AGENDA

Montana Sage Grouse Oversight Team (MSGOT)
January 30, 2018: 11:00 a.m. – 2:00 p.m.
Montana State Capitol, Room 152

11:00: Call to Order, John Tubbs, Chair and DNRC Director

- Administrative Matters:
  - Approve Minutes December 15, 2017
  - Affirm Future Meeting Dates
    - Friday May 4: 10:00 a.m. – 2:30 p.m.
    - Friday September 14: 10:00 a.m. – 2:30 p.m.

11:05: Reports and Implementation of Executive Order 12-2015

- Reports from Individual MSGOT Members
- Montana Sage Grouse Habitat Conservation Program
- MSGOT Discussion, if any

11:20: Federal Agency Partner Reports

- USFS
- USFWS

11:30 – 11:40: Grant Agreement Executive Action: The Nature Conservancy Hansen Livestock Company Conservation Easement

- Introduction and MSGOT Discussion
- Public Comment
- MSGOT Executive Action

11:40 – 11:50: DEQ Water Protection Bureau Programmatic Exception from the Consultation Requirement for Renewal and Modification of Certain Pollutant Discharge Elimination System and Montana Ground Water Pollution Control System Permits

- Introduction and MSGOT Discussion
- Public Comment
- MSGOT Executive Action

11:50 – 12:15: Conservation Spotlight: Management to Remove Encroaching Conifers, NRCS, Kyle Tackett

12:15 – 12:35: BREAK

12:35 – 1:45: Development of Sage Grouse Mitigation Informational: Special Focus on Portions of the July DRAFT Guidance Document & How the HQT and Guidance work together

- Program Presentation
- MSGOT Discussion
- Public Comment

1:45: Public Comment on Other Matters

NOTE: Agenda item times are approximate. Actual times may vary by up to one hour. Attendees who may need services or special accommodations should contact Carolyn Sime (406-444-0554 or csime2@mt.gov) at least 5 working days before the meeting.

MONTANA SAGE GROUSE
Habitat Conservation Program

MONTANA SAGE GROUSE OVERSIGHT TEAM AGENDA ITEM BRIEF SHEET
JANUARY 30, 2018

Handout 1

AGENDA ITEM: STEWARDSHIP FUND GRANT AGREEMENT FOR HANSEN LIVESTOCK COMPANY CONSERVATION EASEMENT

ACTION NEEDED: APPROVE EXECUTION OF GRANT AGREEMENT WITH THE CONTINGENCIES

SUMMARY:

The Sage Grouse Stewardship Fund was established as a source of funding for competitive grants to establish ongoing free-market mechanisms for voluntary, incentive based conservation measures that maintain, enhance, restore, expand and benefit sage grouse habitat and populations on private lands, and public lands as needed.

The Nature Conservancy (TNC) submitted a grant application requesting funds to reduce encroaching conifers and purchase a perpetual conservation easement on Hansen Livestock Company. During its May 24, 2016 meeting, MSGOT elected to split TNC's application into two projects. MSGOT awarded funding for the conifer reduction portion ($202,500) but elected to reconsider the conservation easement portion later. On November 18, 2016, MSGOT awarded $750,000 for the conservation easement, contingent on TNC securing and documenting matching funds from NRCS or elsewhere by September 30, 2017.

On June 2, 2017, MSGOT approved reallocation of the $202,500 originally awarded to reduce conifers towards purchase of the conservation easement. TNC explained alternative funding to implement the conifer reduction was secured and that it would proceed without using Stewardship Fund dollars. On September 29, 2017, TNC provided written notice to the Program that matching funds from NRCS-Agricultural Land Easement (ALE) Program funds were secured. This letter was provided to MSGOT in conjunction with the December 15, 2017 meeting. Additionally, TNC noted that the appraised value of the easement exceeded preliminary expectations, but that other matching sources would be secured to complete the easement.

The easement covers 13,890 acres of private land in core habitat in Beaverhead County. The total $952,500 award counts toward the $5 million cap that MSGOT can award prior to designating a Habitat Quantification Tool (and finalizing administrative rules) and has been accounted for considering MSGOT's other awards from the Fund that was provided to MSGOT during the Nov. 3, 2017 meeting.

State funds from the Stewardship Fund will be matched with NRCS ALE Program funding ($4,950,000). TNC has already entered a cooperative funding agreement with NRCS, which secures and commits the federal matching funds. Additional private funding sources will match state and federal funds to complete the project.

The NRCS will be a party to the easement, along with the State, the private landowner, and TNC. NRCS procedures for completing easements funded through the ALE Program include document review and approval by NRCS. While TNC has completed preliminary negotiations with the landowner, formal negotiations among all parties have not yet begun. The parties to the easement are expected to complete their work and close the easement in 2018.

TNC and the Program have developed a grant agreement for MSGOT's consideration and possible approval for execution now but prior to completion of a final easement document. In recognition that unexpected events may occur that would affect the parties' ability to complete this easement, several contingencies were incorporated into the grant agreement which would excuse the state from transferring Stewardship Fund dollars to TNC.

The contingencies are:

> SECTION 20: CONDITIONS SUBSEQUENT TO SIGNING OF THIS AGREEMENT. Upon the happening of any one of the following listed events or conditions before Closing, the State or its agent's duty to perform under the Agreement shall be excused, and the State shall be entitled to recover from TNC funds distributed pursuant to this Agreement, if any:
>
> 1. TNC's funding sources become unavailable; or
> 2. The terms of the Conservation Easement, and the other reports described in Section 8 above are not approved by MSGOT or are not agreeable to the State, NRCS, or TNC; or,
> 3. The parties to this grant agreement cannot successfully negotiate terms of the Conservation Easement that are agreeable to Hansen Livestock Company; or,there has been a significant change in the physical nature of the property, caused by natural disaster or land owner activities, so that the land loses capacity to provide sage grouse habitat and produce credits up to 30 days prior to closing.
>
> SECTION 21: OBLIGATION OF FUNDS. The Sage Grouse stewardship funds are obligated upon execution of this agreement. Should Sage Grouse Stewardship funds not be available, the State shall promptly notify TNC.
>
> SECTION 22: SUBORDINATION OF EXISTING LIENS OR MORTGAGES. The closing instructions will direct the closing agent to ensure that any existing liens or mortgages on the property are either made subordinate to the conservation easement or paid in full and released at closing.

Additionally, a section of the grant agreement requires the Program to comply with the Montana Environmental Policy Act (MEPA) prior to disbursement of any funds from the Stewardship Fund account. The Program will release an environmental assessment (or impact statement if appropriate) for public review and comment after negotiation of all the proposed easement terms is completed.

Executing the grant agreement with these contingencies now commits funds from the Stewardship Fund account while the parties complete the next steps in the process and the Program fulfills its MEPA requirements. This will signal the state's commitment to moving this proposal forward. MSGOT review and decision on the environmental assessment and approval of the final easement will be sought later in 2018.

PROGRAM RECOMMENDATION:
The Program recommends MSGOT execute the grant agreement with TNC with the contingencies to enable TNC to purchase a conservation easement on the Hansen Livestock Company property.

SAGE GROUSE HABITAT CONSERVATION PROGRAM

SAGE GROUSE HABITAT STEWARDSHIP FUND GRANT AGREEMENT REVIEW ROUTE SLIP

Agreement Number: SG-TNC-0006

TNC: The Nature Conservancy Hansen Livestock Company Conservation Easement

Program Contact: Carolyn Sime Phone: (406) 444-0554

Reviewer	Date In	Date Out	Initials
Amy Personette	_____	_____	_____
Joan Specking	_____	_____	_____
Carolyn Sime	_____	_____	_____
Mark Bostrom	_____	_____	_____
Anna Miller	_____	_____	_____
Danna Jackson	_____	_____	_____
Patrick Holmes	_____	_____	_____
FSO	_____	_____	_____
Amy Personette	_____	_____	_____

Contract Specific Sections: Section 1, 2, 3, 4, 7, 11
List below any changes to Standard Sections:

_____
_____
_____
_____

Please review the enclosed Grant Agreement and pass it on to the next reviewer when finished. Please return the document back to the Sage Grouse Habitat Conservation Program as soon as possible.

SAGE GROUSE HABITAT CONSERVATION FUND GRANT AGREEMENT
CONSERVATION AND RESOURCE DEVELOPMENT DIVISION
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

TNC: The Nature Conservancy

Grant Title: The Nature Conservancy Hansen Livestock Company Conservation Easement

Grant Agreement Number: SG-TNC-0006

Declarations

Attachments

- Attachment D – Executive Order 12-2015
- Attachment E – Conservation Easement

FOR DNRC USE ONLY

Approved

Maximum amount under this Agreement: $ $952,500

Agreement No. SG-TNC-0006

-Source of Funds -

Amendment No._____

Fund Name	**Fund No.**	
Sage Grouse Stewardship	02318	
Subclass	**ORG**	**Percent**
540S1	3060	100%

Division _____

FSO _____

Legal _____

MSGOT_____

Appropriation Authority - HB 261 2016/2017 Biennium and HB 228 2018/2019 Biennium

MONTANA SAGE GROUSE HABITAT STEWARDSHIP GRANT AGREEMENT

WHEREAS, the U.S. Fish and Wildlife Service has identified habitat loss and fragmentation as a primary threat to greater sage grouse in Montana (80 Fed. Reg. 59858-59942 (Oct. 2, 2015)); and

WHEREAS, the 2015 Montana Legislature passed and the Governor signed the Montana Greater Sage Grouse Stewardship Act (MCA § 76-22-101 et seq.) (the "Act") establishing Montana's Sage Grouse Conservation Strategy; and

WHEREAS, the purpose of the Act is to provide competitive grant funding and to establish ongoing free-market mechanisms for voluntary, incentive-based conservation measures that emphasize maintaining, enhancing, restoring, expanding, and benefiting sage grouse habitat and populations on private lands and public lands, as needed, that lie within core areas, general habitat, or connective areas (MCA § 76-22-102); and

WHEREAS, there is a Sage Grouse Stewardship Account (the "Account") in the state special revenue fund and the 2015 Montana Legislature appropriated funds to maintain, enhance, restore, expand, or benefit sage grouse habitat and populations for the heritage of Montana and its people (MCA § 76-22-109); and

WHEREAS, the Montana Sage Grouse Oversight Team (MSGOT) reviews and selects projects for funding and the Montana Department of Natural Resources and Conservation (DNRC) disburses funds from the Account as directed by MSGOT (MCA § 76-22-109(3)); and

WHEREAS, the Sage Grouse Habitat Conservation Program provides assistance, input, and guidance to MSGOT on all matters before it and administers and implements Executive Order 12-2015 and the Greater Sage-Grouse Stewardship Act (Executive Order 12-2015, ¶ 5); and

WHEREAS, Executive Order 12-2015 and the Greater Sage Grouse Stewardship Act set forth that development in sage grouse core areas, general habitat, and connectivity habitat shall observe the mitigation hierarchy of avoidance, minimization, reclamation / restoration, and compensation; and

WHEREAS, MSGOT shall retroactively calculate and make available credits for leases and conservation easements purchased with funds disbursed from the Account after May 7, 2015, but prior to the adoption of final administrative rules (MCA § 76-22-105(3);

THEREFORE, this Grant Agreement is entered into to further sage grouse habitat conservation in Montana and create opportunities for compensatory mitigation to offset impacts of development consistent with the Act and Executive Order 12-2015.

THIS GRANT, administered by DNRC for MSGOT and funded by the Montana Legislature implements the policies, procedures and objectives of the Act to maintain, enhance, restore, expand, or benefit sage grouse habitat and populations for the heritage of Montana and its people. Consistent with the Act, conservation credits shall be calculated retroactively based on each Conservation Easement purchased with funds disbursed from the Account, and the credits shall be made available to the ongoing free market mechanism of a credit and debit exchange.

By approval of MSGOT, this grant is made by DNRC, acting on behalf of and under the authority of the State if Montana, to The Nature Conservancy (hereinafter referred to as the "TNC,") a non-profit corporation organized under the laws of the District of Columbia, with a local address of 32 S. Ewing, Suite 215, Helena, MT 59601, according to the following terms and conditions:

SECTION 1. PURPOSE. The purpose of this Grant Agreement (Agreement) is to grant funds to TNC to assist in TNC's purchase of a conservation easement over approximately 13,890 acres of Hansen Livestock Company located in Beaverhead County, Montana, and more particularly described on **Attachment A** which is incorporated by reference (legal descriptions of lands included within the **Conservation Easement**).

SECTION 2. TERM. The effective date of this Agreement is the date of last signature of State or TNC, as reflected below. The term of this Agreement shall be from the effective date until three years after closing, at which time the State and TNC will execute a Notice of Closure of Grant Agreement, memorializing the termination of this Agreement and the parties' mutual fulfillment of all duties, responsibilities and obligations hereunder.

SECTION 3. ROLES.

Montana Sage Grouse Oversight Team (MSGOT) – The MSGOT is authorized by the Act and is administratively attached to the governor's office as prescribed in MCA § 2-15-121. MSGOT's duties, among others, are to evaluate and select applications to the Sage Grouse Stewardship Account for funding. Also, MSGOT is required to review compensatory mitigation plans, track conservation credits, and retroactively calculate and make available credits for leases and conservation easements with funds disbursed from the Sage Grouse Stewardship Account prior to the adoption of the rules named in MCA § 76-22-104.

