

Habitat Exchange: FWS Formal Recommendations

The Service uses the term Habitat Exchange to collectively describe programmatic approaches for sage-grouse mitigation, including the Colorado Habitat Exchange, Wyoming Conservation Exchange, Nevada Conservation Credit System (CCS), Oregon effort, and Utah effort.

The recommendations that follow would provide for robust habitat exchange programs as compensatory mitigation mechanisms for sage-grouse. These recommendations must be met for the Service to provide full regulatory predictability to these programs.

Recommendation: The Service should identify how much the value of Habitat Exchange credits must exceed the value of debits so that we are reasonably confident that a net conservation gain is being provided.

Pros:

A simple, logical approach to determine if a net gain is achieved.

Cons:

The level is based on what leadership decides is reasonable, not a statistics based confidence interval.

Consistency:

After avoiding and minimizing project impacts to the maximum extent practicable, compensatory mitigation should provide a net conservation gain. The method used to measure debits and credits should provide the Service reasonable confidence that a net conservation gain is provided. The CO Habitat Exchange Working Group assumes that the Habitat Quantification Tool measures both debits and credits with a high degree of accuracy. However, the Habitat Quantification Tool cannot measure with 100% accuracy and credits and debits are measured using slightly different methods. Given the current methods, it may be prudent to see a higher number of credits in the CO system to increase confidence of a net conservation gain. In other systems the methods of measuring credits or debit could themselves be modified such that, for example, the net gain is built in to the credit and thus a credit is more than a debit.

Net conservation gain could also be realized by setting aside credits which are never to be used as mitigation, such as in a reserve or retirement account. The CO Habitat Exchange proposes to achieve a net conservation gain with a reserve pool that is also used to address any potential credit reversals. The reserve pool is populated with 4% of the value of credits and if credit projects are developed in areas that have potential oil and gas or mineral development then an additional 7% is added to the pool. In this case, the reserve pool is a risk management tool used to ensure the value of credits used as mitigation is not degraded. In order to achieve a net benefit the reserve pool cannot be depleted to zero. Additional conservation benefits will

Comment [SG1]: I got a little confused by the subsections for consistency and degree of change. I think there's overlap – perhaps we can combine into one? Or is consistency really the background info?

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Comment [SG2]: Consistent terminology with Framework. I changed throughout

Comment [SG3]: Repetitive to first statement and complicates the issue of ratios versus building in the net benefit into a credit or debit calculation itself.

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Comment [SG4]: Is this really more background on CHE?

Moved (insertion) [1]

Comment [SG5]: Suggest deleting. This may be true for CHE but would not apply to metrics that build in the ratio needed for net gain into the debit or credit side, such that a 1:1 on paper actually is a net gain in reality. I don't think we can make a blanket recommendation here that may be perceived for all exchanges.

Deleted: Thus, estimates of the balance between debits and credits will not be exact. It will be prudent to assume that the percentage of credits should be higher than debits to increase confidence that credits do exceed debits and that a net conservation benefit is provided.

Moved up [1]: The method used to measure debits and credits should provide the Service reasonable confidence that a net conservation gain is provided.

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Moved up [2]: The reserve pool is populated with 4% of the value of credits and if credit projects are developed in areas that have potential oil and gas or mineral development then an additional 7% is added to the pool.

be achieved if conservation certificates are purchased, however there is no certainty as to the quantity of conservation certificates that will be purchased. According to the CO Habitat Exchange Manual, the maximum level of conservation benefit would be between 4 and 11% plus the value provided by conservation certificates. If any unintentional reversals occur, the level of conservation benefit would be decreased.

Potential Mechanisms:

- Requiring such a high reserve account contribution that the Service has confidence that the reserve account will never be completely exhausted
- Requiring a retirement account, separate from the reserve pool and consisting of credits that can never be used for mitigation
- Using adjustment factors tied to qualitative habitat features, making it relatively easier to generate debits from each functional acre lost and harder to generate credits from each functional acre gained
- If credits and debits are measured equally and uncertainties are mitigated through risk management tools, applying a mitigation ratio overall (e.g. need credits equaling 1.5x the number of debits to offset)
- If credits and debits are measured equally and uncertainties are mitigated through risk management tools, requiring credits to have a longer duration than the impacts they offset (e.g. 20-year credit project to offset 10-years of disturbance)

Degree of Change From Proposed Programs:

The Colorado Habitat Exchange and Wyoming Conservation Exchange rely on uncertain conservation certificates and the consumable reserve accounts for net gain.

