an exploited species*, Nature 465, 609-612 (3 June 2010), available at: http://www.nature.com/nature/journal/v465/n7298/pdf/nature09060.pdf

Hall, director of the Southwest Region of the USFWS, issued a policy that limited the use of genetic data in reviewing the status of species recovery.[53] Likewise, the USFWS delisted the northern Rocky Mountain gray wolf distinct population segment without evidence of genetic exchange between wolves in the Greater Yellowstone core recovery area and two other core recovery areas.[54] FWS should ensure that regulations explicitly require consideration of genetic diversity in species recovery and delisting decisions.

10. **Funding** Dramatically increase funding for ESA implementation to allow for timely designation of critical habitat and other functions, by establishing a policy or regulation that would direct the Agency to transfer such personnel or funds as necessary, while complying with budgeting law (e.g. ,10% reallocation without consent of Congressional Appropriators or up to 30% with that consent.)

11. **Climate Change** Require critical habitat designations to take affirmative measures to consider climate change and create mechanisms to increase the probability of species recovery under projected future climatic conditions.[55]

12. **Collectable Species** Eliminate the requirement or practice that species' which are the subject of collectors and hunters, be denied designated critical habitat. Instead, these species should have designated critical habitat but if at all possible, the locations should be reserved for interagency consultations and other controlled uses and not revealed to potential collectors or poachers. Consultation with scientific societies as noted in the Act, could take the place of publication for such species' habitats.[56]

§7 – Consultation

The consultation process has become arbitrarily limited in geographic scope and does not adequately take into account incidental taking or actual accrued recovery in the incidental take permitting or "statement" process (Habitat conservation plans and safe harbor agreements sometimes share incidental taking issues that are similar to those raised in Section 7(b)(4) taking statements issued during some no-jeopardy consultations).

1. **Global Scope** Restore the global reach of the consultation process as directed in the 8th Circuit Court Opinion in *Defenders v. Lujan* (1990)[57] with assistance from agencies with significant international programs related to endangered species or their ecosystems.[58]

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[53] Memo from Dale Hall, *Policy on Genetics in Endangered Species Activity*, January 27, 2005.

[54] *See* Complaint for Declaratory and Injunctive Relief, *Defenders of Wildlife v. Salazar*, CV-09-77-M-DWM (N.D. Mon. 2009), available at: http://www.biologicaldiversity.org/species/mammals/northern_Rocky_Mountains_gray_wolf/pdfs/09-06-02-Complaint.pdf ("[T]he 2009 Delisting Rule unlawfully…failed to ensure that the northern Rockies wolf population exhibits genetic connectivity essential to its survival….").

[55] SCB Recommendations at 5.

[56] SCB Draft idea.

[57] SCB Recommendations at 5 (Dec 2008).

[58] This recommendation has had broad support of the ES Coalition and most other conservation groups (see Defenders and Sierra Club 1997 ENHA Summary) for many years and was covered in the reauthorization bills of 1993 of Senator Chairman Baucus and House Chairman Studds – one directly and the other in introductory remarks affirming that the act already required this as the 8th Circuit Court ruled before its ruling was vacated on the

2. **Jeopardy** Clarify that recovery is the measure of jeopardy in §7 consultations (also discussed above in Definitions section).[59]

3. **Database** Create a database on the numbers, health and occupied habitat of each listed and proposed species and limit incidental takes permitted to the percentage of interest on the existing biological capital. This data must come from species and habitat experts, who can determine what level of take will be most likely to meet the standards of the Act in light of known and anticipated likely stresses, including but not limited to climate change and related changes. This would apply to Section 10(a)(1)(a) permits as well.

4. **Cap on Takes** The Services set a cap on incidental takes for the wildlife population as a whole and ensure that individual take authorizations do not cumulatively exceed the aggregate cap or otherwise impede recovery. This information should be made available to the public.

5. **Monitor Take** The Services monitor the actual level of incidental take with a sufficient level of confidence to ensure that incidental take limits are not exceeded. This information should be made available to the public.