Sage Grouse Habitat Conservation Program (SGHCP) – The SGHCP is authorized by Executive Order 12-2015 to administer applicable provisions of the Executive Order, the Act, and provide assistance, input, and guidance to MSGOT on all matters before it. The SGHCP is attached to the Department of Natural Resources and Conservation for administrative purposes as prescribed in MCA § 2-15-121.

Department of Natural Resources and Conservation – The DNRC serves as administrative host for the SGHCP. House Bill 2 appropriations for administration of the SGHCP and the Sage Grouse Stewardship Account were made by the 64th Legislature for the 2016/2017 and the 2018/2019 bienniums to the Conservation and Resource Development Division in DNRC. DNRC disburses funds from the Stewardship Account as approved and directed by MSGOT.

Upon request from TNC or its agent, the Program Manager of the SGHCP or her designee will explain or clarify the terms and conditions of this Agreement and may provide limited technical assistance to TNC. The Program Manager of the SGHCP or designee will monitor expenditures to assure payment eligibility. The MSGOT, SGHCP, and DNRC assume no responsibility for TNC's obligation to faithfully perform the tasks and activities necessary to implement this Agreement. Similarly, TNC assumes no responsibility for the State's obligation to faithfully perform the tasks and activities necessary to implement this Agreement.

The SGHCP Program Manager for this Agreement is Carolyn Sime at (406) 444-0554, csime2@mt.gov, SGHCP/CARDD; PO Box 201601, Helena, MT 59620-1601. All requests for information and assistance, claims for grant funds, and reports shall be submitted to the SGHCP Program Manager or her designee.

The TNC contact for this Agreement is Jim Berkey, High Divide Headwaters Director, 32 S. Ewing, Suite 215, Helena, MT 59601, 406-370-6905.

SECTION 4. GRANT SCOPE. The scope of this Agreement is described in **Attachment B** which is herein incorporated by reference**.** Supporting documents, and attachments from the Montana Greater Sage-Grouse Stewardship Fund Account Grant Application received from TNC, are also herein incorporated by reference.

SECTION 5. BUDGET AMOUNT. An Agreement budget showing anticipated expenditures is provided in Attachment C and incorporated herein by reference. Any transfer of funds between budget categories in an amount exceeding 10 percent of the total grant amount must have prior written approval of the SGHCP Program Manager.

SECTION 6. AVAILABILITY OF GRANT FUNDS. TNC acknowledges and understands that grant funds are made available through appropriation from a state special revenue account. Costs incurred prior to the effective date of this Agreement are not eligible for reimbursement unless approved by MSGOT as part of the grant application or determined by the SGHCP Program Manager to be an emergency. Pre-award costs incurred but not approved by MSGOT may be counted as match funds upon written approval by MSGOT. The SGHCP Program Manager may consider an expenditure to be for an emergency if it is necessary to protect the imminent loss of life or property; or to prevent significant imminent environmental damage.

SECTION 7. GRANT DISBURSEMENTS & CLOSING DATE. Closing of the acquisition of the Conservation Easement shall occur on or before a date which will be mutually agreed upon by the parties (hereafter "Closing" or the "date of Closing"). If necessary, the date of Closing may be extended in writing for a reasonable period by mutual written agreement of the parties. Closing shall occur at First American Title Company of Montana located at 15 South Idaho Street, Ste. 2, Dillon, MT 59725 (the "Closing Agent"). Upon MSGOT approval of the Agreement, including the tasks described in Attachment B, and the Conservation Easement, the grant amount shall be placed into escrow with the Closing Agent in accordance with the parties' closing instructions. The amount placed into escrow shall not be more than the amount approved by MSGOT ($952,500). Disbursal of the grant funds from escrow shall be in accordance with the parties' Closing instructions.

SECTION 8. REPORTS. Any reports that may be required are set forth in Attachment B and shall be submitted to the State not later than 30 days prior to closing. Closing instructions shall be provided when available.

SECTION 9. RECORDS AND AUDITS. TNC will maintain appropriate and adequate records showing complete entries of all receipts, disbursements and other transactions relating to this Agreement. DNRC, the Legislative Audit Division, or the Legislative Fiscal Division may, at any reasonable time, audit all records, reports, and other documents that TNC maintains under or in the course of this Agreement to ensure compliance with its terms and conditions**.**

SECTION 10. PROJECT MONITORING. MSGOT or their agent (e.g. SGHCP Program Manager) may monitor and inspect all phases and aspects of TNC's performance to determine compliance with this Agreement, including the adequacy of records and accounts. During the Contract term, MSGOT or their agent (SGHCP Program Manager) may present specific areas of concern to TNC, providing opportunity to better accomplish the goals, objectives, and conditions of this Agreement.

SECTION 11. EMPLOYMENT STATUS AND WORKERS' COMPENSATION. The MSGOT, SGHCP, and DNRC are not owners or general contractors for the project and do not control the work activities or work-site of TNC or any contractors that might be engaged for completion of the project. TNC is independent from and is not an employee, officer or agent of the State of Montana or its agencies. TNC, its employees and contractors are not covered by the Workers' Compensation laws applicable to the state or its agencies. TNC is responsible for making sure that its employees are covered by Workers' Compensation Insurance and that its contractors are in compliance with the coverage provisions of the Workers' Compensation Act.

SECTION 12. EQUAL EMPLOYMENT. Any hiring of employees under this Agreement shall be on the basis of merit and qualifications, and there shall be no discrimination on the basis of race, color, religion, creed, sex, national origin, age, disability, marital status, or political belief. "Qualifications" mean qualifications as are generally related to competent performance of the particular occupational task.

SECTION 13. INDEMNITY AND LIABILITY. TNC shall defend, indemnify and hold harmless the State of Montana, its agencies and agents from and against any and all claims, demands, or actions for damages to property or injury to persons or other damages to persons or entities arising out of or resulting from this Agreement that are attributable to, or arise from, the scope of TNC's duties and responsibilities under this Agreement.

SECTION 14. COMPLIANCE WITH APPLICABLE LAWS. All work must be in accordance with all federal, state and local law, statutes, rules and ordinances.

14.1. It shall be TNC's responsibility to obtain all permits, licenses or authorizations that may be required from government authorities prior to initiation of work to be eligible for funds under this Agreement. Consultation with the Sage Grouse Habitat Program in accordance with the Governor's Executive Order 12-2015 is required prior to entering this Agreement.

14.2. Procurement of labor, services, supplies, materials, and equipment shall be conducted according to applicable federal, state, and local statutes. The execution of this Agreement shall not be taken to imply that any required permits or authorizations issued by DNRC or other state, federal or local agency will be approved.

SECTION 15. COPYRIGHT - GOVERNMENT RIGHT TO USE. Any graphic, photographic, or other material developed under this Agreement may be copyrighted by TNC with the condition that the State of Montana will have a royalty-free, nonexclusive, and irrevocable right to produce, publish or otherwise use, and authorize others to use the work for state government purposes.

SECTION 16. CONSERVATION CREDITS. This Agreement precedes the State's efforts to retroactively calculate and make available conservation credits on the Property, consistent with the Act, particularly M.C.A. §76-22-103(4), 105(3). Such credit calculation shall occur after Closing. TNC acknowledges that generation and maintenance of conservation credits is an indispensable purpose of this Agreement, and a primary reason for the grant to acquire the Conservation Easement. Proceeds from credits generated as a result of this Agreement shall reimburse the Sage Grouse Stewardship Account when they are sold. TNC shall not have any ownership or interest in the conservation credits. Any obligation TNC may have related to conservation credits shall be addressed in the Conservation Easement. TNC makes no representation or warranty that its acquisition of the Conservation Easement will result in the creation of conservation credits.

SECTION 17. FAILURE TO COMPLY. If TNC fails to comply with the terms and conditions of this Agreement, DNRC may terminate the Agreement and refuse disbursement of funds from this grant. Such termination will become a consideration in any future application for grants from the Sage Grouse Habitat Conservation Fund.

SECTION 18. ASSIGNMENT AND AMENDMENT. This Agreement is not assignable. Amendment may be accomplished only by express written agreement of the parties. Amendments will be attached as an integral component of the Agreement.

SECTION 19. MONTANA LAW AND VENUE. Any action brought by any party to this Agreement that is based on enforcement or performance under this Agreement or interpretation of any term or condition of this Agreement, shall be governed by the laws of the State of Montana. Venue shall be in the First Judicial District, Lewis and Clark County, Montana.

SECTION 20: CONDITIONS SUBSEQUENT TO SIGNING OF THIS AGREEMENT. Upon the happening of any one of the following listed events or conditions before Closing, the State or its agent's duty to perform under the Agreement shall be excused, and the State shall be entitled to recover from TNC funds distributed pursuant to this Agreement, if any:

1. TNC's funding sources become unavailable; or
2. The terms of the Conservation Easement, and the other reports described in Section 8 above are not approved by MSGOT or are not agreeable to the State, NRCS, or TNC; or,
3. The parties to this grant agreement cannot successfully negotiate terms of the Conservation Easement that are agreeable to Hansen Livestock Company; or,
there has been a significant change in the physical nature of the property, caused by natural disaster or land owner activities, so that the land loses capacity to provide sage grouse habitat and produce credits up to 30 days prior to closing.

SECTION 21: OBLIGATION OF FUNDS. The Sage Grouse stewardship funds are obligated upon execution of this agreement. Should Sage Grouse Stewardship funds not be available, the State shall promptly notify TNC.

SECTION 22: SUBORDINATION OF EXISTING LIENS OR MORTGAGES. The closing instructions will direct the closing agent to ensure that any existing liens or mortgages on the property are either made subordinate to the conservation easement or paid in full and released at closing.

SECTION 23: MONTANA ENVIRONMENTAL POLICY ACT COMPLIANCE. The Program will comply with the requirements of the Montana Environmental Policy Act prior to disbursement of funds from the Stewardship Account. The Program's release of an Environmental Assessment or Environmental Impact Statement will be after negotiation of all terms of the proposed easement is completed.

SECTION 24. COSTS AND ATTORNEY'S FEES. In the event that legal action is brought to enforce the terms and conditions of this Agreement, each Party shall bear its own legal costs.

TNC hereby accepts this Agreement according to the above terms and conditions.

By:_____Date_____
(Signature)

Print name and title_____

For: The Nature Conservancy, a Montana non-profit corporation. Tax ID Number 53-0242652

DNRC hereby accepts this Agreement according to the above terms and conditions.

For: The Montana Department of Natural Resources and Conservation

Reviewed and approved by:

_____ Date:_____
John Tubbs
Chair, Montana Sage Grouse Oversight Team

_____ Date:_____
Danna Jackson
Chief Legal, Department of Natural Resources and Conservation

Attachment A
Description of Property to be Covered by Conservation Easement

A parcel of land located in Beaverhead County, Montana, more particularly described as follows:

TOWNSHIP 10 SOUTH, RANGE 11 WEST MONTANA PRINCIPAL MERIDIAN:
Section 7: Lots 1, 2, 3, 4, W½E½NW¼, W½NW¼SW¼
Section 18: Lots 1, 3, 4, NE¼SW¼
Section 19: Lots 1, 2, SE¼NW¼, S½NE¼, SE¼
Section 20: S½NW¼, SW¼NE¼, W½SW¼, SE¼SW¼
Section 29: N½
Section 31: Lots 2, 3, SE¼NW¼, NE¼SW¼

TOWNSHIP 10 SOUTH, RANGE 12 WEST MONTANA PRINCIPAL MERIDIAN:
Section 1: Lot 4, E½SW¼, S½SE¼

EXCEPTING THEREFROM lands previously deeded to the State of Montana in Book 169 of Microfilm, Page 41, records of Beaverhead County, Montana.

FURTHER EXCEPTING THEREFROM lands previously deeded in Book 247 of Microfilm, Pages 426-7, records of Beaverhead County, Montana.

Section 2: Lots 1, 2, 3, S½NE¼, S½NW¼, SE¼, SW¼,

EXCEPTING THEREFROM lands previously deeded to the State of Montana in Book 169 of Microfilm, Page 37, Book 169 of Microfilm, Page 39 and Book 169 of Microfilm, Page 41, records of Beaverhead County, Montana.

FURTHER EXCEPTING THEREFROM lands previously deeded in Book 247 of Microfilm, Pages 426-7, records of Beaverhead County, Montana.

Section 3: SE¼NE¼, SE¼
Section 10: E½
Section 11: All
Section 12: All
Section 13: All
Section 14: All
Section 15: E½, S½SW¼
Section 20: S½SE¼
Section 21: E½, E½SW¼, SW¼SW¼
Section 22: All
Section 23: All
Section 24: All
Section 25: All
Section 26: NE¼, E½SE¼ W½
Section 27: All
Section 28: All
Section 29: E½E½, NW¼NE¼, SW¼SE¼, E½NW¼, SW¼NW¼
Section 31: Lots 1, 4, 5, 6, 7, 8, 9, 10, NW¼SE¼, NE¼SW¼ SW¼NE¼
Section 32: Lots 1, 2, 3, 4, 5, NE¼, W½SE¼, NW¼NW¼, SE¼NW¼,
Section 33: N½
Section 34: All
Section 35: E½, SW¼, E½NW¼, SW¼NW¼

Attachment B – Statement of Work

TNC's responsibilities under this grant agreement are summarized in this Statement of Work.