Nevada's CCS currently has an adjustment factor for the importance of habitat (priority, general, and other habitat). Functional acres are adjusted to a greater degree when calculating debits than when calculating credits.

The Oregon approach adjusts for importance and uncertainties in the crediting methodology which is based on functional acres. The habitat quantification tool, however, is still under development. Beyond the credit amount needed for an individual project to meet a net conservation gain standard, the Oregon approach employs a 50% reserve pool contribution as risk management against uncertainties from credit reversals.

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Comment [LZC6]: See Section 2.2.2: Management Importance Factor in NV CCS

(Example: taken a certain piece of land, a +/- 100 f.a. change would result in 110 credits/200 debits (or 100c/150d, or 85c/100d, depending on the category of habitat)
This approach further incentivizes conservation in habitat that has been deemed important, and (to the degree market forces can) incentivizes avoidance of that important habitat

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Comment [LZC7]: But I don't like this option I think we should not have this mechanism in the final recommendation document, but I put it here for the sake of the discussion. This approach seems like a step backward to the over-simplified mitigation ratios that we have had,

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Comment [LZC8]: This could make the later recommendation on project duration confusing, but the two aren't inconsistent since the later recommendation sets out minimums

In the NV CCS, "The stated duration in the permit or lease for each anthropogenic disturbance plus an additional 10 years will be used as a starting point for establishing the debit project duration for impacts with limited term impacts."

Comment [SG9]: Does this make more sense as a title?

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Recommendation: We should recommend the frequency (semi-annual, annual) of reporting the Exchange balance of credits and debits. We should recommend the Exchange be tracked in RIBITS, alongside conservation banks. If reports indicate that the reserve pool credits plus the conservation certificates have dropped below the (soft trigger) level identified by the Service, the CHE should increase the required contributions to the reserve pool. If the reserve pool plus the conservation certificates drop below the lowest acceptable level (hard trigger) identified, the Service should suspend the agreement with the CO Habitat Exchange.

Comment [SG10]: Appropriate here?

Those discussions are in the works with HQ and the Corps. El I know is willing to try and I think it would solve some of our uncertainty problems. I will see the RIBITS folks July 12th week and have a discussion. RIBITS is going to start tracking water quality trading too, so they're open to modifications and Deblyn is all for it. This might be one condition of us providing any reg. certainty too...

Pros:

The addition of a hard and soft trigger would increase confidence that Habitat Exchanges are providing a net conservation gain.

Cons:

If the triggers are not conservative enough, Habitat Exchanges might operate while not providing a net conservation gain.

Degree of Change From Existing

Each of the Colorado, Wyoming and Nevada exchange manuals call for annual reporting of all credits tracked by the Credit System but do not have specific adaptive management triggers related to the reserve pool or other program operations.

The Oregon approach calls for adaptive management in several ways: 1) within one year of program implementation identify measureable objectives and adaptive management trigger points that would indicate changes to the program are needed, 2) conduct annual adaptive management reviews, and assesses whether trigger points or other indicators suggest changes are needed, and 3) revisit the estimated probability of project failure as part of regular adaptive management reviews and adjust the reserve contribution requirement accordingly.

Comment [SG11]: I don't think this is true. We're asking for triggers and reports to provide certainty in the program as a whole, whether their goal is NNL or gain, etc.

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This is a variation on asking for no net loss. The Service asks for a net benefit to the species for Habitat Conservation Plans

Comment [LZC12]: I'm really talking about CO, WY, and NV here; I don't know what OR is doing.

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Recommendation: Debits should be offset by credit projects with at least commensurate duration. Minimum duration for credit projects used to offset debits that last 10 years or less should be 10 years. When debits are offset by dynamic (sequential) credit projects, the consecutive credits should be in 30-year increments at a minimum.

