



Headstarting Conservation:

Reviewing new policy to incentivize early investments in declining species

Review of U.S. Fish and Wildlife Service Policy Regarding Voluntary Prelisting Conservation Actions, 79 Fed. Reg. 42525 (July 22, 2014)



About Mission: Wildlife

Mission:Wildlife is a new environmental organization advancing bold policies that will do more to restore endangered wildlife while reducing costs to communities and risks for businesses. Changes in technology, information science, demographics and climate create new opportunities to rethink and improve how we approach wildlife conservation in America. We work to make those opportunities a reality. Sand County Foundation serves as the fiscal sponsor for Mission:Wildlife.

Advisory Board Members: Adam Davis, Bernie Tershey, Kevin McAleese and Steven P. Quarles

About Sand County Foundation

Sand County Foundation is a private, non-profit organization dedicated to working with private landowners across

North America on voluntary, ethical and scientifically-sound land management practices that benefit the environment.

© 2014 Mission:Wildlife Author, Timothy Male, PhD Designer: Theoharides Consulting

For more information contact: timothymale@gmail.com

Mission:Wildlife 7003 Woodland Avenue Takoma Park, Maryland 20912 (240) 274-0341



Headstarting Conservation:

Reviewing new policy to incentivize early investments in declining species

America has more than fifty state and federal agencies whose mission includes managing wildlife populations. When wildlife and plants are secure, those responsibilities fall chiefly on state agencies. When state-level protections, state management strategies and investments, and private conservation actions are insufficient to avoid a high risk that species will go extinct, species are brought under federal protection through the Endangered Species Act (ESA).

Yet a species' decline is often a lengthy one. We have time to find new strategies or to intensify existing efforts to try to turn declines around before the ESA is needed.

On July 22nd, the U.S. Fish and Wildlife Service (USFWS) released a promising new policy to spur more investment in species that are declining but not yet subject to protection under the ESA.¹ Since these species remain under state or non-federal jurisdiction, the USFWS policy focuses on ways it can incentivize more voluntary conservation for these species by providing an assurance that investments in conservation action made before listing will be credited fairly if a listing later occurs.

Key goals of the policy are the following:

- 1. Strong state leadership
- 2. Potential participation by all landowners
- 3. Benefits for landowners derived from the value of credits
- 4. Contribution to wildlife conservation

In order for the policy to be effective in achieving these goals, this report provides a simple review and recommendations for improvements in the policy while addressing the following questions:

- 1. Will the policy create benefits for species?
- 2. Does the policy create enough predictability to encourage widespread participation by landowners and businesses?

Comments on the draft policy are due back to the U.S. Fish and Wildlife Service by September 2014. With improvement, this policy can play an important role in expanding conservation efforts for declining species while providing value to landowners who take action to conserve species.

¹ The policy also covers formal 'candidates' for listing.



Policy Review

State Leadership

America has at least 200,000 species of wild animals and plants and states have jurisdiction over most of them.² Less than 1 percent of U.S. species are protected by federal agencies under the Endangered Species Act (ESA). The proposed policy from USFWS is built around that state authority. It encourages the creation of state programs to "register" conservation actions for wildlife. The policy proposes that interested states create a program, which USFWS would review for consistency with the policy. After review, landowners could participate and secure credits or value for their actions. Those credits would be recognized by the USFWS and could be used to cover compensatory mitigation requirements under the ESA.

The policy contains few details on how a USFWS 'review' of a program for consistency would work or what criteria would be needed in a state program. The value of credits is also unclear. The following summarizes all the apparent requirements for a state program to be considered 'consistent' with this policy:

- Actions to benefit species must be included in a conservation strategy.³
- States have measuring, monitoring and oversight obligations to fulfill (but the policy does not describe what they are). The oversight must be appropriate to

ensure effective implementation and maintenance of conservation actions.

- States must maintain a registry of all voluntary prelisting conservation actions enrolled in a program and inform USFWS of each action.
- Criteria, standards and metrics must be developed to quantify credits as well as the impacts of detrimental actions (but the policy is not clear on who develops them).
- States must record transfers of credits among entities and any use of credits for compensatory mitigation obligations outside of the ESA.