1. TNC shall develop and finalize a Conservation Easement with Hansen Livestock Company that is approved by TNC, Hansen Livestock Company, NRCS, and MSGOT.

2. TNC shall develop and provide to SGHCP Program Manager the following plans and reports:

- The TNC-NRCS Grant Agreement in its entirety.
- A Conservation Easement Baseline Report provided by TNC.
- The final appraisal.
- The Agricultural Land Easement Plan and any component plans described in the Conservation Easement with Hansen Livestock Company.
- A Conservation Easement Stewardship Management Plan which describes TNC's plan to monitor and enforce the Conservation Easement.
- Closing Instructions, when available.

Attachment C – Budget

Background: On May 24, 2016, MSGOT elected to split The Nature Conservancy's (TNC) Hansen Ranch Conservation Easement and Conifer Reduction Proposal into two separate proposals. MSGOT awarded funding ($202,500) for the conifer reduction portion of the proposal, but opted to reconsider the conservation easement portion of the proposal at a later date.

On November 18, 2016, MSGOT awarded $750,000 for the conservation easement, contingent on TNC securing and documenting funds from USDA NRCS or elsewhere by September 30, 2017. *See* MSGOT's Meeting Archive for meeting materials, Notes, and Minutes for the May 24 and November 18, 2016 meetings, respectively, at: https://sagegrouse.mt.gov/Team.

On June 2, 2017, MSGOT approved reallocation of the $202,500 originally awarded to reduce conifers towards purchase of the conservation easement. TNC had explained that it secured alternative funding for the conifer reduction portion of the overall proposal and that it would proceed. *See* MSGOT's Meeting Archive for meeting materials, Notes, Audio, and Minutes for the June 2, 2017 at: https://sagegrouse.mt.gov/Team.

On September 29, 2017, TNC provided written notice to the Program that funds from NRCS-Agricultural Land Easement (ALE) Program funds were secured. This letter was provided to MSGOT in conjunction with the December 15, 2017 meeting. Additionally, TNC informed the Program that the appraised value of the easement exceeded preliminary expectations, but that it would secure adequate funds from other sources to complete the project.

The following budget is revised from the budget in the grant application originally submitted to the Program and MSGOT in 2016. The Revised Projects Costs/Budget below reflects the final appraisal and allocation across all sources of funding. The total MSGOT award shown is $952,500, consistent with the approval sequence described above.

Revised Project Costs / Budget (Lease / Conservation Easement Projects)

Revised Budget for Perpetual Conservation Easement on ~13,890 acres

Item		Other Cash Contribution	Other In-Kind Contribution	Requested MGSGSFA Contribution	Total Contributions
a. Project Planning and Design					
Engineering	Applicant				
	Contractor				
	Landowner				
Baseline Inventory Report (Environmental Documentation Report)	Applicant				
	Contractor	14,000			14,000
Environmental Hazards Assessment		1,500			1,500
Survey					
Mineral Report	Applicant	500			500
	Contractor				
Appraisal		15,000			15,000

Title Commitment					
Title Insurance		2,500			2,500
Mortgage Subordination		500			500
Resolution of Legal Access					
Land Trust Transaction Fee					
Closing and Recording Fees		1600			1600
Other Expenses					
Sub-Total		**35,600**			**35,600**
b. Project Implementation					
Manpower	Applicant				
	Contractor				
	Landowner				
Equipment	Applicant				
	Contractor				
	Landowner				
Materials (rock, chemicals, etc.)	Applicant				
	Contractor				
	Landowner				
Perpetual Easement Stewardship Fee / Endowment		15,000			15,000
Total Easement Value		5,000,000	647,500	952,500	6,600,000
Other			-		
Sub-Total		**5,015,000**	**647,500**	**952,500**	**6,615,000**
c. Project Operation/Maintenance					
Manpower	Applicant				
	Contractor				
	Landowner				
Equipment	Applicant				
	Contractor				
	Landowner				
Materials (rock, chemicals, etc.)	Applicant				
	Contractor				
	Landowner				
Monitoring Stewardship					
Other					
Sub-Total					
d. GRAND TOTAL		**5,015,000**	**647,500**	**952,500**	**6,615,000**

If a Conservation Easement, Summary of Acquisition Budget:

Appraised Value of Conservation Easement: $6,600,000
Landowner Donation: $647,500
Purchase Price: $5,925,500

Source of Easement Funds: (list all sources)
MGSGSFA: $952,500
Other: NRCS - $4,950,000
Other: TNC (Private Grant) - $50,000
Other: _____

Attachment D – Executive Order 12-2015

[To be added prior to execution of this Agreement]

Attachment E – Conservation Easement

[to be attached at closing]

MONTANA SAGE GROUSE OVERSIGHT TEAM AGENDA ITEM BRIEF SHEET
JANUARY 30, 2018

AGENDA ITEM: PROGRAMMATIC EXCEPTION FROM CONSULTATION REQUIREMENT FOR CERTAIN WATER POLLUTION DISCHARGE PERMITS ISSUED BY THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY, WATER PROTECTION BUREAU

ACTION NEEDED: REVIEW AND APPROVAL

SUMMARY:
Exceptions to the requirements for Sage Grouse Program consultation for state permitted activities, authorizations, grants, or state technical assistance are approved by the Montana Sage Grouse Oversight Team (MSGOT), not granted by the Sage Grouse Habitat Conservation Program (Program). Executive Order 12-2015 Attachment D sets forth the review process for consultation when a proponent seeks a permit, grant or technical assistance from the State of Montana. Executive Order 21-2015 designates the sage grouse habitats to which Executive Order 12-2015 applies.

Montana Department of Environmental Quality, Water Protection Bureau (Bureau), permits certain pollution discharges into state waters. The Montana Pollutant Discharge Elimination System (MPDES) Permitting Section regulates point source discharge of pollutants to state surface waters through Individual or General Permits (e.g. waste water treatment plants, sewage lagoons, mining, or oil and gas production sites). The Montana Ground Water Pollution Control System (MGWPCS) implements the Montana Water Quality Act by regulating discharges of pollutants to state (ground) waters through Individual Permits (e.g. municipal sewage treatment facilities).

In consultation with the Program, the Bureau identified three situations for existing in which existing permitted surface or groundwater discharge facilities should be granted a programmatic exception from the consultation requirement when no new surface disturbance or disrupting activities near active leks during the breeding, nesting, and early brood-rearing seasons would occur. They are:

1. modification of a permit for existing facilities pursuant to ARM 17.30.1361;
2. minor modifications to existing permits pursuant to ARM 17.30.1362; and
3. renewal of existing permits.

The proposed exception to the consultation requirement for permit modifications is limited to the circumstances in which the modifications do not result in new surface disturbance or disrupting activities. Examples within the scope of the exception are:

- The permittee is working within the existing, disturbed footprint of the facility, adding new pollution control equipment within the disturbed footprint of the facility, etc.;
- The permittee is seeking a change in operating conditions such as a change in sampling frequency or effluent limitations, but the changes do not change the physical nature or extent of the existing operation.

Consultation with the Program will still be required where modification of a facility would result in new surface disturbances or disrupting activities. Examples outside the scope of the exception are:

- construction of a new lagoon or expansion of an existing lagoon;
- addition of new outfalls or relocation of an outfall; or
- expansion of a mine.

Existing facilities are already considered non-habitat due to land conversion and are associated with existing human development. If substantive changes to facility operation or expansion of the footprint are proposed, the permit modification process would still require consultation and application of stipulations. Likewise, new discharge permit applications would still require consultation and be subject to the stipulations.

If approved by MSGOT, the above three circumstances (modification, minor modification, and renewal) would be granted a programmatic exception for existing facilities holding discharge permits. These are specific and narrow circumstances. See narrative Table 1 for a list of existing permitted facilities covered by this exception request.

PROGRAM RECOMMENDATION:
The Program recommends MSGOT approve a narrow programmatic exception from the consultation requirement of Executive Order 12-2015 for the facilities listed in Table 1 of the Narrative for modifications, minor modifications, or renewal of existing permits, provided that no new surface disturbance or disrupting activities near active leks during the breeding, nesting, and early brood-rearing seasons would occur.

Sage Grouse Habitat Conservation Program Narrative
Montana Department of Environmental Quality
Water Protection Bureau

Programmatic Exception from Executive Order 12-2015 Consultation Requirements for Renewals and Modification of Certain Montana Pollutant Discharge Elimination System and Montana Ground Water Pollution Control System Permits

Summary: This request for a programmatic exception from the consultation requirement of Executive Orders 12-2015 and 21-2015 under certain circumstances pertains to the follow three types of discharge permits:

1. Individual Montana Pollutant Discharge Elimination System Permits

2. Individual Montana Ground Water Pollution Control System Permits

3. MPDES General Permits for Domestic Sewage Treatment Lagoons-Batch and Continuous Dischargers that occur outside municipal boundaries

If granted, a programmatic exception from the consultation requirement would pertain to the following circumstances when no surface disturbance or disrupting activity would occur during the breeding, nesting, or early brood-rearing seasons near active leks:

1. Modification of an Individual or General Permit listed in Table 1 for existing facilities pursuant to ARM 17.30.1361.

2. Minor modification to the current Individual Permits (surface and groundwater) and General Permits for domestic sewage lagoons pursuant to ARM 17.30.1362.

3. Renewal of Individual MPMDES or MGWPCS Permits.

General Background: Taken together, Executive Orders 12-2015 and 21-2015 (EO) and the Sage Grouse Stewardship Act (Act) establish Montana's Conservation Strategy. The Strategy is based on a "Core Areas" approach similar to the State of Wyoming. The Act and the EO are key to addressing threats identified by the U.S. Fish and Wildlife Service to sage grouse in Montana by establishing the necessary regulatory mechanisms and addressing threats to the sagebrush habitats relied upon by most of Montana's sage grouse populations.

Executive Order 12-2015 only applies to specially designated sage grouse habitats, primarily in central and eastern Montana, as reflected by the map contained in the EO. Habitats for conserving sage brush and sage grouse have been designated as core areas, general habitat, or connectivity areas.

Executive Order 12-2015 applies to all state agencies and took effect January 1, 2016. It pertains to all programs and activities of state government such as: permitting, licenses, authorizations, grants, technical assistance, and the state's own agency programs like highway planning or management of state trust lands.

The Montana Sage Grouse Oversight Team (MSGOT or Team) guides implementation of the EO. MSGOT was formally created in statute by the 2015 Montana Legislature. The Team is chaired by the Governor's Natural Resource Policy Advisor. Other members are the directors of the Departments of Fish, Wildlife & Parks, Natural Resources and Conservation, Transportation, Environmental Quality, the Administrator of the Montana Board of Oil and Gas, a member of the Montana Rangelands Resources Committee, a member of the Montana Senate, and a member of the Montana House of Representatives.

The role of the Sage Grouse Habitat Conservation Program (Program) is to facilitate implementation of the EO across state government and with federal agency partners. As outlined in Attachment D of the EO, the Program consults with permit applicants and project proponents ***before*** permit applications are submitted to state agencies to help applicants avoid negative impacts of development in designated sage grouse habitats, minimize impacts, and address compensatory mitigation for impacts that can't be avoided or minimized. The Program's role is one of consultation, not regulation. The Program will make recommendations to the applicant and the permitting agency. The Program is administratively attached to the Department of Natural Resources and Conservation, but reports to MSGOT and the Governor's Office.

The Montana Department of Environmental Quality (DEQ or Department) has numerous permitting and licensing responsibilities. The Department's ultimate goal is protect public health and to maintain Montana's high quality of life for current and future generations. To that end, the Water Protection Bureau (Bureau) oversees a variety of activities related to water quality and implements the Montana Water Quality Act. State waters are defined as "a body of water, irrigation system, or drainage system, whether surface or underground."[1]

Within the Bureau, the Montana Pollutant Discharge Elimination System (MPDES) Permitting Section regulates point source discharge of pollutants to state surface waters. MPDES permits are required for a facility or activity that discharges pollutants into state surface water, unless excluded under Administrative Rules of Montana (ARM) 17.30.1310.

The Montana Ground Water Pollution Control System (MGWPCS) implements the Montana Water Quality Act by regulating discharges of pollutants to state (ground) waters. MGWPCS permits are required for any source that discharges pollutants into state ground waters. An MGWPCS permit is not required for sources meeting the criteria established in 75-5-401 Montana Code Annotated (MCA) or ARM 17.30.1022.

Within this document, the term facility is used to discuss either a facility or activity as defined in ARM 17.30.1304(32)[2] or a source as defined in ARM 17.30.1001.[3] The types of facilities which hold MPDES or MGWPCS permits include municipal waste water treatment plants, municipal water treatment plants, mines and related mineral processing facilities, oil and gas production and refining, and other industrial, private, or public sources which discharge into state waters.

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[1] Admin. Rules of Montana 17.30.1304(70).

[2] Admin. Rules of Montana 17.30.1304(32) defines "facility or activity" as "any MPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the MPDES program."