6. **Ensure Incidental Takes Are Not Jeopardizing Recovery** Require any permitted takes be from interest gained on biological capital after first listed year and place burden on proponent to show net affect would not delay recovery. Require evidence of assets sufficient to carry out any mitigation and monitoring required.

7. **Accountability** Require that the senior authors sign initial assessments and opinions. Require political appointees to sign all changes they make and cite the science justifying the change in a draft or final biological opinion.[60] Additionally, the lead agency attorney for the consultation should review and sign as indication of legal approval.[61] [62]

8. **Ethics** A revised Scientific Code of Ethics should be made applicable to Interior and Commerce policy level officials as well as career employees.[63],[64]

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procedural grounds of a lack of standing. Interagency assistance to the FWS could flow from the Section 7(a)(1) and (2) duties of the Act. For example, the US FWS could seek the informal or formal biological assessments of the State Department and the US Agency for International Development, the International Programs of the Forest Service and the US Agriculture Department's International Conservation and Development Division, among others, depending on the agency actions being reviewed. SCB Recommendations at 5 (Dec 2008).

[59] SCB Draft idea.

[60] SCB Recommendations at 5 (Dec 2008).

[61] *Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making* Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Mike Kelly former USFWS and NOAA Fisheries biologist).

[62] This idea may not be workable in the regulatory scheme, but as a broader policy within the Department.

[63] *Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making* Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Deputy Inspector General of Interior).

[64] This idea may not be workable in the regulatory scheme, but as a broader policy within the Department.

9. **Transparency** Require documentation and public access to all records of all consultations, and solicit public comment on draft biological opinions.[65] In addition, if a scientist has disagreement or significant concern with a decision from his agency, he should be able to submit a statement explaining his disagreement.[66] This would provide the scientist an opportunity to make his concern public, and provide FWS with an opportunity to explain how it has addressed the concerns or why they are not significant.[67]

10. **Full Federal Collaboration** Promulgate regulations defining the obligation of each federal agency under §7(a)(1) of the ESA to utilize its authorities to affirmatively implement programs for the conservation of species and a process requiring that those duties be addressed in each consultation and for budget and planning purposes in a "7(a)(1) consultation" at least once a year concerning the agency's budget request and Government Performance and Results Act reports.[68]

11. **Climate Change** Include input from Federal agencies involved in relevant climate change research and policy development in interagency consultations to evaluate how climate change might be addressed in species assessments, recovery planning, consultations and management.[69]

12. **Probable Take Analysis** Require the Secretary to identify within the recovery plan the types of actions that are likely to take members of the species and scales of impacts likely to violate §7.[70]

13. **Prioritize Recovery Plans** Require consideration of recovery plans during consultations.[71]

§9 – Prohibited Acts

1. **Import/Export Declarations**[72] The import/export provisions of the ESA give the FWS broad authority to determine the type of information that importers and exporters of fish, wildlife, and plants must provide for each importation or exportation.[73] The FWS regulation implementing these provisions generally require that "importers or their agents must file with the Service a completed Declaration for Importation or Exportation of Fish or Wildlife (Form 3–177), signed by the importer or the importer's agent, upon the importation of any wildlife at the place where Service clearance under §14.52 is

[65] *Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making* Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Mike Kelly former USFWS and NOAA Fisheries biologist).
[66] This idea may not be workable in the regulatory scheme, but as a broader policy within the Department.
[67] *Endangered Species Act Implementation: Politics or Science?*, Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Francesca T. Grifo, Senior Scientist with the Union of Concerned Scientists).
[68] CBD Recommendations at 3.
[69] SCB Recommendations at 5.
[70] Defenders & Sierra Club at 5.
[71] CBD Recommendations at 4 (July 2008).
[72] Jeffrey Flocken, Nathan Herschler, Ya-Wei "Jake" Li, Preliminary Analysis on Regulatory Revisions for Strengthening the ESA, unpublished (June 2010).
[73] *See* 16 U.S.C. §1538(d)(2)(C) ("Any person required to obtain permission under paragraph (1) of this subsection shall…file such reports as the Secretary may require."); *see also* 16 U.S.C. §1538(e).

requested."[74] While Form 3-177 currently requires information such as a specimen's scientific name, common name, description code, and country of origin, the FWS could expand the Form to include information that would help identify illegal shipments and enhance trade monitoring data.