Deleted: If a debit will last for less than 10 years, it must be offset by a credit of at least ten years in duration. If debits are anticipated to last more than ten years, the minimum credit duration should be 30 years.

Comment [SG13]: Totally agree on this edit.

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The sagebrush ecosystem is slow to respond to restoration and management efforts. There may be a time lag between restoration of a site and use by sage-grouse.

Pros:

Consistent with Service recommendations in NV and OR.

Cons:

The CO Habitat Exchange wants to allow 10-year [dynamic](#) credits.

Degree of Change From Existing:

The minimum credit duration for the Colorado, Wyoming, and Nevada habitat exchanges is 10 years. [Oregon does not specify a minimum term](#). The Nevada CCS and Oregon exchange establish 30-year minimum credit duration for dynamic offsets ([with Oregon limiting the total program to less than 50% dynamic permanent credits](#)), while the Colorado and Wyoming habitat exchanges have no additional duration requirements for dynamic offsets.

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The NV Conservation Credit System (CCS) has 310-year minimum credit duration for static offsets and 30-year minimum credit duration for dynamic credits. The Oregon habitat exchange effort is favoring 30-year minimum credit duration.

Comment [SG14]: I really think we should separate out reg. pred. from CCAA overlap issues. See old draft. But, if we keep them together, see edits below.

Comment [SG15]: a bit unclear on this language. I can see the ARDs asking "what does this mean"?

Recommendation: The Service shall provide, where appropriate, regulatory predictability through the habitat exchange program. To receive regulatory predictability, a credit provider would need to provide a conservation benefit commensurate with that provided by a CCAA. This could be facilitated if that level of benefit is identified as a minimum HQT value.

[Additionally, landowners enrolled in CCAA/CCAs can provide compensatory mitigation if the actions related to mitigation are additional to the minimum conservation measures required by the CCA/CCAA.](#) Terms and conditions will need to be developed to ensure consistency [and accounting](#) between CCAAs, SGI, and the CHE.

Pros:

[Provides a pilot program/proof of concept for developing Service pre-listing and mitigation policies. Incentive for early conservation actions from both industry and land owners. Incentive for mitigation, and continuation of the mitigation program, regardless of listing status.](#) Potentially increase landowner participation. [May obviate](#) the need for landowners to obtain or keep a CCAA on the same lands. Ability to fund conservation measures on individual properties through mitigation dollars could further secure positive conservation actions.

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Cons:

Offering predictability to landowners through a habitat exchange program could decrease participation under CCAAs.

Consistency:

[The Framework, Barrick Agreement, and draft pre-listing policy have set the stage for allowing the Service to provide some level of regulatory certainty to mitigation programs.](#)

Comment [SEP16]: Is this necessarily a con? CCAAs are good for public relations for the Service, but also create an administrative burden. If the same amount of conservation can be achieved through an exchange, then I don't know if it matters who administers the effort?

Comment [SG17]: I agree. Plus the mitigation agreement may be longer than the CCAA

Comment [SG18]: This section is addressing overlap of CCAAs and mitigation, not regulatory predictability per se.

Informed by national policy discussion and consistent with the GRSG Mitigation Framework: Landowners enrolled in CCAA/CCAs can provide compensatory mitigation if the actions related to mitigation are additional to the minimum conservation measures required by the CCA/CCAA. In order to track conservation actions and ensure additionality, conservation measures and

mitigation-related conservation actions should be independently accounted for and reported to each respective program.

Degree of Change From Existing:

All four Exchange programs have indicated desire to attain regulatory predictability from the Service. The Service has provided some regulatory certainty language in the Barrick Agreement.

The Nevada CCS and Oregon approach allow for credit developers enrolled in CCAAs to work with the Administrator to generate credits if the benefits generated are additional to the minimum conservation measures required by the CCAA. In addition, CCA/CCAAs in Oregon may be used to demonstrate that lands meet the minimum eligibility requirements of having a neutral or positive effect on sage-grouse before becoming a credit provider.

Recommendation: Avoidance and minimization must be applied to the maximum extent practicable prior to the use of compensatory mitigation for unavoidable impacts. A habitat exchange should require avoidance and minimization at least equivalent to that required by the BLM RMP amendments. Valid existing rights would need to addressed at least equivalent to how they were on BLM lands.