Participation by all landowners

The policy creates no limitation on the kinds of landowners who can participate. Any landowner — including federal ones — can join a state program. This is the first ESA incentive program that covers all lands and freshwater in the United States.

The policy avows that USFWS "will treat credited conservation actions" as either a compensatory mitigation measure under section 10 or as part of the environmental baseline of a project undergoing section 7 review. This commitment will create predictability sufficient to encourage some landowners to join programs approved under this policy.

The ability of federal agencies to gain credits for their actions to conserve unlisted species for use after listing is a bold and promising step that will encourage more conservation. In addition, federal agencies like the Department of Defense could become some of the largest buyers or investors in credits produced on private

² Insects: http://www.si.edu/Encyclopedia_SI/nmnh/buginfo/bugnos.htm Plants: http://en.wikipedia.org/wiki/Flora_of_the_United_States

³ A conservation action would need to be covered under a 'conservation strategy' to count. The narrative that precedes the policy suggests that it will allow any strategy by a federal, state, tribal or private party to count and encourages cooperation in developing them. However, the actual policy only covers state plans. It also mentions that State Wildlife Action Plans may provide helpful guidance and implies, but does not confirm whether those plans are adequate to meet USFWS standards as a 'conservation strategy.'



or non-federal lands because of their needs to 'buffer' military bases from housing and other development that could otherwise impede training activities

If landowners and land managers are already required to take action on behalf of species under local, state or federal laws or policy, these required actions could not earn credit through this new policy. As proposed, any action also has to take place under a state or multistate program.

Benefits to landowners

Landowners receive a number of potential benefits by participating in a state prelisting conservation program. First, their efforts help prevent a species from needing federal protection under the ESA that could restrict future land use and development activities on their property. Early conservation actions through Candidate Conservation Agreements, with and without assurances, have kept dozens of species off the endangered species list. This policy is a promising way to expand those successes.

Second, by providing a clear commitment to consider prelisting actions in a permit or consultation process after listing, USFWS is giving landowners much-needed flexibility and a new risk management tool.⁴ Early actions for unlisted species may speed review of future development or activities on a property that could affect a listed species. The availability of those credits will give landowners an option to offset impacts of their activities that might otherwise be difficult or expensive to address.

Third, the policy proposes that credits can be transferred from one landowner to another. This approach will allow creation of a market where landowners or parties implementing conservation actions can bank and sell those credits to third parties who need them. The potential for a credit market may be the most important outcome from the policy as it will encourage more targeted conservation and protection on lands that are most important to species and will create new compensatory mitigation options for developers and federal agencies. Opportunities to offset harm to species on federal lands may generate some of the highest volumes of credits because projects on federal lands are often planned over many years for a predictable set of uses like logging, grazing and mining. This will create a new ecosystem marketplace in wildlife conservation in the U.S.

In addition, the policy proposes that credits accumulated under this program would be given a preference after listing, when USFWS requires some form of compensatory mitigation for a development project. By creating this preference, USFWS is providing greater predictability to participants that the credit-generation actions they take will have value in the future.

Contributing to conservation

A principle purpose of this policy is to benefit wildlife. By providing value for early conservation actions, the policy will result in more investment in species before they become threatened and prevent any need to ever consider protecting them with the ESA. In other cases, species that are candidates for listing may benefit enough that a listing is not needed by the time the agency reaches the point of making a listing decision.

^{4 &}quot;the Service will treat any of the [conservation] action as (1) a measure to minimize and mitigate the impact of the taking of an endangered or threatened species pursuant to Section 10(a)(1)(B) of the Act, or (2) an intended compensatory measure of a proposed Federal agency action subject to the consultation requirements of section 7(a)(2) or 7(a) (3) of the Act."



If a listing does occur, earlier investments in conservation will help protect existing populations and restore or enhance habitat in ways that benefit species and may result in more rapid recovery.

The policy requires that the benefits of actions for which credits are issued be greater than the harm or incidental take caused by future projects. As a result, the program is intended to secure a net improvement for species and to contribute to their recovery once they are listed.⁵ This is a higher standard than required by federal agencies under the ESA.⁶ It is similar to the 'net conservation benefit' standard applied in USFWS policy for the approval Safe Harbor Agreements and the 'net benefit to recovery' standard applied by USFWS for Recovery Credit Trading Systems.