In addition, a person may not engage in business as an importer or exporter of certain fish or wildlife without first having obtained permission from the Secretary.[75] To obtain permission, a person must submit a completed FWS Form 3–200–3, which requests basic contact and business information from the applicant.[76] Importers or exporters must also keep records of each import/export made, including information on the scientific and common name, country of origin (if known), date and place of import/export, and date of subsequent disposition.[77]

We recommend revisiting the contents of Form 3-177 to determine what types of additional information would help customs officials properly identify the contents of each shipment and help enhance trade monitoring data. Possible additions include information on chain of custody, list of re-export countries, and more detailed descriptions of specimens. Additionally, if falsification of information is a problem, the resulting penalties could be increased or, at a minimum, stated explicitly on the form to deter falsification.[78]

We also recommend revisiting the requirements for import/export licenses and related recordkeeping. Form 3–200–3 requests only basic information about an applicant and does not inquire about the person's criminal history or experience with wildlife trading. Likewise, the import/export recordkeeping requirement could be expanded to assist

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[74] 50 C.F.R. §14.61. Form 3-177 available at: http://www.fws.gov/le/pdffiles/3-177-1.pdf

[75] 16 U.S.C. §1538(d)(1); 50 C.F.R. §§14.91 – 14.94.

[76] 50 C.F.R. §14.93. Form 3-200-3 available at: http://www.fws.gov/forms/3-200-3.pdf

[77] 50 C.F.R. §14.93(b)(4). The full list of required information is as follows:

(i) A general description of the wildlife, such as "live," "raw hides," "fur garments," "leather goods," "footwear," or "jewelry";

(ii) The quantity of the wildlife, in numbers, weight, or other appropriate measure;

(iii) The common and scientific names of the wildlife;

(iv) The country of origin of the wildlife, if known, as defined in §10.12 of this subchapter;

(v) The date and place the wildlife was imported or exported;

(vi) The date of the subsequent disposition, if applicable, of the wildlife and the manner of the subsequent disposition, whether by sale, barter, consignment, loan, delivery, destruction, or other means;

(vii) The name, address, telephone, and e-mail address, if known, of the person or business who received the wildlife;

(viii) Copies of all permits required by the laws and regulations of the United States; and

(ix) Copies of all permits required by the laws of any country of export, re-export, or origin of the wildlife.

[78] The form currently states: Knowingly making a false statement in a Declaration for Importation or Exportation of Fish or Wildlife may subject the declarant to the penalty provided by 18 U.S.C. 1001 and 16 U.S.C. 3372(d).
18 U.S.C. §1001 authorizes the government to fine or imprison a person for up to 5 years for "knowingly and willfully" falsifying information in dealings with the federal government. No maximum fine is provided.
16 U.S.C. §3372(d) makes it illegal for any person to make or submit any false record, account, or label for, or any false identification of, any fish, wildlife, or plant which has been, or is intended to be—
(1) imported, exported, transported, sold, purchased, or received from any foreign country; or
(2) transported in interstate or foreign commerce.

enforcement officers with identifying illegal shipments. For example, the contact information of the person who receives wildlife from an exporter needs to be provided only "if known."

§10 – Habitat Conservation Plans and Safe Harbor Agreements

Ideas for §10 HCPs & SHAs

1. **Measurement of Effectiveness** Before completing any revisions that permit any increase or substantial addition to permitted incidental takes via HCPs or Safe Harbor Agreements, the Secretary should issue a report on the effectiveness of them and options for improving or otherwise supporting their effectiveness. The final report should be peer reviewed.

2. **Examine Existing Law** The Secretaries should issue within 12 months a draft for comment, and within 18 months a final three part study (resembling the study that would have been required by the 93 Baucus bill) on existing conservation incentives and disincentives in Federal law and spending and options for improvement.