Pros:

This is the most practical method identified to determine sufficiency of avoidance and minimization.

Cons:

Will require a subjective assessment by the Service to determine if a habitat exchange is sufficient.

Consistency:

Consistent with what the Service has recommended to BLM.

Degree of Change from Existing:

All four Exchanges state a requirement for avoidance and minimization to be accepted into the program. However, for non-federal lands, only Oregon has the ability to actually require avoidance and minimization across the board as part of a state regulatory mechanism. WY has some avoidance and minimization through the core area strategy. NV does not regulate private land. CO oil and gas developments will have some requirements through state permitting, but the level and consistency application of avoidance and minimization is an unknown.

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Comment [SEP19]: Be aware that operators in CO do not have the best record for implementing avoidance and minimization practices. Since COGCC's 1200-series rules went into effect in 2009, there have been 5 or 6 projects with surface disturbance within the 0.6 mile lek buffer zone, and about 10 times as many surface disturbance sites within 4 miles of a lek. COGCC doesn't even have good records of this, but hopefully with the tracking database being established in accordance with the CO Governor's EO, these issues will be identified. As we discussed Monday, the burden of proof that avoidance and minimization have occurred to the max extent possible should fall on the operator. How can we formalize or have confidence in this self-reporting? Should the Exchange require third party verification before an impactor can purchase credits?

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Recommendation: Habitat Exchanges should include discrete, qualitative input in addition to the quantitative input from the Habitat Quantification Tool. Compensatory mitigation provided should exceed the net effect of the taking - the demographic impact to the population. To accomplish this, a qualitative analysis should be used in conjunction with the Habitat Quantification tool when calculating debits and credits. The qualitative analysis should be conducted by a group that is of or designated by the state to guide sage-grouse monitoring and conservation efforts. In Colorado that would likely be Colorado Parks and Wildlife.

Comment [LZC20]: Both Colorado and Wyoming have lost consideration of limiting habitat types from their HQTs. Is that something that we want to be included? If so, are we confident that it could be captured here, or do we want it wired into the HQT or Manual? (CO and WY had it in the HQT previously, NV addresses it as an adjustment factor when calculating debits/credits from functional acres.

Pros:

Helps Habitat Exchanges target populations and habitat types. Encourages development of conservation strategies for Service Areas.

Cons:

Additional workload for the state.

Comment [SG21]: Suggest deleting, especially for future exchanges. Hopefully we are pushing for service areas to be drawn based on population needs – planning ahead - and I believe that was some of the factor for the CHE 5 service areas. However, sometimes even within large service areas, this qualitative input is needed, especially in the absence of a robust conservation plan for the state/local area.

Consistency:

Adding qualitative input aligns with the following guiding principles from the CO Habitat Exchange:

- Science-based, employing the best available science, including expert opinion, to determine the most appropriate conservation actions and quantification methods;
- Focused on meeting priority habitat and species conservation goals of the State (consider the example in Service Area 2 with the Meeker/White River and Parachute Piceance Roan populations—qualitative input on conservation goals in this area is vital);
- Complimentary to other conservation approaches (forthcoming WAFWA Management Zone Regional Mitigation Strategy);
- Meets the standards and approval of key regulating entities, if and when regulatory approval is necessary (i.e., the Service for species listed under the ESA);
- Tailored to local community conditions (qualitative input could provide better conservation response to local threats to the species and habitat);
- Flexible and adaptable to specific local community and environmental conditions.

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Degree of Change From Existing:

The Colorado and Wyoming habitat exchanges rely solely on the quantitative vegetative measurements to calculate debits and credits.

To calculate debits and credits the Nevada CCS applies adjustment factors to functional acre outputs of the Habitat Quantification Tool. The adjustment factors reflect the qualitative aspects of habitat importance (core, priority, and general habitat categories), seasonal habitat scarcity, and the proximity of the credit project to the debit project.

The Oregon approach is linked directly to the state plan, which provides several decision support tools and other mechanisms to ensure mitigation is properly placed. In addition,

because the program will be an in lieu fee approach, Oregon can decide on priorities and solicit specific credit projects to address local priorities.