In the context of compensatory mitigation, this policy may encourage outcomes that mirror those provided through conservation banks. Under conservation banking policy, credits are not issued to a bank owner until the conservation action has occurred and benefits are realized, as measured by approved metrics, criteria and standards. As a result, conservation banks reduce risks to species compared to in lieu fee and other programs that allow incidental take in exchange for the promise of future conservation actions that might not be successful. Because prelisting conservation actions occur before listing, prelisting actions produce a more certain outcome for wildlife.

Making it work

The most important considerations for the success of the Prelisting Conservation Action policy can be evaluated based on the purposes for which it was proposed:

- 1. Will it create benefit for species before they are listed as threatened or endangered under the ESA?
- **2.** Will it provide a clear benefit predictability to landowners and businesses?

Both of these are undermined by insufficient direction in the policy to define minimum standards for operation of a state registry and crediting program and lack of clarity about by whom, how and when crediting and debiting standards will be developed. It's not enough for landowners to know that there is some value in early action taken to conserve unlisted species. They also need some sense of how much value their actions warrant to be willing to take the risk of enhancing or expanding the populations of future endangered and threatened species on their property. This uncertainty further undermines confidence in how the system will work.

The following describes these issues in more detail and offers suggestions for improvement of a final policy. These limitations can be addressed to produce a clear policy that will increase the likelihood of benefits to species, result in some species not needing ESA protection, provide a predictable stream of offsets for compensatory mitigation needs, and produce a commodity for landowners to trade for compensation that may exceed that of traditional agricultural commodities.

All of these recommendations are built off the assumption that the only mitigation programs that will achieve their conservation goals are ones

⁵ The policy narrative states, "The benefit from the prelisting action, combined with the detriment from a later action, must result in a positive assistance to the recovery of the species."

⁶ Section 7 of the ESA requires applicants to avoid jeopardy and destruction and adverse modification of critical habitat and does not require federal projects or projects with another federal nexus to make a contribution toward recovery.



designed with significant transparency and separate responsibilities for different participants. Systems in which one authority sets the rules, recruits players, manages actions, limits prices, controls trades and monitors and reports on outcomes are designed to fail. By having clear roles, approval processes and transparency the actions of state agencies, USFWS, credit producers and buyers are much more likely to achieve the goals of this policy.⁷

Improve benefits to landowners and buyers: lower their risk

The policy proposes that actions for unlisted species will get credit and those credits can be used later, if a species is listed. The credits can be used either by the entity that produced them or credits can be sold or traded to a federal, state, business or landowner who needs the credit. Why would someone need a credit after species are listed? Development and other projects that could harm species or cause 'incidental take' either require a permit under section 10 of the ESA, or if they are a federal action require review under section 7 of the ESA.8 Requirements under either section can create a need for project proponents to offset or compensate for harm to the species, which could be provided by these credits

Yet before any of this happens — possibly years and years before — landowners need to take action to benefit species. When they do so under a state program, they create risk for themselves in the form of increased endangered species populations or habitat on their land and thus the potential for future regulation. If actions they take do not produce credits that have a use after listing, landowners who act with the best intentions to conserve a species could paradoxically face more restrictions on their property use. In addition, landowners who might themselves use the credits also take on risk if they don't know how much credit or value their conservation actions will yield. Lack of predictability in credit value will also undermine participation of buyers who could otherwise become early investors in advance purchase of credits as insurance before a listing decision occurs. If the policy provides too little predictability to landowners and buyers, it is unlikely to encourage widespread participation which will in turn reduce the ability of the policy to benefit wildlife. Unless these risks are reduced through revisions to a final policy it will probably fail to achieve meaningful participation.

These risks for landowners and buyers can be reduced or eliminated in three ways:

- Clarify crediting and debiting system development responsibilities, state program requirements and timeline for development.
- Expand options for credit use by connecting policy to conservation banking policy
- Allow landowners enrolled in CCAA programs to extinguish their assurances and move into state prelisting conservation programs if they are interested in doing so.

⁷ The U.S. Fish and Wildlife Service's Conservation Bank program and 2008 Corps of Engineers and EPA wetland banking regulation are the two best designed programs in defining clear roles, setting high standards and creating accountability that increases the likelihood of positive environmental outcomes.