3. **Land Acquisition Priorities** To the extent possible under the statutory provisions controlling the acquisition of interests in land the Secretary and his or her agents shall devote the proceeds of the Land and Water Conservation Fund and any new funds derived from the permitting of or licensing of uses on and off shore on federal lands and waters once conservation safeguards are in place for the areas affected by such leases or permits, to the acquisition of interests in land and water according to the efficiency with which the Secretary finds they are likely to promote the recovery of listed, proposed and candidate species, followed by declining non-game species, in that order, unless the Secretary determines and demonstrates that an unusual recovery opportunity exists that warrants an exception.

   Furthermore, in order to reward non-federal landowners whose management of lands and waters subject to Habitat Conservation Plans and Safe Harbor Agreements succeeds in producing documented increases in listed species' populations or areas occupied or other indicia of recovery in excess of projections of the recovery plan or a majority of the recovery team, such landowners shall be afforded preference in accordance with their performance in the consideration by the secretary of options available for acquisitions of interests in land by the Land and Water Conservation Fund and other funds or exchanges, in comparing the interests of the successful owners to other interests in land that are proffered for conservation purposes in a given acquisition cycle that would offer comparable conservation benefits.[79]

4. **Continuing Review** Require that each HCP and Safe Harbor agreement contain within it a clause requiring review and revision whenever changed circumstances warrant it in the opinion of the Secretary and no less than every five years.

   A regular review shall precede and inform the species status reports due under the Act, so that the obligations and permits of all parties to such agreements can be renegotiated as necessary to provide for changed circumstances, recovery or lack thereof, and to provide

[79] This concept is also applicable under §§ 4-5.

additional assistance if necessary for the permittee(s) to enable them to assist in recovery in a manner that surpasses or exceeds minimum requirements of the law. This would not expose the holder to liability but it could require new limitations or contributions to recovery. (See also other incentives below).

Require contemporaneous and no less rigorous reviews for agencies and other beneficiaries of 7(b)(4) incidental taking statements to complement the reviews.

5. **Biological Assessments and HCPs** Define "Biological Assessment" in a manner that complements HCP proposal requirements so that both require the presentation of specific data sufficient to support a finding of specific net benefits at reasonably predictable times.

   The data should also contribute to the data base of information necessary to track recovery and provide a verifiable basis for the incidental taking permitted and for controls and limitations pertaining to the permitted or allowed takes. (This shifts the burden to the actors while acknowledging that the business expense deduction or the federal action agency budgets should absorb more of the costs as the FWS budgets are very limited.)

6. **Tax Planning** In program planning, budget proposals and in guidance to regional offices of the FWS and NMFS, create positions, (in each state, if possible) in cooperation with the States and the Secretary of the Treasury, to provide expert assistance for tax and estate planning for HCP permit applicants and for others seeking to convey interests in land to the Federal government for the conservation of proposed or listed or warranted species.

7. **Right of First Refusal** Under § 17.22(d)(3)(i), a property owner with a Candidate Conservation Agreement permit must notify the Service of any transfer of lands subject to the CCA. This is also a requirement under Safe Harbor Agreements (§17.22(c)(3)(i)), but *not* Habitat Conservation Plans (§17.22(b)). In negotiating HCPs or similar agreements, the Agency should retain a right of first refusal in the sale or transfer of any relevant interest in property subject to these three permits or provide that the obligations or easements run with the land.

8. **Development Plans** For any energy or other development on Federal on-shore or off-shore lands, the BA, HCP proposals, and EIS should describe in detail the initial and on-going net impacts on listed, proposed and warranted species and alternatives available to both the government and the applicant for improving the net impacts.

   For example, if the sage grouse is affected by coal, oil, gas, solar, wind, geothermal, hunting, grazing, cell phone towers, transmission lines, and highway development, the combined net impact of current and proposed federal state and private actions is understood to the extent possible, then appropriate actions are taken or restrained under sections 7(a)(1) and (2), and 6, 9 and 10.