[3] Admin. Rules of Montana 17.30.1001 defines "source" as "any sewage system, treatment works, point source, disposal system, concentration of pollutants, or pond containing process wastes or pollutants used, employed, or operated so that the same results or under normal operating conditions may reasonably be expected to result in the discharge of pollutants to ground waters of the state."

The MPDES Permitting Section issues two types of permits:

1. Individual Permits: issued to one single facility which authorizes discharge directly from a pipe to surface water or discharge to a drain field or leech ponds and then to groundwater. Examples include discharges from individual municipal waste treatment plans, or individual industrial sites used for mining or oil and gas production; and

2. General Permits: an umbrella permit issued by the State of Montana that authorizes and regulates different categories or types of dischargers across the state excluding Indian Reservations. There are currently 13 general permits issued by the Bureau; however, the Bureau is only seeking an exception related to the Domestic Sewage Lagoons General MPDES Permits for both Batch and Continuous Dischargers, and not for any of the other 12 general permits.

The MGWPCS program currently issues only individual permits.

Prior to authorizing a new discharge of pollutants from a facility when an MPDES or MGWPCS permit is required, the Bureau accepts an application and conducts an environmental review under the Montana Environmental Policy Act (MEPA). Consultation with the Program occurs in conjunction with issuance of new permits. The facility and the point sources that are permitted to discharge is clearly defined within the permit and the outer boundaries of the facility are known.

Description and Scope of the Request for an Exception to the Consultation Requirement: The Department is requesting an exception from the consultation requirement under certain circumstances for renewal and modification of certain existing Individual Permits (28 surface water and 4 groundwater) and the Domestic Sewage Lagoon General Permit (5 authorizations). The Department is not seeking an exception from consultation for any other type of General Permit issued by the MPDES Permitting Section.

The Bureau identified twenty-eight total Individual Permits for discharge to surface waters subject to the consultation requirement and not otherwise granted an exception to the consultation requirement as an activity within the boundaries of a municipality. See Table 1 and Figure 2. Twenty-six are located in General Habitat, one is located in a Core Area, and one is located in Connectivity Habitat. The Bureau identified four total Individual Permits for discharge to groundwater. All of them are located in General Habitat.

Examples of Individual Permits that regulate discharge to surface or groundwater include the following:

- publicly owned sewage treatment systems, consisting of sewage lagoons and/or a mechanical treatment system;
- publicly owned water treatment plants;
- mining and related facilities; and
- oil and gas production sites.

The Bureau identified a total of six General Permit authorizations for domestic sewage lagoons within designated habitats and subject to the consultation requirement. See Table 1 and Figure 1. One of the six is located within the Lavina municipal boundary. The Lavina wastewater treatment

plant would otherwise be exempt under a prior exception to the consultation requirement for any permitting activities that would solely occur within municipal boundaries.[4]

In consultation with the Program, the Bureau identified three circumstances in which an exception from the consultation requirement of the EO should be considered by MSGOT. This is because: (1) the facility already exists but is modifying a permit within the confines of existing infrastructure and no new surface disturbance or disrupting activity[5] would occur as a result of the modification; (2) changes to a permit constitute a minor modification as defined in ARM 17.30.1362; or (3) no changes are proposed, but the existing permit requires renewal.

Consultation and application of Executive Order 12-2015 stipulations would still be required when applicants seek an MPDES or MGWPCS permit for the first time and when applicants seek to modify their existing permits in ways that require new ground disturbance or disrupting activities.

Under the following circumstances, the Program recommends MSGOT approve an exception to the consultation requirement for the Individual Permits for surface or groundwater discharges and for General Permit authorizations for domestic sewage lagoons listed in Table 1. This would clarify the consultation requirements for MPDES and MGWPCS permits and streamline the process for current permit holders.

1. Modifications of an Individual or General Permit listed in Table 1 for Existing Facilities Pursuant to ARM 17.30.1361 when No New Surface Disturbance or Disrupting Activity Occurs

Once a facility obtains an MPDES or MGWPCS permit, the permittee may seek to change the conditions of operation at a facility, add an additional outfall, or revise effluent limitations or monitoring. The kinds of modifications sought may or may not result in new surface disturbance. A specified list of changes to permits may be made as Minor Modifications under ARM 17.30.1362, minor modifications will be addressed in #3 below.

In conjunction with the Bureau, the Program reviewed the MPDES permit modification process to determine the appropriateness of a narrow programmatic exception from the consultation requirements of EO12-2015 when the permit must be modified but when no new surface disturbance or disrupting activity is proposed. The Program determined that the modification of an existing MPDES or MGWPCS permit when no new surface disturbance is proposed and the nature of the modification strictly relates to the existing infrastructure, the proponent should be granted a narrow exception from the consultation requirement. This is so because the permitted activity, even after the modification process, will not exacerbate threats to sage grouse.[6]

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[4] *See* MSGOT Meeting Archive for April 19, 2016 available at: https://sagegrouse.mt.gov/Team.

[5] EO 12-2015 defines surface disturbance as "any conversion of formerly suitable habitat to grasslands, croplands, mining, well pads, roads, or other physical disturbance that renders the habitat unsuitable for sage grouse." EO 12-2015 also limits surface disturbing activities to times of year other than the breeding, nesting, and early brood-rearing habitat (March 15 – July 15) if those activities would occur near active sage grouse leks.

[6] *See* 80 Fed. Reg. 59858 (Oct. 2, 2015) (U.S. Fish and Wildlife Service 12-month finding that listing of the greater sage grouse range wide is not warranted). *See also* U.S. U.S. Fish and Wildlife Service, 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO. February 2013 (pp 16, 17, 18, 23). For a more thorough discussion of threats, see the Narrative for the proposed exception to consultation for all activities occurring within incorporated cities and towns.

The proposed exception to the consultation requirement for permit modifications is limited to the circumstances in which the modifications do not result in new surface disturbance or disrupting activities. Examples within the scope of the exception are:

- The permittee is working within the existing, disturbed footprint of the facility, adding new pollution control equipment within the disturbed footprint of the facility, etc.;
- The permittee is seeking a change in operating conditions such as a change in sampling frequency or effluent limitations, but the changes do not change the physical nature or extent of the existing operation.

Consultation with the Program will be required where modification of a facility would result in new surface disturbances or disrupting activities. Examples of modification falling outside the scope of the exception are:

- construction of a new lagoon or expansion of an existing lagoon;
- addition of new outfalls or relocation of an outfall; or
- expansion of a mine.

While the U.S. Fish and Wildlife Service identified exurban development, infrastructure, and other anthropogenic disturbances as important threats alongside sagebrush conversion, modifying a MPDES or MGWPCS permit to continue operating within the same anthropogenic footprint will not exacerbate threats due to development. Here, the facility location is already considered non-suitable habitat for sage grouse because the land use has already been converted to human uses and occurs within existing patterns of urban and exurban development or habitat conversion.

The key focus with respect to threats to sage grouse habitat continues to be where new facilities are proposed that require an MPDES or MGWPCS permit, which itself would still require consultation, review under MEPA, as well as trigger stipulations under the EO when proposed within designated sage grouse habitats. Similarly, expansion of the footprint would still require consultation, review under MEPA, and be subject to stipulations of the EO. The Bureau will refer proponents to the Program for consultation.

Not applying the Executive Order 12-2015 regulatory mechanism to the modification of MPDES and MGWPCS Permits under circumstances where the modifications strictly relate to existing facilities and infrastructure without increasing surface disturbance or engaging in disrupting activities near nesting, breeding, or early brood-rearing habitat from March 15-July 1 will not lead to increased habitat loss and fragmentation or direct mortality. No new surface disturbance would occur beyond that which already exists in association with the existing facility.

If approved by MSGOT, modification of MPDES and MGWPCS permits would be granted a programmatic exception when no new surface disturbances or disrupting activities would occur outside of the current facility footprint. This is a specific and narrow exception, applying only to the permit modification process, not facilities seeking MPDES or MGWPCS permits for the first time or facilities seeking permit modifications that would expand the surface footprint. Both the consultation requirement and stipulations would still apply, as those circumstances would be outside the scope of this exception. The scope of the proposed exception is limited to those modifications where no new surface disturbance occurs and the modifications would not result in an expanded footprint.

2. Minor Modification to the Current Individual Permits (surface and groundwater) and General Permits for Domestic Sewage Lagoons Pursuant to ARM 17.30.1362

Holders of MPDES or MGWPCS permits occasionally need to make minor modifications to a permit. ARM 17.30.1362 restricts what changes may be made to a permit through a minor modification. Examples of allowable minor modifications include: correcting typographical errors, requiring more frequent monitoring or reporting, revising dates within a compliance schedule, changes in ownership or operation of a facility, and incorporation of pretreatment requirements or a nutrient management plan. Changes other than that allowed by ARM 17.30.1362 would trigger a permit modification under ARM 17.30.1361.

As above, in consultation with the Bureau, the Program reviewed minor modifications to existing MPDES and MGWPCS permits to determine the appropriateness of an exemption from consultation requirements of Executive Order 12-2015. The Program has determined that minor modifications to existing MPDES or MGWPCS permits undertaken by the Bureau should be granted a programmatic exception because actions undertaken as minor modifications pursuant to ARM 17.30.1362 will not exacerbate threats to sage grouse.[7] Minor Modifications do not affect the facility's footprint on the landscape. These also would include the permit transfer to new owners/operators where no other permit conditions are being modified.

Not applying the Executive Order 12-2015 regulatory mechanism to minor modifications to currently valid MPDES or MGWPCS permits will not lead to increased habitat loss and fragmentation or direct mortality. No new surface disturbance or disrupting activities would occur as a result of the minor modification/s.

(3) Renewal of Individual MPDES and MGWPCS Permits

The Water Protection Bureau implements the Montana Water Quality Act and certain Administrative Rules of Montana through the issuance of MPDES and MGWPCS permits. Permits are issued for a period of five years, after which the permit must be renewed for the permittee to maintain permit coverage.

The renewal process includes but is not limited to review of the permit effluent limits, monitoring requirements, and other permit conditions. Permit conditions may be revised based upon new effluent data, revised water quality standards, or other facility, effluent, and receiving water considerations.

In conjunction with the Bureau, the Program reviewed the MPDES and MGWPCS permit renewal processes to determine the appropriateness of a narrow programmatic exception from the consultation requirements of Executive Order 12-2015. The Program has determined that the renewal of MPDES and MGWPCS permits should be granted a narrow exception from the consultation requirement, when the renewal of the permit does not result in a new ground

[7] *See* 80 Fed. Reg. 59858 (Oct. 2, 2015) (U.S. Fish and Wildlife Service 12-month finding that listing of the greater sage grouse range wide is not warranted). *See also* U.S. U.S. Fish and Wildlife Service, 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO. February 2013 (pp 16, 17, 18, 23).

disturbance or entail disrupting activities near active leks during the breeding, nesting, and early brood-rearing seasons.

While the U.S. Fish and Wildlife Service identified exurban development, infrastructure, and other anthropogenic disturbances as important threats alongside sagebrush conversion, renewing an MPDES or MGWPCS permit to continue operating at the same locations and under the same conditions will not exacerbate threats to sage grouse due to development. Here, the facility location is already considered non-suitable habitat for sage grouse and occurs within existing patterns of urban and exurban development or habitat conversion.

The key focus with respect to threats to sage grouse habitat is where new facilities are proposed that require a new MPDES or MGWPCS permit, which itself would still require consultation, review under MEPA and the possibly the National Environmental Policy Act. New facilities would also trigger applicable stipulations under Executive Order 12-2015 when proposed in designated sage grouse habitats reflected on the map in Executive Order 21-2015. Similarly, any modification which would result in an expansion of the footprint would still require consultation, review under MEPA, and be subject to stipulations of Executive Order 12-2015.

Not applying the Executive Order 12-2015 regulatory mechanism to the renewal of MPDES or MGWPCS permits will not lead to increased habitat loss and fragmentation or direct mortality, when the renewal of the permit does not result in a new surface disturbance or entail disrupting activities near active leks during breeding, nesting, or early brood-rearing seasons. No new surface disturbance would occur and no changes in terms and conditions within the permit would increase or change activity in a way that would disturb sage grouse during the breeding and nesting seasons.

If approved by MSGOT, renewal of MPDES or MGWPCS permits would be granted a programmatic exception when the renewal of the permit does not result in a new surface disturbance. Accordingly, proponents would not be required to consult with the Program prior to renewing an MPDES or MGWPCS permit from the Bureau.

