# **CCS ADMINISTRATION OF CREDITS ON PUBLIC LANDS**

# Finding

Current guidance and frameworks regarding credit development are largely focused on private lands. While many project requirements and provisions remain the same for credits that may be developed on public lands<sup>1</sup>, several elements need to be updated to account for differences due to federal land management. These differences need to be addressed in the CCS manual to allow development of credits on public land. The improvement recommended here pertains only to debit project proponents who choose proponent driven mitigation on public lands. The case for entities interested in developing credits on public lands for open sale is not available at this time.

# **Improvement Recommendation**

# **Summary**

Two aspects of federal land management provide challenges for meeting the durability and additionality provisions of the CCS when credits are developed on public lands. First, the multiple use mandate through federal legislation results in the inability for federal agencies to commit to a lack of future impacts from proposed activities on credit sites in the same way that is expected on private lands. Private lands enrolled in the CCS are expected to limit activities in the landowner's control that could have negative effects on credits or face intentional reversal for those credits. Federal land managers have very few options to limit proposed activities on public land that could have impacts on existing credit sites. The second aspect of federal land management which makes credit development different is the concept that federal agencies are the stewards of public lands and are required to maintain a certain level of habitat quality. Therefore, in order to meet additionality requirements of the CCS and expectations of public land managers, only uplift credits will be available for development on public land. Uplift credits represent habitat that has been created above and beyond the current conditions.

The process for developing credits on public land will be as similar as possible to the process on private lands with the following changes:

1. The Sagebrush Ecosystem Council currently does not approve transactions that purchase credits wholly from private land. If a proposed transaction involves credit generation on public land, the Sagebrush Ecosystem Council will review and approve an associated Credit Establishment Plan (CEP) that outlines the process for fulfilling a credit obligation consistent with the CCS requirements and provisions.

2. Credit projects on public land will only be eligible for uplift credits. This is intended to reflect the fact that the responsibility for stewardship rests with the land management agency, not with a credit developer. However, maintenance and monitoring of any uplift will rest with the credit developer.

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<sup>&</sup>lt;sup>1</sup> "Public land" in this document refers to land owned by governments and managed for public benefit. The SETT anticipates that a majority of credit development on public land will occur on BLM and Forest Service managed land, and the document is written to reflect such. Credit projects on other public lands (e.g., state, county, etc.) may be possible depending on authorizations.

3. Credit projects on public land will be subject to an increased public lands reserve account contribution, separate from a private lands reserve account.

4. While extensive efforts will be made to locate public land credit sites in areas with low potential for development, if existing credit sites are impacted by new anthropogenic disturbances, the impacted credits will be prorated for the remaining term and assigned to the new disturbance. This will mean that the debit obligation assumed by the new disturbance will have the additional amount of the prorated credits added to the original obligation that is required to be offset.

5. Pinyon-Juniper (PJ) removal projects will utilize the Habitat Suitability Index for uplift calculations in lieu of field collected data.

A proposed framework and details for credit development on public lands are provided below.

## Specific Improvement Recommendation

The specific improvement recommendation will be described in several parts and pertains to proponent driven mitigation on public lands only. Section 1 will discuss the general process proposed whereby debit project proponents will develop a CEP that follows with all aspects of the CCS on public lands. Section 2 will detail the process for both uplift opportunities. Initially, credit development on public lands will be limited to meadow improvements and PJ removal.

## Section 1.

If a debit project proponent desires to generate credits on public land to offset an anthropogenic impact, a detailed plan will be developed that must be approved by the Sagebrush Ecosystem Council. This plan will be developed in coordination with federal land management agencies and will include the following elements:

- 1 Administrative Project Overview
  - Proponent, location, type of project, anticipated timeline
- 2 Current Land Status
  - Proposed treatment areas, NEPA status (i.e., complete vs. incomplete), existing rights and management, potential and existing land uses, and current or planned conservation activities
- 3 Mitigation action summary
  - Project purpose and offset summary, detailed treatment proposal, anticipated credit result, credit term/project life, credit release schedule, and reserve account summary
- 4 Project management/monitoring
  - Tables detailing specific project actions and frequency, locations, action goals, timeline, monitoring efforts, anticipated costs, and financial assurances
- 5 Management plan terms
  - Credit developer responsibilities, permittee cooperative agreement, land management agency role, remedial action