   To illustrate, BLM might be ordered to withhold further medium to long term coal, oil, shale or other fossil fuel leases until a consolidated federal energy development plan is in place, that takes advantage of the increasing availability of efficiency improvements, wind, solar

and geothermal. Fees placed on the developments should be sufficient to more than restore, mitigate and offset the degradation of all affected wildlife, habitats and human health, to the extent possible within existing law.

If such authority does not exist, then estimates of such costs should be published by the Secretary before any decision is made to grant any development or exploration permit so that affected parties and governments can take appropriate action.

9. **Measure Cumulative Impacts** For Section 10(a)(1)(a) permits, the Secretary should also have a verifiable data base to ensure the cumulative impact of such permits does not substantially impede recovery.

10. **Local Programs** Currently in use at NOAA for its trust resources, Community-Based Restoration Programs focus on habitat restoration. A similar model could be used to address terrestrial and marine listed species. In its program NOAA grants local jurisdictions funds for partnerships for restoration. NOAA employees involved are required to do community outreach to involve a variety of persons in the process and are evaluated on their performance in the process.

11. **Issuance Criteria** The regulations should be more precise regarding what impact of the taking will be tolerated. Under §17.22(c)(2)(ii), "The implementation of the terms of the Safe Harbor Agreement is reasonably expected to provide *a net conservation benefit* to the affected listed species by contributing to the recovery of listed species included in the permit, and the Safe Harbor Agreement otherwise complies with the Safe Harbor policy available from the Service;" emphasis added.

    Requiring a 'net' benefit is too vague, and should either be expressed as a percentage term or a stronger descriptor such as 'measureable, significant net' benefit.[80]

12. **Sport Hunting Exemption** ESA §10(a)(1)(A) allows FWS to issue import permits for an endangered species if the import will enhance the propagation or survival of the species. The USFWS has applied this provision to authorize the import of sport-hunted trophies in certain situations. For example, FWS has determined that the "culling of male bontebok through sport hunting on ranches that participate in South Africa's management program will enhance the survival of the bontebok, provided they are imported by the person who hunted them for personal use."[81] Trophy hunting permits for a species are issued on the assumption that portions of the revenues generated from hunts are directed towards conservation efforts on behalf of that species in the wild.

    The FWS's sport hunting exemption raises concerns because the link between trophy hunting and conservation benefits can be tenuous. Some organizations believe that trophy hunting operations can lead to poaching and smuggling, as developing countries seek to profit from U.S. demand for exotic animal parts. Given this potential problem, it is unclear whether the

[80] This is also included in the Definitions section of this memo.
[81] USFWS document, *Importing Your Bontebok Sport-hunted Trophy*, Summer 2003, available at: http://www.fws.gov/international/DIC/pdf/bo.pdf

revenues from trophy hunting permits outweigh the potential setbacks to conservation.

Another issue is whether the FWS's issuance of certain trophy hunting permits comports with the ESA. IFAW, HSUS and Defenders are currently arguing in the Polar bear litigation that an "enhancement" permit premised on the deliberate killing of a threatened species may only be granted to address overpopulation. See *Fund for Animals v. Turner*, 1991 WL 206232 (D.D.C 1991) ("[c]ongress has specifically limited the hunting of a threatened…species to extraordinary cases of population pressures, and the Court is constrained to enforce that legislative restriction").[82] The USFWS opposes this rationale and has, in fact, granted import permits for sport-hunted animals without finding the hunting necessary to relieve population pressures. Thus, the issuance of these permits may be unsound from both a legal and conservation science perspective.

Scrutinize the sport hunting exemption to determine whether it actually results in conservation benefits for targeted species, or whether instead the exemption is driven primarily by political and economic incentives unrelated to the conservation of that species in the wild. Of particular concern are any future blanket, species-wide exemptions, such as the ones for cimitar-horned oryx, addax, and dama gazelles that were recently struck down in *Friends of Animals v. Salazar* (D.D.C. 2009).[83]

Another basis for scrutinizing the sport hunting exemption, at least as applied to the issuance of Polar bear permits, is that it appears inconsistent with the *Fund for Animals v. Turner* decision. That court, in holding that hunting of ESA listed species is limited to "extraordinary cases of population pressure," also observed more broadly that "the [ESA], as currently interpreted, does not authorize hunting whenever it would be a sound conservational tool."[84]

One risk with challenging the sport hunting exemption is the possibility that FWS will end up broadening it in response to petitions from hunting organizations. The agency has been applying the exemption more narrowly than in the past. While the current situation may not be ideal from a conservation perspective, it may be acceptable given the alternative. We should analyze this issue further before deciding whether to pursue it.