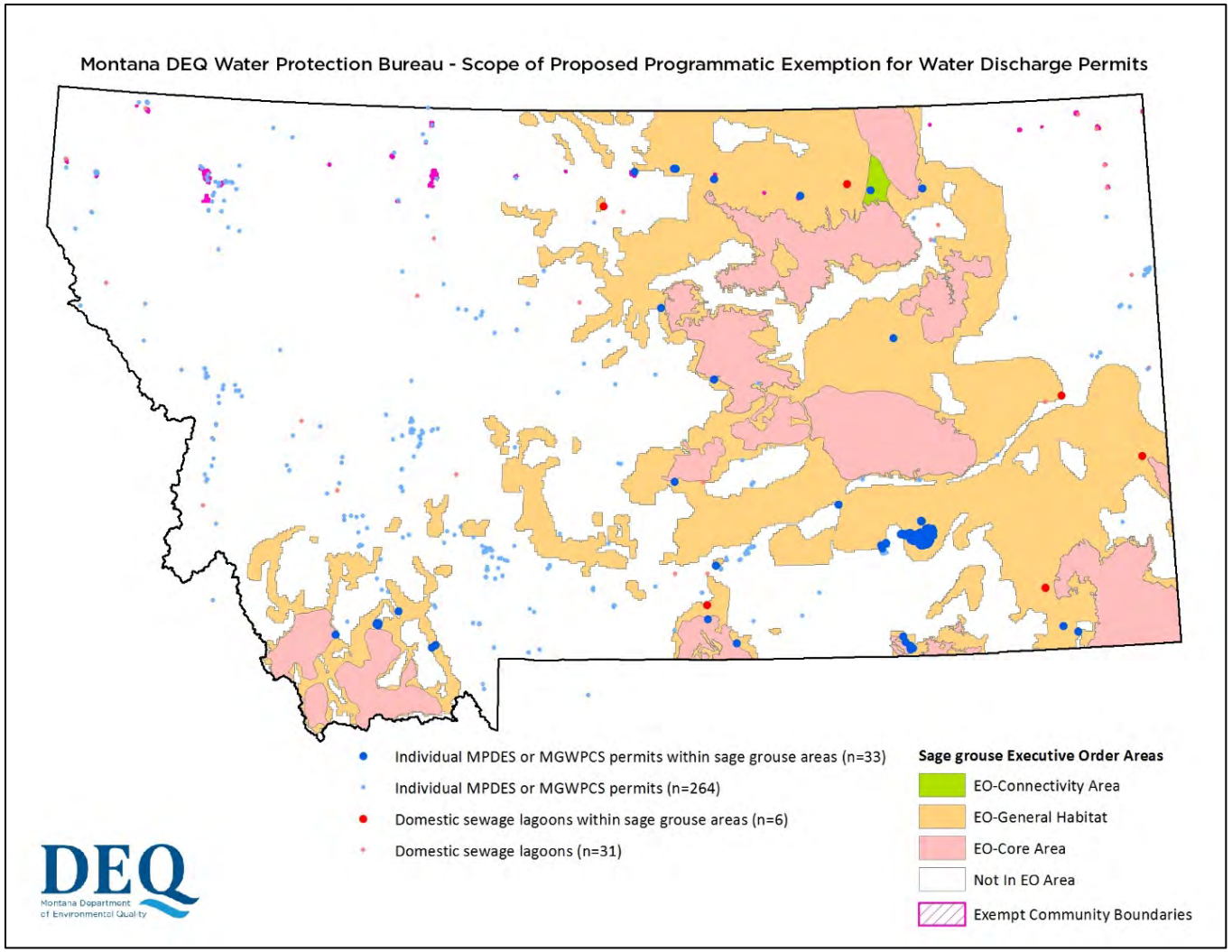
This is a specific and narrow exception, applying only to the renewal process, not facilities seeking new MPDES or MGWPCS permits for the first time or facilities seeking changes to terms and conditions of any state permits that would authorize a new discharge, result in new surface disturbances. Both the consultation requirement and stipulations would still apply in those circumstances, and would thus be outside the scope of this exception.

Table 1: DEQ Water Protection Bureau Discharge Permits within Sage Grouse Executive Orders 12-2015 and 21-2015 Designated Habitat Areas.

Permit Type	Discharge Permits in Sage Grouse EO Areas	Number of Facilities	Permit Name	EO Area
MPDES Individual Permits	MT0000884	21	BIG SKY COAL COMPANY - BIG SKY MINE	General
	MT0000892	4	DECKER COAL CO (WEST MINE)	General
	MT0000931	1	HARLEM WTP	General
	MT0020125	1	CHINOOK WWTP	General
	MT0020303	1	BRIDGER WWTP	Core
	MT0020389	1	MALTA SEWAGE TREATMENT LAGOONS	General
	MT0020451	1	RYEGATE WWTP	General
	MT0020656	1	HINSDALE WWTF	Connectivity
	MT0020702	1	WINNETT WWTF	General
	MT0021229	4	WESTMORELAND RESOURCES INC - ABSALOKA MINE	General
	MT0021270	1	CITY OF HARLEM – WWTP	General
	MT0021385	1	JORDAN WWTF	General
	MT0022373	1	COLSTRIP WWTP	General
	MT0022535	1	CITY OF HAVRE WWTP	General
	MT0023965	149	WESTERN ENERGY CO - ROSEBUD MINE	General
	MT0024210	1	DECKER COAL CO (EAST MINE)	General
	MT0024619	1	SPRING CREEK MINE	General
	MT0027821	1	BEAVERHEAD TALC MINE	General
	MT0028584	3	IMERYS TALC AMERICA - YELLOWSTONE MINE	General
	MT0029891	5	BARRETTS MINERALS INC	General
	MT0029980	1	MONTANA AVIATION RESEARCH CO	General
	MT0030309	1	TOWN OF GRASS RANGE WWTP	General
	MT0030392	1	M&K OIL COMPANY - WRIGHT CREEK WATER DISPOSAL FACILITY	General
	MT0030422	1	CITY OF COLSTRIP WTP	General
	MT0030473	1	CITY OF CHINOOK WTP	General
	MT0031411	1	WOLF MOUNTAIN COAL	General
	MT0031453	1	WINIFRED DOMESTIC WWTF	General
	MT0031534	1	CATTLE DEVELOPMENT CENTER	General
	MT0031691	1	DENBURY ONSHORE - BELLE CREEK CENTRAL FACILITY	General
	MT0031780	1	ROSEBUD POWER PLANT COAL PILE RUNOFF	General
	MT0031836	1	GARNET USA LLC	General
MGWPCS Individual Permits	MTX000052	2	COLSTRIP ENERGY LP ROSEBUD FLYASH DISPOSAL	General
	MTX000061	1	YELLOWSTONE ENERGY LTD	General
	MTX000094	1	BARRETTS MINERALS INC	General
	MTX000143	1	SADDLEBACK RIDGE SUBDIVISION	General

Permit Type	Discharge Permits in Sage Grouse EO Areas	Number of Facilities	Permit Name	EO Area
MPDES Domestic Sewage Lagoon General Permits	MTG580012	1	TOWN OF SACO	General
	MTG580013	1	TOWN OF LAVINA WWTF	General
	MTG580015	1	TOWN OF BROADUS WWTF	General
	MTG580025	1	FALLON WATER AND SEWER DISTRICT	General
	MTG580029	1	CITY OF BAKER WWTF	General
	MTG580033	1	TOWN OF FROMBERG WWTP	General

Figure 1. Location of Montana Point Source Discharge Elimination System or Montana Ground Water Pollution Control System permit locations relative to habitats designated for conservation in Executive Orders 12-2015 and 21-2015.