Initially, actions on public land will be limited to PJ removal projects, and meadow enhancement projects. This is due to the complexity, uncertainty, and difficulty of actions targeting other restoration actions in upland environments. PJ treatments in phase 1 and 2 generally have immediate, measurable uplift success. Meadow habitats are a limiting factor for sage grouse regardless of land ownership, and thus meadow uplift will be specifically encouraged on public lands in the same way they are encouraged on private lands. Meadow projects

will be heavily screened in collaboration with state and federal partners for probability of success. Future improvements to the CCS targeting wildfire restoration are under development.

The SETT anticipates coordinating with federal agencies on the authorization process for proposed projects at the initial stages of project planning. However, the responsibility for obtaining federal authorization for an SEC approved credit project on public land rests solely on the project proponent. The CCS will not give credit for NEPA costs. The SETT and the authorizing agency will work together to ensure that the two authorizing documents (the relevant NEPA documents and the SETT required documents) include the same actions which will accomplish the same mitigation offset as measured by the HQT. Project implementation may commence when the SEC approved CEP has been signed, and the federal authorization has been issued.

#### Section 2.

#### Public Land Credit Development Option 1: Pinyon-Juniper Removal

Pinyon-Juniper encroachment represents both a direct and indirect threat to greater sage grouse populations (Commons et al. 1999; Doherty et al. 2008; Atamian et al. 2010; Casazza et al. 2011; Knick et al. 2013: Coates et al. 2017). Direct threats include the removal of predation opportunities by a wide variety of predators, and the loss of understory habitat (Hartzler, J.E. 1974; Blomberg et al. 2013; Coates et al. 2014; Howe et al. 2014; Prochazka et al. 2017). Indirect threats include decreased water availability, a change in wildfire dynamics, and behavioral changes in sage grouse leading to population declines (Bates et al. 2005; Miller et al. 2005).

The CCS uses PJ layers derived from USGS products (see section 3.2.3: Conifer Removal in the HQT Scientific Methods Document), and mandates the removal of all PJ from stewardship projects where appropriate. The CCS has provided an incentive structure to accomplish that goal. This incentive structure takes the form of PJ removal factors. These factors are 1.2 and 1.5 for phase 1 and phase 2, respectively. These factors are multiplied against the credit project's current local scale habitat function to calculate the project's projected local scale habitat function, which is then multiplied with site scale data and results in functional acres of initial uplift due to PJ removal. PJ removal on private lands makes credits available both from removal actions and from stewardship of the underlying habitat value. On public land however, only the uplift credits from the removal effort will be available, which will likely result in larger acreage projects necessary to generate the same number of credits as a similar project on private lands. For proponents who choose PJ removal projects on public land, this assumed increased project size would more likely result in landscape scale habitat improvements and population survival rates (Baruch-Mordo et al. 2013; Coates et al. 2017) than a similarly credited project on private lands that includes stewardship credits. In order to more appropriately quantify the uplift goals and landscape effect of tree removal, the Habitat Suitability Index (which specifically models landscape variability) will be used in lieu of field data for the site scale value. The conifer removal factors will then be applied to this site scale value. A fuller discussion on the utility of this method can be found in the rationale section of this document. When PJ removal projects are proposed on public lands, a desktop analysis will be performed to determine credits generated. Similar to PJ removal on private lands, the project proposal will include a plan for treatment maintenance. On public land PJ removal project inspection and re-treatment will occur every subsequent 10 year period prior to the project end. For example, if a PJ removal project has a 30 year term, then re-treatment must occur in year 10 and in year 20. This re-treatment cost will be covered in the financial assurances. In addition to re-treatment costs all removal projects occurring in phase 2 will require a prophylactic invasive weed treatment, if the land management agencies and the SETT conclude the treatment is warranted. This will be required based on an assumption that a more degraded and at-risk understory will be associated with phase 2 removal and that a pre-emergent herbicide applied to the treatment area will prevent a greater spread of invasive weeds than might otherwise be expected. This will only be expected to be applied with the initial treatment, not with subsequent re-treatments.