§11 – Penalties and Enforcement

1. **Mens Rea**[85] In all criminal prosecutions under ESA §9, the U.S. government has adopted a policy requiring it to prove that a defendant "knowingly" engaging in a "take" of not simply an animal, but the specific species of animal at issue.[86] All U.S. Attorney Offices are required to adopt this heightened *mens rea* requirement as the result of a U.S. Department of Justice memorandum that instructs federal prosecutors to object to the use of jury instructions that do not require the government to prove that a defendant "knew the biological identity of

[82] *Fund for Animals v. Turner*, 1991 WL 206232, 1991 U.S.Dist. LEXIS 13426 (D.D.C 1991)
[83] Available at: https://ecf.dcd.uscourts.gov/cgi-bin/show_public_doc?2006cv2120-43
[84] *Fund for Animals v. Turner*, 1991 U.S.Dist. LEXIS 13426, at 22.
[85] Jeffrey Flocken, Nathan Herschler, Ya-Wei "Jake" Li, Preliminary Analysis on Regulatory Revisions for Strengthening the ESA, unpublished (June 2010).
[86] U.S. Department of Justice Memorandum, *Knowing Instruction in Endangered Species Cases*, Feb. 12, 1999.

an animal at the time he shot it."[87] The DOJ's memorandum was issued in response to the U.S. Solicitor General Office opposition brief to a *certiorari* petition in *U.S. v. McKittrick*, 142 F.3d 1170 (9th Cir. 1998), which conceded that the United States would no longer "request the use of this [*mens rea* knowledge] instruction, because it does not adequately explicate the meaning of the term 'knowingly' in [§11(b)(1) of the ESA]."

The current *mens rea* standard creates an enforcement obstacle because it allows defendants who kill an endangered species to evade criminal liability by claiming that they believed the animal was an unlisted "look alike" species (*e.g.*, grizzly bears and black bears, California condors and turkey vultures, and wolves and coyotes). The DOJ reports that several grizzly bear poaching cases have been declined because of this heightened standard, as hunters in Montana and Idaho have a ready defense that they mistook the animal for a black bear.[88]

We recommend abrogating the DOJ's policy requiring prosecutors to prove that a defendant knowingly engaged in the "take" of the specific species of animal at issue. One potential avenue is for the U.S. Fish & Wildlife Service to adopt a regulatory provision clarifying that the ESA is a general intent statute and that criminal prosecutions are not to be premised on proof that a defendant knew the species of animal at issue. This interpretation aligns with both ESA case law[89] and the Congressional amendments to §11, which reduced the standard for criminal violations from "willfully" to "knowingly" in order to make "criminal violations of the act a general rather than a specific intent crime."[90] [91]

2. **Citizen Suits**[92] Section 11(g) authorizes any person to commence a civil suit against any other person to enjoin a violation of any provision of the ESA or its implementing regulation. Currently, at least two courts have interpreted this provision as not applying to a violation of an incidental take permit.[93] The rationale is that the violation is of the permit itself, rather

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[87] *Id*.

[88] U.S. Department of Justice Memorandum, *Elements of Endangered Species Act Offense Require Proof that Defendant Knew Biological Identity of Animal*, April 21, 2003.

[89] *See e.g., United States v. McKittrick*, 142 F.3d 1170 (9th Cir. 1998); *United States v. Ivey*, 949 F.2d 759 (5th Cir. 1991); *United States v. Zak*, 486 F. Supp. 2d 208 (D. Mass. 2007)

[90] H.R. Rep. No. 95-1625, at 26 (1978), reprinted in 1978 U.S.C.C.A.N. 9453, 9476.