Handout 3

Kyle Tackett, Montana NRCS

Causes

- Interruptions to natural fire cycle
- Favorable climatic conditions

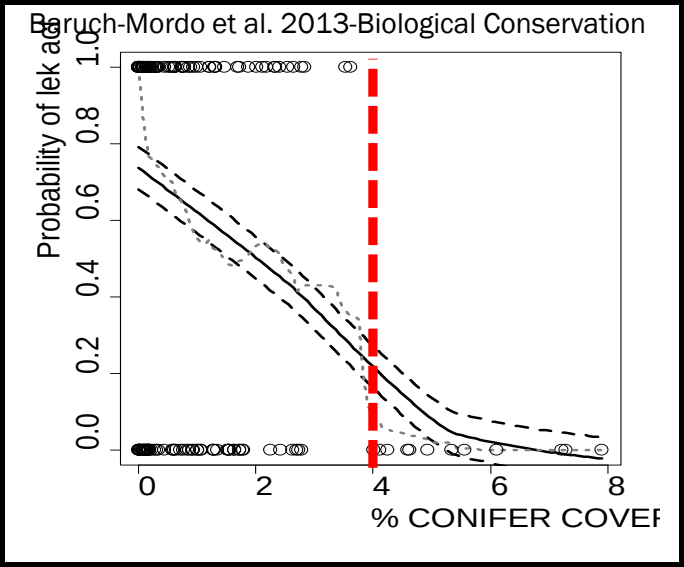
Impacts

- Threat to sagebrush obligates
- Soil water use
- Increased runoff and erosion

Sage-grouse are really sensitive to trees

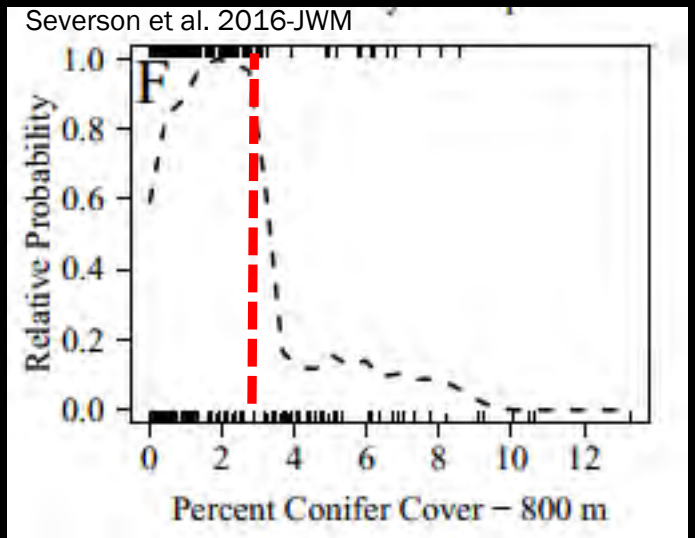
Leks

Baruch-Mordo et al. 2013-Biological Conservation



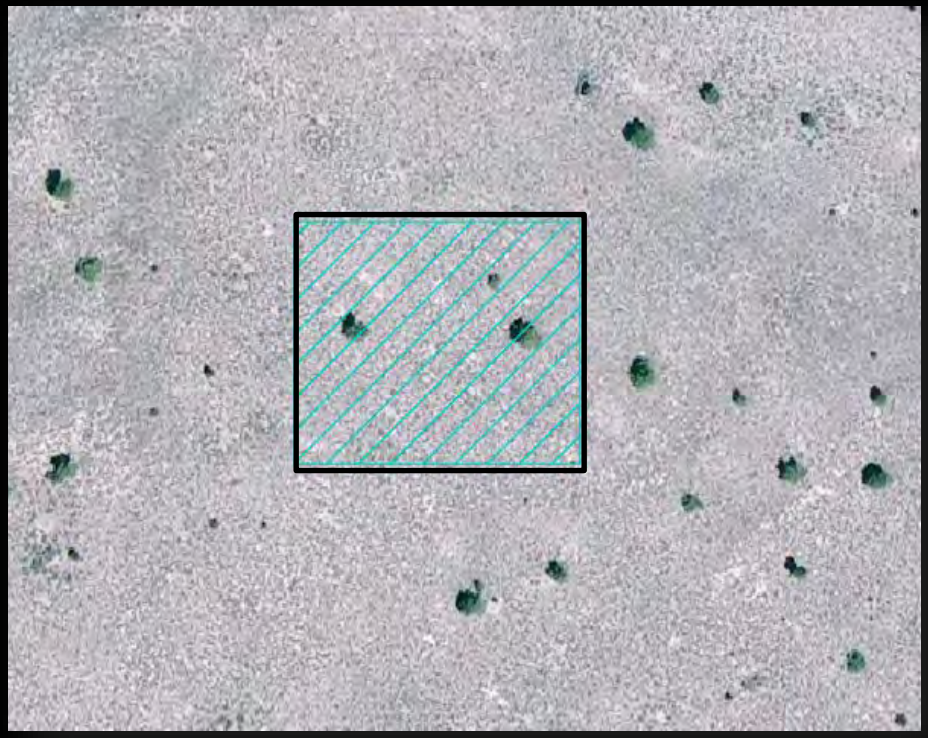
Nests

Severson et al. 2016-JWM

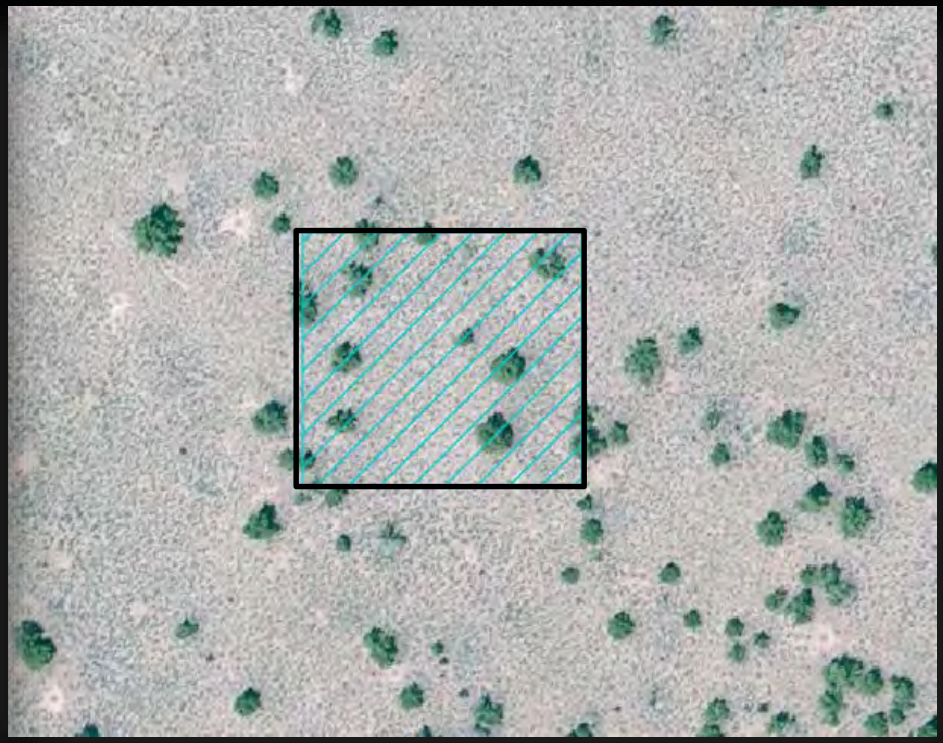


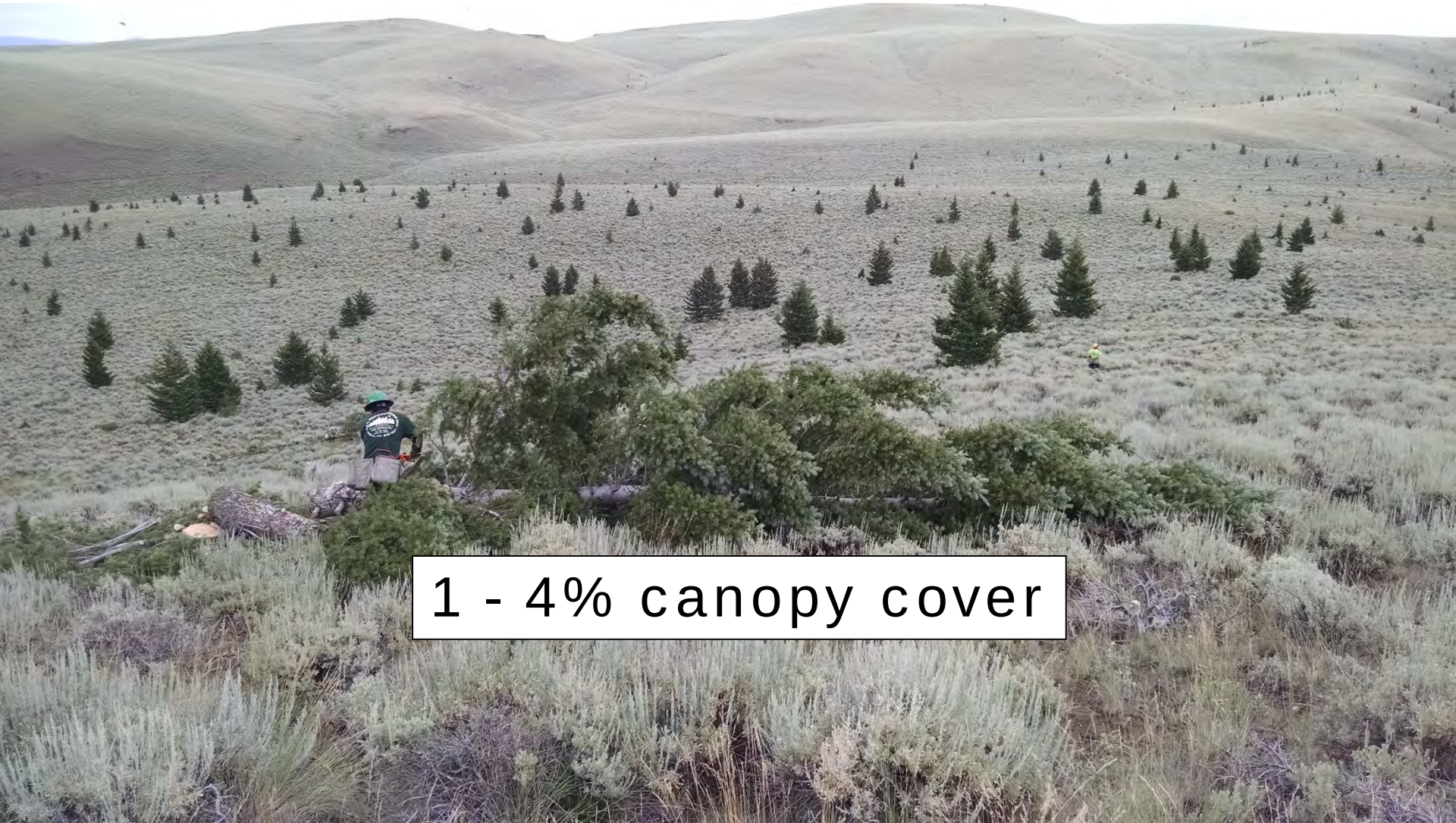
Estimating Tree Cover

1% per acre



4% per acre




1 - 4% canopy cover


4 - 10% canopy cover

Management Options

Management Options

Management Options

Advantages

- Immediate habitat availability
- Wide window for application
- Precise treatment
- Little risk of weed invasion

Disadvantages

- Difficult to get every tree, shorter treatment lifespan

Management Options

Management Options

Advantages

- Precise treatment
- Wide window for application
- Only slight risk of weed invasion due to disturbance
- Shrubs impacted, but mostly maintained

Disadvantages

- Small trees often missed
- Utility limited in steep terrain, wet areas, etc.
- Can be cost prohibitive

Management Options

Tenya Quinn-Davidson

Management Options

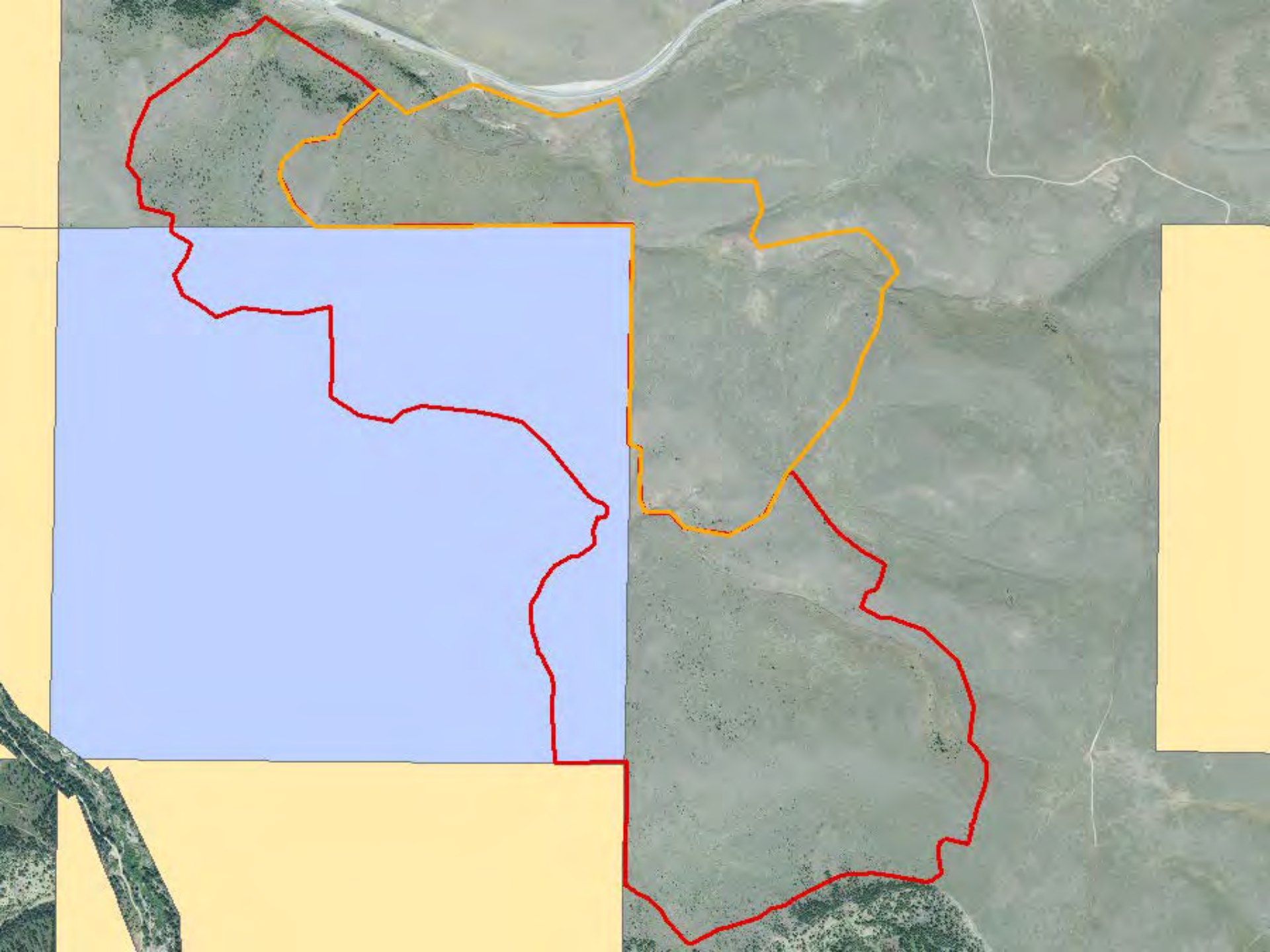
Advantages
- Effectively removes smaller trees
- Closely mimics natural processes
- Treat larger areas
- Works well in higher elevation sites

Disadvantages
- Liability
- Imprecise treatment
- Narrow time period for application
- Temporary loss of sagebrush
- Potential for annual grass invasion
- Loss of grazing both before and after

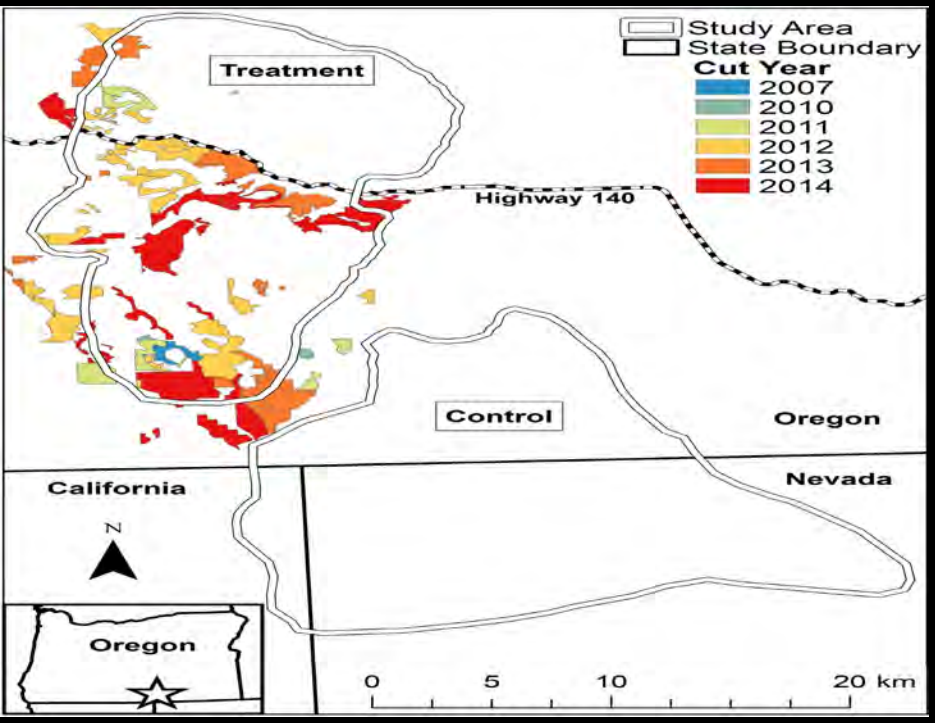
Tonya Quinn-Davidson


07/13/2016


07/15/2016



Warner Valley, Oregon



After 4 years of initiating cuts, 29% of marked birds shifted nesting into treated habitats