⁸ Under section 10, these credits would count as compensatory mitigation measures after avoidance and minimization have already occurred. Under section 7 review for projects with a federal nexus, there is no explicit requirement for compensatory mitigation but credits could be incorporated into the project as 'mitigating measures' and therefore reduce the overall impact of the project.



Measuring credits and debits

It is unclear how USFWS intends for credit and debit methodologies to work. In some places the draft policy suggests states will run the program but there is a clear tension between that goal and section 6 of the policy and the narrative regarding the Paperwork Reduction Act. In section 6, USFWS says it will evaluate the beneficial impacts of conservation actions according to the same "criteria, standards and metrics that it uses to evaluate beneficial impacts of other mitigating or compensatory measures and the detrimental impacts" of other activities. In addition, it says that "speciesspecific metrics will be developed" to evaluate conservation actions and assign credits, but lacks any identification of who will develop them. Given that this section of the policy is focused only on USFWS and not states, it's reasonable to assume that USFWS believes it is the agency that will develop species-specific crediting and debiting methodologies. This doesn't make sense given the:

- proposed role for states,
- need to develop these systems while species are still unlisted,
- lack of USFWS expertise on conservation needs of unlisted species years or decades before listing, and
- need for landowners to have predictable credit value when they sign up in the program, not months or years later when a species is listed.

During the comment process on the Advance Notice of Proposed Rulemaking that preceded this policy in 2011, USFWS received extensive comments from state wildlife agencies and non-profit organizations that provided detailed guidance on how to design

crediting and debited systems and accountable offset program administration. In particular, the policy needs to clearly demarcate responsibility for credit and debit system development to states — or set it up as a joint responsibility — at the beginning of the program's development. And USFWS needs to set up an actual approval process for these program or for credit/debit methodologies — currently the policy only includes a USFWS review of a state program for consistency. This recommended approval process is not meant to tie states' hands or to usurp their authority over these species, but rather to commit the USFWS to a course of action in the future that creates predictability for states, landowners and other credit generators and credit buyers.

Improving these aspects of the policy would help achieve a goal of Secretary Jewell's Secretarial Order No. 3330 which directs Department of Interior agencies to insure that, "mitigation opportunities are identified as early in the permitting process as possible."

Recommendations: The policy should be revised to create an approval process for USFWS to accept a state program and confirm its own commitment to accept the credits approved by the state program and commit itself to use the same methodologies to track future debits if the species is listed. Beyond guidance already provided in the policy, the policy should describe the following elements that are necessary to the success of state programs:

- Strategies or conditions through which landowners will earn credits
- Metrics with which to calculate credits and debits
- Consideration of baseline and additionality in calculating credits



- Standards for credit verification and registry and monitoring
- Trading mechanisms for the exchange of credits and administration of a market
- Description of how a registry will be operated
- Commitments to transparency on program operation and transactions to participants and USFWS
- Compliant and monitoring systems
- Proposed strategies and goals for ensuring a net benefit to species recovery

USFWS should offer to work with states who are interested in using the U.S. Army Corps of Engineers' Regulatory In lieu fee and Bank Information Tracking System (RIBITS) as a tool with which to track prelisting actions, the generation of credits and credit transactions. While states should be free to set up and use their own system, RIBITS is an available tool with which to administer a state program.

Predictability for the Department of Defense

Few federal agencies have as much potential to lead extensive prelisting conservation action and use credits provided by their own actions and those of others as the Department of Defense. Department of Defense agencies have expanded authorities to work on private lands and be proactive in efforts to conserve wildlife through an installation's Integrated Natural Resource Management Plans (INRMPs). A lack of specificity about when, by whom, and how credit and debit metrics and

measurement systems will be developed and approved creates risk to the Department of Defense's participation in this program. If adopted by USFWS, revisions suggested elsewhere in this analysis could reduce uncertainty for the Department of Defense, however an alternate approach is for USFWS to use a conference opinion process for the subset of unlisted species that are candidates for listing.

Recommendation: Clarify the option for USFWS to use section 7(a)(4) of the ESA to provide a conference opinion to cover federal actions that describes the system through which credits and debits will be calculated.