[91] One concern with this strategy is that the proposed regulatory provision would be inconsistent with the Solicitor's *certiorari* petition in *McKittrick*—a position that the U.S. Supreme Court may have relied on in denying cert. We may need to research this issue further. Another potential avenue is to request that the DOJ abrogate its policy, which may in turn require that the Solicitor General rescind its position in *McKittrick*. This approach may have limited success, however, considering that approximately seven years ago the ENRD's Wildlife and Marine Resources Section "sought to relax the Solicitor General's position, but [reported that] it appears the only likely relief available is a legislative fix to amend the ESA and change the knowledge requirement under it to track the proof requirement in *McKittrick*."

[92] Jeffrey Flocken, Nathan Herschler, Ya-Wei "Jake" Li, Preliminary Analysis on Regulatory Revisions for Strengthening the ESA, unpublished (June 2010).

[93] *Atl. Green Sea Turtle v. County Council of Volusia County Fla*., 2005 U.S. Dist. LEXIS 38841 (M.D. Fla. May 3, 2005) ("In comparison, the ESA's citizen suit provision provides, in relevant part, for suits to enjoin violations only of the ESA and related regulations. The ESA, itself, simply does not provide a private enforcement mechanism covering the terms and conditions of incidental take permits."). *South Yuba River Citizens League v. Nat'l Marine Fisheries Serv.*, 629 F. Supp. 2d 1123, 1129 (E.D. Cal. 2009) ("Section 11(g)(1) of the ESA authorizes citizen suits 'to enjoin any person…who is alleged to be in violation of any provision of this chapter or regulation issued under the authority thereof.' By specifically referring to violations of the statute and the implementing regulations, but not to violations of permits issued under the statute, section 11(g) differs from the ESA's other enforcement provisions,

than the ESA or its regulations.

We suggest conducting further research on whether FWS could issue a rule specifying that a violation of an ITP is a violation of the ESA regulations that require compliance with the terms of the permit.[94]

Other Instrumentalities

The following include some items that might not necessarily be appropriate for a regulatory framework or may be better executed as Department-wide policy. These concepts also appear above in the sections where appropriate.

1. **Ethics** A revised Scientific Code of Ethics should be made applicable to Interior and Commerce policy level officials as well as career employees.[95]

2. **Transparency for Career Staffers** If a scientist has disagreement or significant concern with a decision from his agency (such as on a biological opinion), he should be able to submit a statement explaining his disagreement. This would provide the scientist an opportunity to make his concern public, and provide FWS with an opportunity to explain how it has addressed the concerns or why they are not significant.[96]

3. **Accountability** Require that the senior authors sign initial assessments and opinions. Require political appointees to sign all changes they make and cite the science justifying the change in a draft or final biological opinion.[97] Additionally, the lead agency attorney for the consultation should review and sign as indication of legal approval.[98]

4. **Vicarious Liability**[99] Consider whether the government can be held vicariously liable for a "take" conducted by a private actor. For example, if a state authorizes boating in waters inhabited by an endangered species, the claim would be that the state is vicariously liable for any injuries the boaters cause to the species

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and from the citizen suit provisions provided by other environmental statutes. In light of this distinction, the court must conclude that Congress did not intend to authorize citizen suits to enforce ESA permits.")

[94] 50 C.F.R. §13.48.

[95] *Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making* Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Deputy Inspector General of Interior).

[96] *Endangered Species Act Implementation: Politics or Science?*, Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Francesca T. Grifo, Senior Scientist with the Union of Concerned Scientists).

[97] SCB Recommendations at 5 (Dec 2008).

[98] *Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making* Before the House Natural Resources Committee, 110th Cong. (2007) (statement of Mike Kelly former USFWS and NOAA Fisheries biologist).

[99] Jeffrey Flocken, Nathan Herschler, Ya-Wei "Jake" Li, Preliminary Analysis on Regulatory Revisions for Strengthening the ESA, unpublished (June 2010).