## Public Land Credit Development Option 2: Meadow Restoration

Meadow systems on public lands may represent a small percentage of the total area, but meadow systems have an outsized impact on sage grouse life history requirements, and within the CCS are considered to be a limiting habitat. To this end meadow improvements are incentivized by the CCS with an 8X factor multiplied to meadow functional acres. The process for meadow improvements will remain the same as with private land with respect to quantification, credit release, maintenance, and monitoring. Within the project proposal the SETT will ensure increased emphasis on coordination with federal agencies and permittees to ensure that new infrastructure or operational changes will be maintained throughout the life of the credit term.

## Public Land Credit Development Details:

Stewardship responsibilities are mandated to the land management agencies on public lands, thus all credits developed on public land will be restricted to functional acres resulting from uplift activities. Initially, the SETT will focus on PJ removal and meadow improvement projects. The SETT is engaged in working with biologists and land managers to identify priority areas and further frameworks are being developed that may include wildfire restoration and rehabilitation activities.

If existing credit sites on either private or public land have a participant contract (i.e., sold or transferred), and are impacted by authorized uses requiring mitigation (Legislative Council Bureau File No. T006-18A), the authorized use (debit project) will be required to replace the impacted credits at a prorated amount. The following scenario demonstrates this concept. Credit site A is providing credits for a 30 year term. Debit site B has a total debit calculation of 1000 credits, 100 of which are located within credit site A. In addition to the 1000 credits required to offset the impacts, the project proponent will have to mitigate for the 100 credits that have 10 years left on the term from credit site A, which will be prorated. The prorated credits will be  $100 \times (10/30) = 33.33$ . The total mitigation obligation for debit project B will then be 1033.33 credits.

Currently in the CCS, adjacent land use impacts which invalidate enrolled credits (which includes impacts from public lands) are covered by the private lands reserve account. The SETT proposes that those credits be covered by a public lands reserve account. Debit project proponents will analyze and fulfill credit obligations regardless of whether impacts are located on private land or public land. Credits generated by credit developers will be not be reduced at the time of sale if they become impacted indirectly by an authorized anthropogenic disturbance. This will result in offset discrepancies, which will be fulfilled by a public land reserve account. At the time of sale, the credits impacted will be withdrawn from the public land reserve account to cover the discrepancy in habitat value, and terms will be matched directly or via prorating. The example used above illustrates this concept. Credit site A has 1000 credits on private land awaiting potential sale, and debit project B has a credit obligation of 1000, 100 of which are contained within credit site A. Debit project B will still offset 1000 credits, and credit site A will be able to sell 1000 credits. At the time credit site A sells 1000 credits for a 30 year term, 100 credits will be withdrawn from the public land reserve account with terms (either direct or prorated) that equal 30 years. The credits that are withdrawn from the public land reserve account under this scenario will be used to satisfy the term. Credits may be returned to the reserve account if the disturbance ceases operation before the term. Due to this obligation, and to the increased risk of invalidation of credit sites on public land, all public land credit development will be expected to contribute 25% to the public land reserve account. The SETT anticipates a medium probability but a high consequence of these types of invalidations, requiring a higher contribution to the reserve account.

For PJ removal, maintenance and monitoring will be restricted to returning in 10 year intervals and treating subsequent re-growth. Likewise, reporting will be restricted to reports documenting the re-treatment efforts. Credit projects involving meadow improvements will remain as outlined in the manual. Intentional and unintentional

reversals will be handled as currently outlined in the CCS manual (CCS Manual 2.1.9: *Use of Reserve Account and Financial Assurances*).

Additionality requirements (CCS Manual 2.3.3: *Additionality*) will apply to all credit development across the board, regardless of location. Uplift credits must demonstrate habitat benefit beyond improvements that are planned or would happen regardless of mitigation obligations.