An overall system to manage risk and encourage conservation actions

In policies developed between the 1990s and today, USFWS has created a system of incentives, assurances, and permits that encourages investment in unlisted species and creates mitigation tools after listing.

Consider Candidate Conservation Agreements (with and without assurances), Safe Harbor Agreements, Habitat Conservation Plans, Recovery Credit Trading Systems, and assurances offered to landowners restoring endangered and candidate species habitat through USDA Natural Resource Conservation Service 'Farm Bill' programs. In many ways, this new Prelisting Conservation Action policy is a new tool that helps complete the set of tools and incentives available under the ESA. Unfortunately, the policy does too little to make that connection.

Conservation Banks: Conservation banks are compensatory mitigation tools that require permanent protection of a bank site and actual accrual and measurement of species benefits before credits can be



released for any offset purpose. Their goal is simply to offset a proposed project's adverse impacts that have not been avoided or cannot be further minimized. This is very similar in concept to Prelisting Conservation, yet the draft policy makes no mention of banks. There is no reason that sites enrolled under a state's Prelisting Conservation program(s) could not be treated as potential future banks if property owners are willing to add or amend their commitments to meet the requirements of Conservation Banking policy.

Recommendation: USFWS should make the connection to Conservation Banks clear by doing two things. First, whether a transition occurs before or after species listing, the agency should commit to allow the value of credits from a Prelisting action to be used as credits in a bank and commit to the same baseline for the site if it is rolled under banking policy. Second, the draft policy needs to provide guidance on how a site or credits moving under banking policy would be treated to ensure a net conservation benefit from the bank. This is important because the bank standard is just to offset adverse impacts, whereas the Prelisting Conservation policy seeks to create a net benefit. Third, USFWS should provide encouragement for such transitions before species listing by committing to prioritize review of proposed banks built out of prelisting investments. Doing so is consistent with the commitment USFWS has already made in the draft policy to give preference to offset credits from Prelisting Conservation when evaluating compensatory mitigation options for section 10 permit and through section 7 consultation.

CCAAs: As drafted, the policy proposes that participants in Candidate Conservation Agreements with Assurances (CCAAs) cannot get credit for their actions under this policy — and vice versa. Why? CCAAs are a form of risk management tool. Landowners make investments in species conservation, hoping those actions will be enough to prevent a listing and conserve the species. However, if a listing still occurs, landowners have assurances through an incidental take permit that give them certainty about their future ESA obligations. A better option is to encourage movement of participants between these programs. Landowners in the Prelisting program who, before listing, decide they want assurances, should be allowed to move to a CCAA if one is available. This may require additional conservation actions on their part but the option should still exist. Landowners in a CCAA programs should be able to move the other way — if they are willing to extinguish the assurances and future incidental take permit they would receive they should be able to move seamlessly from a CCAA into a Prelisting credit program to take advantage of the opportunity to offer or sell credits to those who face compensatory mitigation obligations. By allowing landowners to move between programs before listing USFWS would lower risks to landowners and give them more opportunities to get value from their stewardship actions.

Recommendation: Before listing, provide landowners with more flexible opportunities to move between CCAA and Prelisting Conservation programs.



Benefits for species

The draft policy already includes the most important commitment USFWS could make to ensure that it benefits species — it commits Prelisting Conservation programs to achieve a net benefit to the recovery of species. However, there are many ways that the policy could further ensure that unlisted species rebound and listed species achieve recovery gains.

Service area. Various compensatory mitigation policies for wetlands and species dwell extensively on the subject of 'service area.' Where can credits be bought or offsets produced to balance harmful activities? The draft policy currently lacks any standards or requirements for state programs regarding service area, only limiting transactions to occur within a state's political boundaries. The 2008 Recovery Credit System guidance uses language requiring that transactions occur within areas that are biologically appropriate.

Recommendation: The draft policy should be amended to require transactions to occur within a geographic area that is biologically appropriate to offset adverse effects. Such a provision provides strong guidance to states and landowners and others producing credits without being overly restrictive. As long as state registries can track and properly account for cross-state transactions, there is no reason to prohibit them if it is biologically appropriate to do so.