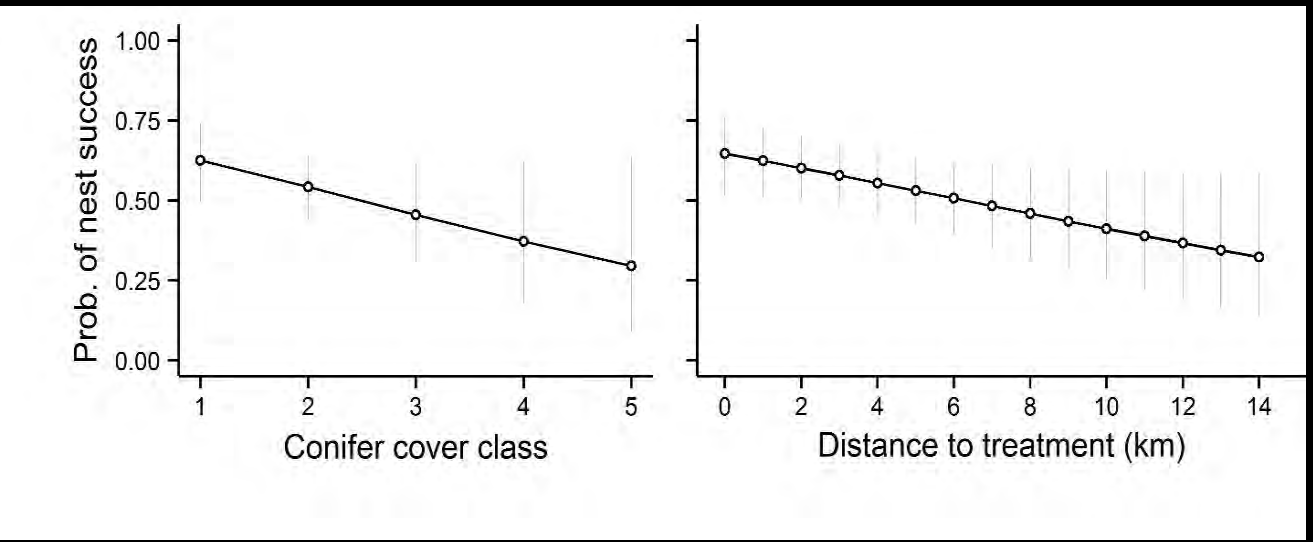
Severson et al. 2017-REM

Control 94,000+ acres
Treatment 84,000+ acres
250+radio collared hens

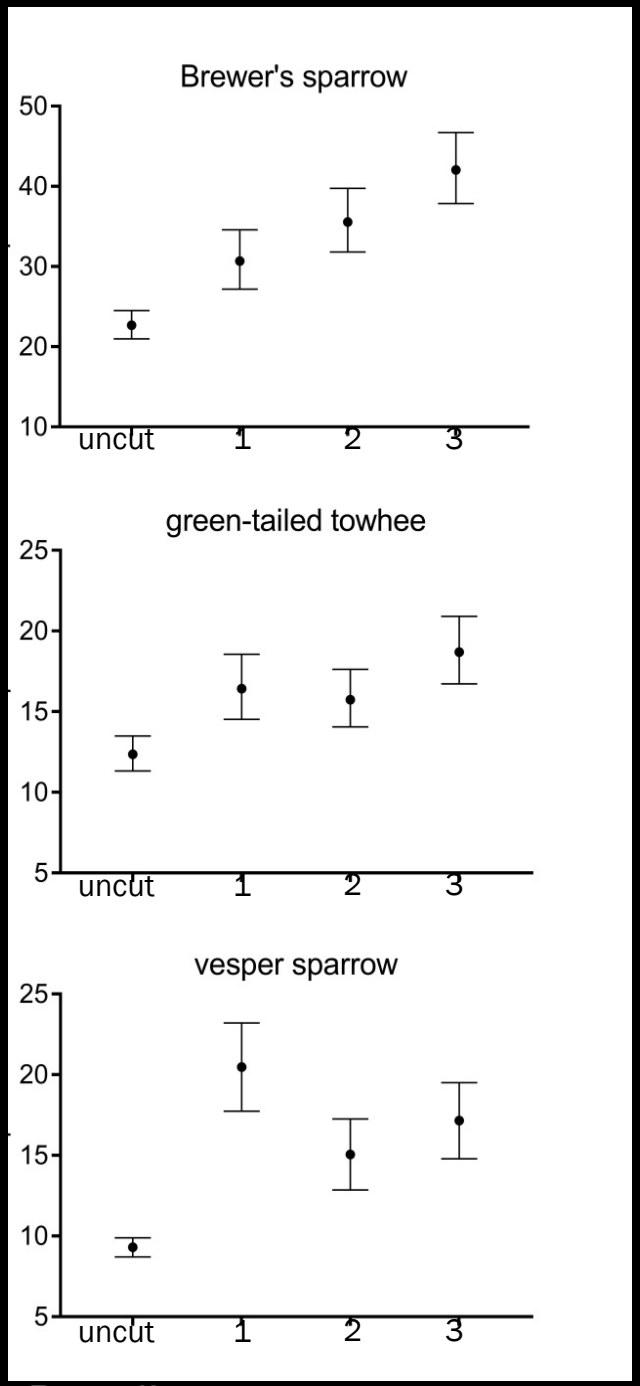
GPS sage grouse movements in juniper cut
(By: Andrew Olsen)

Box Elder County, Utah

- Most hens (86%) avoided conifer-invaded habitats, and those using restored habitats were more likely to raise a successful brood
- Probability of nest success declined by 9.1% for every 1km away from a cut area



Sandford et al. 2017-REM



+54%

+66%

Benefits for other ecosystem obligates

+54%

Holmes et al. 2017

Moving Beyond Grouse

Contents lists available at ScienceDirect

Rangeland Ecology & Management

journal homepage: http://www.elsevier.com/locate/rama

Ecosystem Water Availability in Juniper versus Sagebrush Snow-Dominated Rangelands☆

Patrick R. Kormos [a,*], Danny Marks [a], Frederick B. Pierson [a], C. Jason Williams [a], Stuart P. Hardegree [a], Scott Havens [a], Andrew Hedrick [a], Jonathan D. Bates [b], Tony J. Svejcar [b]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United States Department of Agriculture
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Science to Solutions

Conifer Removal Boosts Sage Grouse Success

In Brief: In recent years the Sage Grouse Initiative, led by the USDA's Natural Resources Conservation Service, has worked with many partners to accelerate the mechanical removal of invading conifer trees, primarily junipers, to restore sagebrush habitats in and around sage grouse strongholds across the West. Replicated studies from public and private land in southern Oregon and northwest Utah are the first to document sage grouse response to this type of landscape-level habitat restoration effort. Despite conventional wisdom that female sage grouse use the same nesting areas every year, space-starved hens in Oregon were quick to use restored habitats made available by conifer removal: within four years, 29% of the tracked sage grouse were nesting within and near restored habitats. In Utah, 86% of hens avoided conifer invaded habitats, and those using restored habitats were more likely to raise a brood. Taken together, studies show that landscape-level conifer removal can effectively increase habitat availability and boost success for nesting and brooding sage grouse.

Removing invading conifers in otherwise high-quality sagebrush habitat is a boon to nesting sage grouse, as in this landscape in the Warner Valley, southern Oregon, before (left) and after (right) restoration. Photos courtesy of Todd Forbes, Bureau of Land Management.

Invaders in the Sage

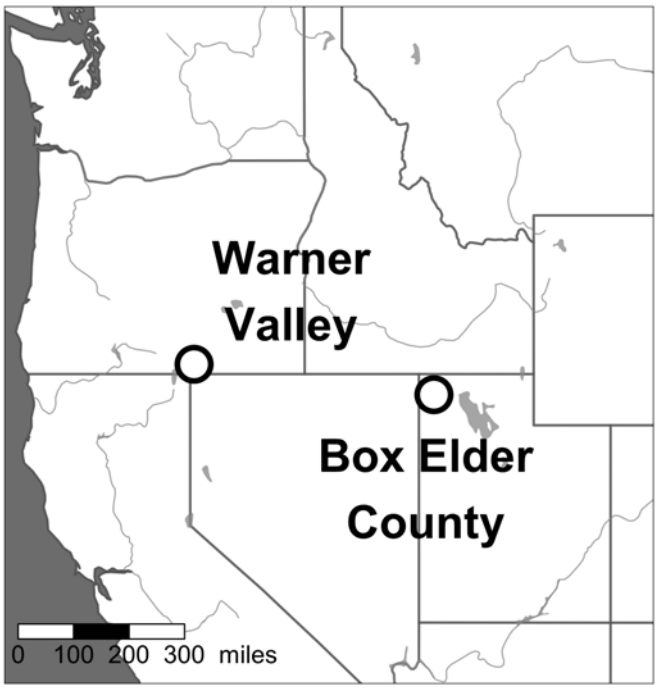
The encroachment of conifers (mostly juniper species and pinyon pine) into sagebrush habitats is one of several major causes of sage grouse declines. Although native, these trees have spread into millions of acres of sagebrush habitats due to a combination of 100 years of fire suppression, historic overgrazing, and a changing climate. As trees spread into sagebrush, predation may increase because the trees provide new nest sites and perches to raptors, ravens, and other birds that prey on sage grouse, eggs, and chicks. Conifers also alter sagebrush habitats by robbing native shrubs and understory plants of water and nutrients and drying up streams, springs, and seeps. The result is a widespread degradation of healthy sagebrush habitats.

Even just a few trees scattered across the landscape in the earliest stage of conifer encroachment (called Phase I) can impact grouse. An Oregon study found that where conifers

cover only 4% of the landscape, grouse abandon their courtship leks (Baruch-Mordo et al. 2013; and see **Sage Grouse Initiative Science to Solutions No. 2**). Although sage grouse still use Phase I landscapes, their survival may be lower when compared to sagebrush-dominated habitats because of the increased abundance of predators. In essence, sagebrush habitats with even a few conifers serve as death traps for grouse—areas biologists call "population sinks" because they cannot sustain the species (Prochazka et al. in press; Coates et al. in press).

In a range-wide effort, land managers have collaborated to restore the quality of the habitat on working sagebrush landscapes by removing invasive conifers across public and private lands. These projects focus on removing invading conifers in and around sage grouse strongholds. Biologists initially reasoned that bird response to habitat restoration would be a slow process because sage grouse show strong fidelity to nest sites (hens using the same nesting areas year after year).

Yet two parallel studies in the Great Basin show a different story—apparently grouse know good habitat when they see it. These two studies examined sage grouse response to conifer removal in watershed-scale restoration projects, and confirmed that grouse benefit almost immediately when the trees come down.

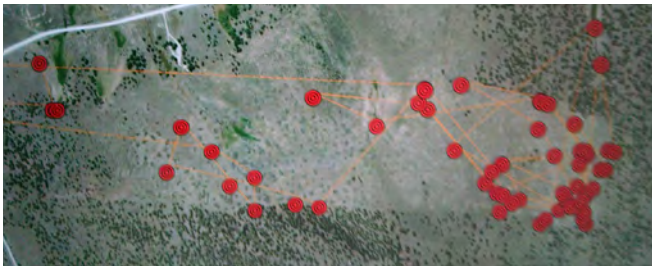


Two recent, independent studies near the Warner Valley in Oregon and in Box Elder County, Utah confirm that sage grouse directly benefit from large-scale mechanical removal of invasive conifers. Map by SGI.

Moving into the New Neighborhood

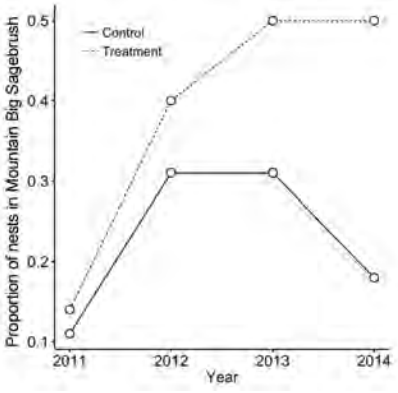
How quickly will sage grouse nest in restored habitats where invading conifers have been removed? To answer this question, John Severson of the University of Idaho and his colleagues set up a treatment and control field study near the Warner Valley on the Oregon/Nevada border (Severson et al. in press). The study compared two large landscapes of mountain big sagebrush and western juniper. An untreated control area (>98,800 acres) scattered with invading juniper was compared to a treatment area (>84,000 acres) where large patches of juniper, totaling 20% of the landscape, were removed to restore the entire watershed to sagebrush habitat suitable for nesting grouse. Because the impact of invading conifers extends beyond the trees themselves, removing encroaching trees helps restore the habitat quality of a much larger area of the sagebrush landscape than just the stands that are cut.

From 2009 to 2014, the researchers then radio-collared and tracked 153 hens in the treatment study area and 117 hens in the control area, which allowed them to locate more than 260 nests and determine where hens were choosing to nest.



GPS locations recorded for this single female grouse in the Warner Valley show how the bird prefers a newly restored sagebrush habitat recently cleared of invading conifers. Image courtesy of Andrew Olsen, graduate student under Professor Christian Hagen at Oregon State University, who is continuing long-term monitoring of sage grouse response at these sites.

> *"The speed at which these space-starved birds colonize our sagebrush restorations is remarkable, and their increased performance is the ultimate outcome in science-based conservation."*
>
> ~Charles Sandford, former Graduate Student, Utah State University, and current SGI Partner Biologist, Tremonton, Utah.



In the large landscape that was treated with conifer removal, 29% of radio-tagged female sage grouse nested in newly restored habitat. Hens did not increase nesting in the untreated control landscape, where conifers remained. Chart courtesy Severson et al.

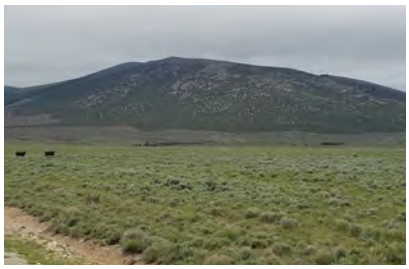
It became immediately apparent that sage grouse hens were starved for good sagebrush nesting habitat, and removing the trees creates more usable space. Despite conventional wisdom that female grouse are strongly tied to the same nesting sites every year, sage grouse hens were quick to consider restored habitat nearby, and nested both in and near sagebrush stands cleared of juniper. Within two to four years after juniper cutting, sage grouse moved in to cut areas, and the probability of nesting in and near treated sites increased 22% each year after cutting. After four years, the number of sage grouse nesting in and near the restored areas increased 29% (relative to the control area). Additionally, birds were much more likely to nest in or near restored sites: for every 0.6 miles from a cut area, the probability of nesting decreased 43%. In short, removing junipers dramatically increased the availability of nesting habitat, and hens proved quite willing to take advantage of good habitat as it became available.