# Rationale Supporting Recommendation Details

Credits developed on public lands have always been intended to be a large part of the CCS because approximately 80% of sage grouse Habitat Management Areas are located on Bureau of Land Management and U.S. Forest Service Land. There has also existed a strong desire from all stakeholders to have proponent driven mitigation available on public lands. Credits on public land however may have decreased durability due to the fact that the management of public land is intended to be multiple-use, and cannot completely protect credit sites. Any credits invalidated on public lands will be required to be replaced by the project that has caused the invalidation. While these invalidated credits can be accounted for in the CCS, if credits are impacted, moved, and created elsewhere multiple times this will cause an indeterminate loss to the sage grouse. Credits on private lands are better positioned to be protected from direct anthropogenic impacts, and have a maximum of a 14% reserve account contribution possible. The SETT anticipates an additional 11% contribution to the reserve account, to equal a total of 25%, may be sufficient to incorporate the risks involved in proponent driven mitigation on public lands. The 25% contribution to the public land reserve account contribution is meant to anticipate the increased risk of project invalidation due to multiple use of federal lands (less assurance of durability), losses from force majeure events, as well as the risk of private land credits being invalidated by actions on public land, and the possibility of indeterminate losses if credit sites continue to be invalidated and moved around the landscape. As with reserve account contributions for credits developed on private land, the contribution may be adjusted in the future if the Sagebrush Ecosystem Council finds that the reserve account is not adequately covering these risks.

Many options for habitat improvements exist on all sage grouse habitat. Because projects on public land will inherently carry more risk of invalidation, mitigation projects should be limited to actions that have a high degree of confidence in the success of the proposed actions. PJ removal presents a clear opportunity for successful landscape scale habitat improvement for a species with large scale habitat use patterns and landscape scale population declines (Coates et al. 2017). The CCS will not require the maintenance of understory habitat values within PJ removal projects. Only uplift is required to be maintained. The uplift value which comes from PJ removal is found more in the removal of predation opportunities, and in the avoidance of future understory degradation. Thus, using the HSI as a measure of large areas of habitat being restored to sage grouse use seems most appropriate. The SETT also anticipates that the use of the HSI in lieu of field data will allow proponent driven mitigation to locate, plan, and place improvement projects in areas of the highest value for the species. The SETT intends for this type of project to be less focused on site-scale, understory improvements and be more focused on landscape scale improvements for sage grouse related to decreased predation, decreased erratic behavior associated with trees, and preventing understory degradation in future years (Svejcar et al. 2005; Blomberg et al. 2013; Prochazka et al. 2017). Invasive weed treatments applied as a prophylactic treatment in phase 2 PJ projects are intended to help any invasive weed introductions by machinery associated with the project in more at-risk areas. PJ removal projects on private lands are expected to maintain the understory condition as measured by the HQT, supported by the stewardship credits. Where those expectations are different on public land, only a preventative measure will be required when projects are completed in phase 2 PJ. Future improvements relating to the siting of credit sites may be incorporated as new and improved scientific products are made available. Similar to PJ projects, meadow improvements are needed in Nevada. Dissimilar to PJ projects however, meadow projects will probably be complex in practice. The SETT believes these projects are incentivized sufficiently through the limiting factor multiplier, but that planning and implementation continue to be large challenges.

All projects submitted to the SEC will demonstrate a high degree of confidence that they will be maintained in cooperation with authorized uses, compliance with land use plans, and anticipated infrastructure.

#### Citations

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# Appendix A: suggested CCS Manual Changes

CCS MANUAL SECTION	REVISION TYPE	GUIDANCE/REQUIREMENT REVISION
Throughout Document	Additional language	For each reference of "management plan" add "or credit establishment plan."
Throughout Document	Additional language	For each reference of "conifer" add "Pinyon-Juniper" or "PJ"
2.1.9	Additional Language and Subsection	<text><text><text><section-header><text></text></section-header></text></text></text>
		account allocation to be approved by the Oversight Committee as part of the CCS adaptive management process. The Administrator can propose the required

contributions be adjusted upward or downward as needed to account for

insufficient or excessive amounts of reserve credits.