Clearly define conservation benefit. USFWS has many definitions in place that define the goals of a permitting or review process. This is one of the most important aspects of a trading program to get right because clear goals make it possible for states and third parties to understand how to build a system or project that is

consistent with policy. The current draft proposes an entirely new term — 'positive assistance to the recovery of the species' — that is duplicative of 'net conservation benefit' and 'net benefit to recovery' already in use in Safe Harbor Agreement and Recovery Credit System policy. It makes no sense for USFWS to create yet another term, when the goals and likely operation of this policy so closely match those other examples. In addition, the term 'assistance' is associated with an action and not an outcome and is not an appropriate word to use to measure impacts to wildlife species. It is the outcome of assistance that matters, not the act itself.

Recommendation: Replace "positive assistance to recovery" with "net benefit to recovery" throughout the policy. There is additional guidance in the 2008 policy that helps define the term and can be incorporated into this policy with few changes.

Plans. The policy wisely requires a plan be available as the basis for USFWS approval of a program and credit quantification. The plan helps ensure that conservation actions are connected to strategies that will reduce threats affecting a species and therefore are likely to result in an improvement in species status. It should not matter who authors the plans that states choose to use as long as a plan achieves this goal. However, the draft policy does not adequately describe what USFWS will do if it believes that strategies in a plan are not likely to succeed or if it believes a species is not likely to be able to tolerate the impacts associated with trading debits for credits in different locations. In many cases, USFWS should seek to approve both a credit and debit calculation methodology and commit itself to use that methodology after listing. However, in cases where the



outcomes of conservation management are unclear or the types of debiting activities uncertain, USFWS could reserve the right to develop or approve a debiting methodology later in the life of a prelisting conservation program.

Recommendations: The policy should include a caution that in some cases USFWS may conclude that crediting and trading approaches are inappropriate for species and it cannot approve a program. The policy should indicate reasons why USFWS may decide to approve a credit calculation methodology at the beginning of a state program but may delay approval of a debiting methodology. Finally, the policy should include in its list of ways to achieve a net benefit to species recovery, the option for USFWS to not allow debits in certain recovery areas that are too important to the species to lose.

Reserve pool. Even the best designed projects have a risk of failure. Natural disasters, bankruptcies, change in landownership, biological invasions, and other unforeseen circumstances can change the outcomes of a project overnight. The current policy proposes to require a reserve of credits to achieve a net benefit, but a better approach is to require an additional reserve on top of any strategies to achieve a net benefit.

Recommendation: In order to receive USFWS approval, a state program should be required to include a reserve pool of credits as a guarantee against project failure.

Conclusion

On July 22, 2014, the U.S. Fish and Wildlife Service released a promising new policy that will allow any landowner

to take action to benefit any declining wildlife or plant species. The policy works by encouraging state wildlife agencies to create programs for species conservation and a system to measure or register beneficial actions for a species. Those benefits may help restore animals and plants and keep them from ever needing protection under the Endangered Species Act. However, if the species are put on the endangered species list, the policy essentially turns the credits accumulated from beneficial action into a commodity that can be sold to any federal or non-federal landowner who has a project that is harming listed species. In addition, if the landowner who produced the credits has future impacts after listing, they too can use those credits to offset harm. The program will benefit species because regardless of whether an ESA listing occurs, the overall outcome of credits and offsets must ensure that the species receives an overall benefit. The policy is the first of its kind that applies to all private, local, state and federal lands. It includes a clear guarantee from the agency that it will not only allow prelisting credits to be used to offset harms to species requiring mitigation under the ESA, but also gives preference to those prelisting credits.

Despite these strengths, the draft policy still needs significant improvement to benefit wildlife and be of interest to a broad set of landowners. America has extensive experience with crediting and debiting programs in conservation and USFWS needs to strengthen requirements on state programs and help clarify the role of credit generators, market administrators and buyers. USFWS needs to formally approve state programs for unlisted species because its acceptance of those credits may have a significant impact on the fate of species that will be under its authority if later listed under the Endangered Species Act.



Short Analysis of responses to USFWS questions

The policy requires an overall positive assistance to the species; how should we define this benefit?

USFWS has unnecessarily complicated the policy by creating a new term ('overall positive assistance') that is identical to an existing one ('net benefit to recovery'). The 2008 Recovery Credit Trading System policy requires that transactions balance credits and debits to achieve a net benefit that would contribute to the species recovery. The policy should be amended to use the same term because the definitions of the two are indistinguishable.