#### **Debit Projects that Impact Existing Credit Project**

<u>Through the credit site validation checklist, extensive efforts will be made to</u> <u>locate public land credit sites in areas with low potential for development.</u>

A debit project that directly or indirectly impacts an existing credit project on public or private land generates debits for both the habitat loss from the debit project as well as the invalidation of existing credits already used to offset impacts from a previous debit project. The debits representing the habitat loss from the proposed debit project is calculated based on the functional acre loss from the proposed debit project within the boundary of the existing credit project. The debits representing the invalided credits are calculated by taking the functional acre loss from the proposed debit project within the boundary of the existing credit project and the pro-rating the functional acre loss by the remaining life of those credits. For example, if the credits from the existing credit project had a duration of 30 years and the remaining life of those credits is 10 years, then the invalidated credits are multiplied by 10/30. If the credits from the existing credit project were permanent credits, then there is no pro-rating and credits for the full credit loss must be replaced. The prorating formula used is as follows:

Equation 1:

$$C_p = \frac{T_c}{T_d} * C$$

Where:

new

subsections

2.2.3 Credit

and Debit

Calculation

Cp = Number of prorated credits required to be replaced

Tc = Term remaining on original contract

Td = Term of original credit project

C = Number of credits impacted

#### **Public Land Credits**

On public lands, only uplift credits are available in compliance with approval from the appropriate land management agencies. Credits will not be awarded for stewardship of habitat on public lands, as these do not meet the additionality standard. Guidance for determining baseline functional acres for credit projects on public lands is provided in Section 2.3.4: Calculating Credit Baseline Habitat Function.

2.3.2 Credit Project Area and Management Action Types	new subsection	Public Land CreditsOn public lands, credits are only awarded for uplift activities implemented andmaintained according to approval by the appropriate land managementagencies. Credits will not be awarded for stewardship of habitat on publiclands. Guidance for determining baseline functional acres for credit projects onpublic lands is provided in Section 2.3.4: Calculating Credit Baseline HabitatFunction.
	additional	
2.3.3 Credit	language to	Ownership & Stewardship
Site Eligibility	existing	On public lands, authorization to perform and maintain habitat improvements
	subsections	must be attained from the appropriate land management agencies. The clearance

		required will be project specific and may come in many forms (e.g., performing actions in areas with already existing NEPA clearance may only require a Determination of NEPA adequacy). Authorization for activities on public land may be obtained at any point by a project proponent, however credit establishment plans which include credit generation through the CCS must be approved by the Sagebrush Ecosystem Council in order for credits to be available for offset.
2.3.3 Credit Site Eligibility	modify existing language	<b>No Imminent Threat</b> However, in order to develop credits on public land within a grazing allotment, the Credit Project Proponent <del>must either be the permittee or must</del> have a <del>n</del> cooperative agreement with the permittee <del>that are necessary</del> to ensure grazing practices are compatible with the <del>performance standards</del> uplift actions defined in the management plan associated with the credit project.
2.3.3 Credit Site Eligibility	new language in existing section	Site Protection Circumstances relating to site protection on public land is less clear as compared to private lands due to the mandate for multiple use. The SEP recognizes that site protection is limited, and information on credit invalidation on public lands can be found in section 2.2.3: credit and debit calculation, and the reserve account contribution for public land can be found in section 2.3.4: Reserve Account Contribution.
2.3.4 Calculating Credit Baseline Habitat Function	Modify council- approved subsection	<b>Credit Baseline for Uplift</b> Credits generated from stewardship projects will be subject to the regional standard baseline, however credits generated subsequent to the signing of a management plan (uplift credits) will use the stewardship project'spre-project condition at the time of initial verification as baseline. Calculating uplift credits in this manner will allow for the possibility of credits generated from 0 function up to any function measured by the HQT for any appropriate seasonal type. Uplift credits on public lands which are not associated with stewardship actions will use pre-project conditions as the baseline for credit calculations.
2.3.5 Developing Credits on Public Lands and Other Designations	Edit second paragraph and add additional subsections	In order to generate credits on public lands, the debit project proponents must have a credit establishment plan that follows the CCS and is submitted and approved by the Sagebrush Ecosystem Council, and approval for all proposed action from the relevant public land management agencies. The project proponent is not required to own all grazing permits; however, a cooperative plan including grazing permittees must be submitted with the credit establishment plan approved by the council to reduce the risk of not meeting performance standards established for the credit project and thus invalidation of the credits due to incompatible practices. Before credits are issued a participant contract must be signed that <b>NEPA Authorization</b> The CCS will not give credit for NEPA costs. The responsibility for federal authorization of a proposed project rests solely on the credit developer. The SETT and the authorizing agency will work together to ensure that the two authorizing documents accomplish the same mitigation offset as measured by the HOT. Project implementation may commence when the SEC credit establishment plan has been approved, and the federal authorization has been issued. Project