The policy requires that a prelisting conservation action be part of a State plan. What approach should we take if there is no State plan for the species?

There is no reason to limit programs to only use state plans. It should be a state's choice which plan they use to decide an appropriate strategy to conserve species. These are generally species for which little information exists and beggars cannot be choosers. Use the plan(s) that contains the best information to develop conservation strategies for a species. Don't limit states from using a document based on plan authorship.

For those species for which the State does not have the authority or jurisdiction, should we revise the policy to allow prelisting conservation actions for these species to receive credit? If so, how would these prelisting conservation actions be tracked and monitored?

Yes, if USFWS, another federal agency, or a non-federal party is willing to build a registry system that can track and monitor conservation actions for such species and track credit transactions, and carry out adequate measuring, monitoring and oversight obligations that are needed to ensure successful implementation and maintenance of the conservation actions. Especially since some state agencies have no jurisdiction over plants, involvement of additional parties is needed to encourage effective prelisting conservation.

How should we quantify the value of the voluntary prelisting conservation actions and credits?

Existing USFWS, U.S. Army Corps of Engineers, and state guidance (e.g. California) already provide significant detail on appropriate and effective credit accounting system design. USFWS should not be quantifying the credit or debit methodologies because these are supposed to be state run programs, but USFWS should approve them. Thus, the policy should include criteria for approval that can be gleaned from other existing programs.



Based on the species and the nature of the actions, how should we determine the percentage set aside?

The draft policy is overly restrictive in limiting methods to create a net benefit. Currently it only allows the goal to be achieved by withdrawing a certain percent of credits from use. A better approach is to follow Recovery Credit System policy and set a guideline (not restriction) for balancing credits and debits that allows use of biologically appropriate mitigation ratios, restricting use of debits to areas not essential to recovery, limiting the activities available for debiting, and withdrawing credits from use. Each of these methods as well as others may be an appropriate way to ensure a net benefit. In addition, USFWS should require a certain reserve of credits to be set aside to deal with potential project failure. By setting a 10 percent 'buffer' or reserve, states would have a consistent target with which to build out credits.

The policy allows for the transfer of credits. How could we develop an uncomplicated trading system mechanism?

Don't. It is not USFWS' job to develop trading system mechanisms. This is an area of state authority and the policy gives states license to run their own programs. The policy appropriately already requires states to create registries of credits. However, before any listing USFWS should not require states to inform the agency of each transaction, as proposed in the draft policy. Instead, the policy should focus on a requirement that USFWS be informed of the volume and implementation success of credits before any listing process may be initiated or during a listing process. In addition, if a listing does occur, the policy should require states to provide updates on credit transactions that occur after listing.

All species pictured are either candidate or proposed species for listing, or have recently been listed under the Endangered Species Act.

Cover Photo: Graham Beard Tongue (*Penstemon* grahamii), Michael Vandenberg, 2011

Page 3: Red Knots (Calidris canutus rufa), Greg Breese, USFWS, 2009

Page 4: Arizona Treefrog (Hyla wrightorum), Jeff Servoss, USFWS

Page 5: Bartram's Scrub Hairstreak Butterfly (Strymon acis bartrami), Holly Salvoto, USFWS

Page 6: Graham Beard Tongue (Penstemon grahamii), Kevin Megown, USFS

Page 7: Washington Ground Squirrel (Urocitellus washingtoni), USFWS

Page 8: White Fringeless Orchid (Plantanthera integrilabia), Thomas G. Barnes, USFWS

Page 9: Red Knot (Calidris canutus rufa), Greg Breese, USFWS

Page 10: Rio Grande cutthroat trout (Oncorhynchus clarki virginalis)

Page 11: White Bark Pine (Pinus albicaulis), Mark A. Wilson, Wikimedia.org

Page 12: Magnificent Ramshorn (Planorbella magnifica), Andy Wood, USFWS

Page 13: Georgia Aster, (Symphyotrichum georgianum) Craig Huegel (http://hawthornhillwildflowers. blogspot.com/)

Page 14: Yellow-billed Cuckoo (Coccyzus-americanus), http://commons.wikimedia.org



























15