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proponents are encouraged to include the analysis of any proposed proponent driven mitigation projects in the authorization of the initial project requiring mitigation. The use of existing NEPA cleared projects and areas is encouraged, however coordination with the SETT will be crucial as some aspects of existing NEPA cleared areas may conflict with sage grouse conservation values (e.g., extremely poor surrounding habitat, surrounding and future land uses, existing rights, wildfire risk, etc.).

#### **Project Types**

The CCS will initially focus on improvements related to PJ removal and meadow/riparian habitat. Further project types may be approved as quantification and administrative methods are developed.

## <u> Pinyon-Juniper Removal (PJ)</u>

For credit projects that remove pinyon juniper on public lands, the calculation of credits will be similar to PJ removal on private lands with the exception that the resulting credits will be calculated using a desktop analysis using the Habitat Suitability Index in lieu of field data collection. See section 2.2.2: Pinyon-Juniper Removal Factors and section 3.2.3: Conifer Removal in the HQT Scientific Methods Document for additional information. Credits resulting from the desktop analysis will be subject to the HQT version control, and may be released subsequent to the credit establishment plan being approved by the SEC and when all treatments outlined in the plan have been completed. The credit establishment plan may include phased work plans and will include a credit release schedule. PJ removal projects will include a re-treatment in 10 year intervals with a re-treatment 10 years prior to the term end as the final treatment. For example, a removal project with a 30 year term will include the initial treatment, and re-treatments in years 10 and 20. For removal projects occurring in phase 2 juniper, a one-time prophylactic herbicide treatment for invasive weed establishment will be required if the land management agency and SETT conclude a treatment is warranted. Meadow Improvements Meadow habitat improvement credits will not be calculated differently on public lands. Approved projects will need to demonstrate a high degree of confidence that they will be maintained in cooperation with authorized uses, compliance with land use plans, and anticipated infrastructure. **Developing Credits on Public Lands** Circumstances relating to site protection on public land is less clear as compared to private lands due to the mandate for multiple use. The SEP recognizes that 2.4.1 Credit new site protection is limited, and information on credit invalidation on public lands Site Protection subsection can be found in section 2.2.3: Credit and Debit Calculation, and the reserve account contribution for public land can be found in section 2.4.3: Reserve Account Contribution. -Reserve Account Contribution for Developing Credits on Public Lands The reserve account contribution for credits on public land will be set at a flat 2.4.3 Reserve additional rate of 25%. This includes the standard base rate, the maximum competing land Account subsection Contribution use score (due to the multiple use mandate on public lands), a maximum score for the probability of adverse impacts from wildfire, and an additional 11% contribution due to a reduced ability to protect credit sites on public land. The

		additional 11% may be adjusted in the future based on the frequency of withdrawals.
2.4.4 Credit Release	additional language for subsection "Restoration Management Actions"	<b>Credit Release for Projects on Public Land</b> The release of credits for projects implemented on public land will be detailed in the credit establishment plan approved by the SEC, and will conform to the above guidelines. Credits being issued in advance of quantification as described above will trigger a more in-depth review by the SETT which will involve using outside professional judgement from federal, state, and local partners (e.g., NDOW, BLM, USFS, UNR, NDA, NACO, local CDs, permittees, etc.) in order to develop a recommendation to the SEC for approval.
Section 3.1 Generating Credits	Additional Language	This section will be updated to reflect processes and suggestions for coordinating with federal agencies for project proposals, development, NEPA authorizations, and subsequent monitoring requirements.