A Boost in Nest and Brood Success

Charles Sandford of Utah State University and his colleagues asked how conifer removal in sagebrush habitats might affect the success of sage grouse nests and broods (Sandford et al. in press). Their study area in the Box Elder Sage Grouse Management Area (SGMA) is home to one of the largest and most stable sage grouse populations in Utah.

Covering 256,000 acres, the project area hosts both big and small sagebrush species, and a mix of native bunchgrasses and forbs. Since 2008, managers have mechanically removed invading conifers on more than 20,000 acres to improve sagebrush habitat.

From 2012 to 2015, the biologists tracked 96 radio-tagged sage grouse hens to find and determine the fate of nests. They discovered that the distance between nests and restored habitat predicted success: nest success declined with every 0.6 miles farther away from restored habitat. (In one documented instance, a marked female nested within a treatment even before mechanical harvesters had completed the cut, and then successfully hatched a brood; Sandford et al. 2015).



Clearing conifers from more than 20,000 acres of the Box Elder Sage Grouse Management Area increased sage grouse nest and brood success. Photo courtesy of Charles Sandford, Utah State University.

The researchers also tracked 56 broods, observing their movements and survival. Most hens (86%) kept broods close to restored habitats and avoided areas with trees, and hens that used areas cleared of conifers were most likely to successfully fledge their broods. This is the ultimate measure of success of habitat restoration: more chicks surviving to boost the next generation of sage grouse.

Clearing the Way for Success

The Sage Grouse Initiative, led by the USDA's Natural Resources Conservation Service, and its many partners have completed conifer restoration projects on more than a half million acres across the West. Utah's Watershed Restoration Initiative has restored another half million acres, and the Bureau of Land Management is now investing heavily in sagebrush habitat restoration across the species' range.

Where conifers invade, grouse appear to be lacking enough quality nesting and brood-rearing habitat. These new studies demonstrate that sage grouse know good nesting habitat when they see it, and collaborative, large-scale sagebrush restoration can benefit sage grouse within a relatively short time.

> *"Most impressive to me is the foresight and planning across state and federal agencies that resulted in these watershed-scale restorations. BLM is now squarely focused on replicating this partner-based model in priority landscapes throughout the West."*
>
> ~Steve Small, Division Chief, Fish and Wildlife Conservation, Bureau of Land Management, Washington, D.C.

Use SGI's New Web Tool for Restoration Planning

Interested in planning a sagebrush habitat restoration across your landscape? The Sage Grouse Initiative has a new web tool that maps tree canopy cover in high-resolution across sage grouse range, since removing expanding conifers is a primary focus of SGI's conservation investment strategy. The map tool allows managers and planners to zoom in on a local site or scale up to a county or state. The raster data is free to download to your GIS for planning and conservation. Visit SGI's new web tool at **http://map.sagegrouseinitiative.com/**

Contacts

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- Terry Messmer, Utah State University: terry.messmer@usu.edu

Principal Student Investigators

- John P. Severson, University of Idaho
- Charles Sandford, Utah State University

Graduate students John Severson, University of Idaho, and Charles Sandford, Utah State University, documented increases in nesting and brood success after sagebrush habitat was restored by removing encroaching conifers.

Please Cite As

Sage Grouse Initiative. 2017. Conifer Removal Boosts Sage Grouse Success. Science to Solutions Series Number 12. Sage Grouse Initiative, 4pp. **http://www.sagegrouseinitiative.com/.**

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January 2017

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Learn More

The Sage Grouse Initiative, led by the USDA's Natural Resources Conservation Service, is a partnership-based, science-driven effort that uses voluntary incentives to proactively conserve America's western rangelands, wildlife, and rural way of life.

To learn more, visit **www.sagegrouseinitiative.com.**

Science to Solutions

Sagebrush Rangelands Help Maintain Water Availability

In Brief: Removing encroaching conifer stands from sagebrush ecosystems can increase late season water retention in western rangelands by holding snow longer in the spring. Researchers with the U.S. Department of Agriculture's Agricultural Research Service analyzed snow and streamflow data from a snow-dominated sagebrush steppe ecosystem in southwest Idaho to evaluate the impact that juniper-dominated landscapes might have on water availability in the system. They found that areas with more juniper had earlier snow melt and less streamflow relative to sagebrush-dominated landscapes. The water retention in sagebrush systems comes from the increased water storage within snow drifts and delayed release of the melting snow back into the soils. **Water delivery is delayed by an average of nine days in sagebrush systems compared to juniper-dominated systems.** The implications of this research suggest that conifer removal efforts to support sage grouse restoration also provide the ecosystem service of improved water availability in these semi-arid systems.

Capturing and Holding Snowfall

Imagine standing in a landscape covered with encroaching conifers on a high-elevation ridge in the West during a winter snowstorm. It is cold and quiet, the wind is buffered by the numerous trees capturing and keeping the snow close. The snow is evenly spread throughout the conifer stand and when the spring comes, the snowpack melts quickly. Now picture yourself in a treeless sagebrush landscape during a snowstorm—this time the wind whirls all around you. The blowing snow drifts in wind-sheltered areas, and around the sagebrush and other shrubs. The snow is deeper in these drifts and takes much longer to melt.

For several years, ranchers and land managers who have engaged in conifer removal projects have reported that there is more water flowing in their streams and that there are seeps in areas where they hadn't been previously. These anecdotal stories suggested the broader ecosystem services that conifer removal had for their ranches, but there was little scientific evidence that these stories had merit. While studies have looked at soil water extraction by juniper roots and evapotranspiration from juniper boughs, there was limited understanding of how redistribution of snowfall impacted watershed hydrology.

Evenly distributed snow inside a conifer stand (l) versus drifting in a treeless sagebrush landscape (r). Credit: USDA-ARS.

Studying the Snow

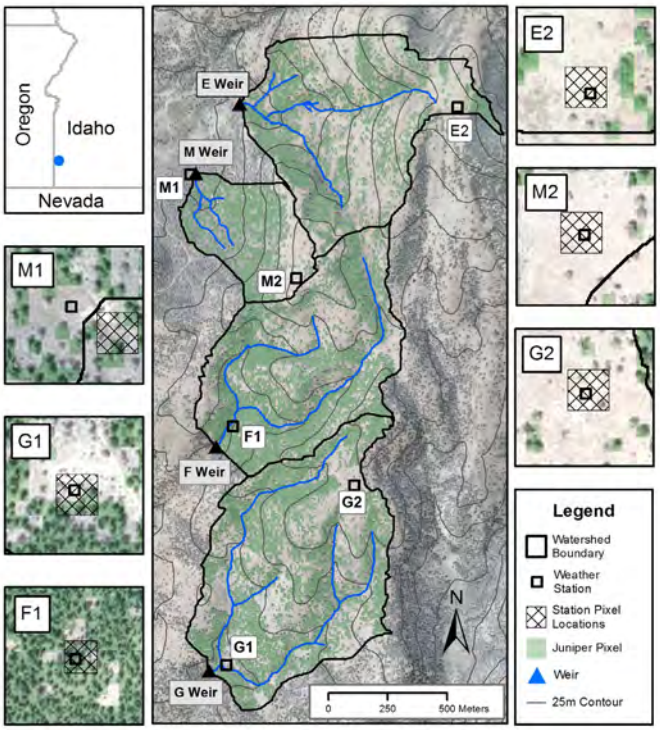
In the high elevations of the arid West, much of the annual precipitation falls in the form of snow. The heightened ability of a system to be able to hold that moisture for extended periods of time can significantly benefit native vegetation and its associated wildlife. Deeper snows improve insulation of soils and prolong water delivery. How and where the snow accumulates establishes variability in vegetation, creating a mosaic of diverse plant species. Understanding the differences of snow distribution between sagebrush landscapes and juniper-dominated landscapes can provide key information in understanding water availability for plants and wildlife.

Coordinated by Patrick Kormos, Frederick Pierson, Jason Williams, and Danny Marks with the U.S. Department of Agriculture's Agricultural Research Service in Boise, Idaho, this new science quantifies whether more water was, in fact, being held in landscapes where there was less juniper invasion. Specifically, scientists assessed the differences in snow distribution and water delivery to the soil surface and the effects of those differences on catchment water and streamflow. Their goal was to better understand the implications of tree-induced changes on water availability and the resulting effects on the sagebrush steppe ecosystem.

> *"Snow is the important dynamic affecting water availability in western rangelands. We demonstrate here how snow works within the system and the resulting benefits of conifer removal to ecosystem dynamics."* ~Frederick Pierson

Snow Accumulation Models

Kormos and his colleagues built their analysis using existing streamflow data from four catchments on the South Mountain Experimental Catchments in the Owyhee Mountains of southwest Idaho. Precipitation at the study area is predominantly from snowfall and the area has abundant juniper cover. The study team had data for six water years, from 2008 to 2013, providing a range of precipitation and temperature conditions typical for the region. Working with the physical data from weather stations in the study area, the scientists used *iSnobal* to model and estimate snow accumulation and melt for both the existing juniper cover and for a healthy sagebrush landscape with no juniper.



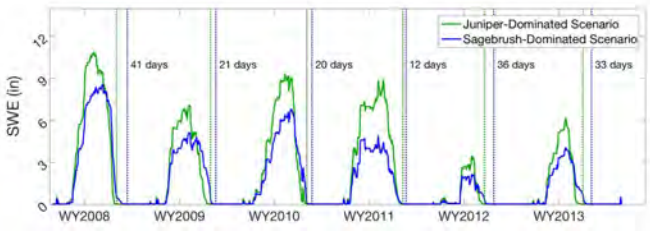
Map of the South Mountain Experimental Watershed study area that shows general location, topography, and juniper cover.

iSnobal has been used extensively to evaluate snow physics, processes, and the distributed melt patterns using catchment topography and metereological data such as solar radiation, wind speed, and other information. The model produces estimates of snow water equivalent (SWE), snow melt, and surface water input (the combination of liquid water draining from the bottom of the snowpack and from the rain on the ground's surface). Juniper cover is accounted for in *iSnobal* by classifying areas as juniper-dominated, juniper-sheltered, forest opening, or open. The juniper cover affects several variables in the model including snow accumulation, surface wind speeds, net solar radiation, and incoming thermal radiation. The scientists then used field measurements and modeled results describing water delivery at the four study catchments to identify when 75% of the modeled surface water input enters the catchments.

Conifer removal projects can help retain water and restore the sagebrush sea. Credit: Charles Sandford.

Drifting in the Sagebrush

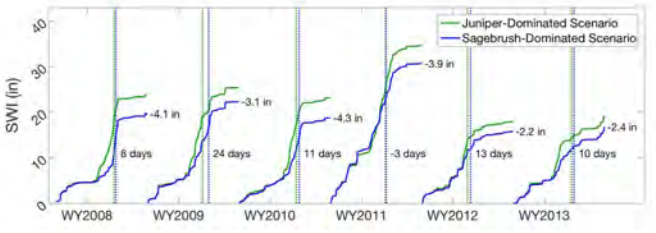
Through the modeling process, the researchers found that drifting in sagebrush-dominated systems delayed snowmelt into the watershed by an average of nine days. The juniper-covered landscape caused more uniform snow distribution across the landscape with less drifting. As a result, the snow melted more quickly and entered the watershed earlier. The researchers compared the modeled results for the juniper-dominated system with actual measurements from the study area and found that the models were highly consistent with the actual behavior of the snowfall on the ground.



Modeled total basin snow water equivalent (SWE) for juniper runs and sagebrush model scenarios showing higher peak accumulation and earlier melt out for juniper model runs.

The absence of trees in sagebrush-dominated landscapes creates more varied snow distribution. When the wind is able to blow across the landscape, the topography causes snow to consistently drift in the same places, creating deeper drifts in very specific parts of the landscape. Because those areas hold more water for longer periods most years, the vegetation is more diverse, leading to a mosaic of plant communities and higher quality habitat for wildlife species.

Wet areas are important for sage grouse in late summer, and removing encroaching conifers helps retain water on the land. Credit: Jeremy Roberts/Conservation Media.



Modeled total basin cumulative surface water input (SWI) from each of the catchments showing the time of delay of water inputs (days) in sagebrush model scenarios, and the higher magnitude of total surface water inputs (in) in juniper simulations.

Benefiting More than the Birds

While many juniper-removal studies have demonstrated value to wildlife species, this research adds an entirely different dimension to the practice – the improvement of ecosystem services provided by sagebrush habitats. Rangelands in the West face harsh, dry conditions with plenty of wind, and in higher elevations the vast majority of precipitation comes in the form of snowfall. **Holding water later into the summer season helps the sagebrush system become more diverse, benefiting vegetation, wildlife, and ranchers. This is one of the greatest services that an ecosystem can provide in the West.**

Both cows and birds gravitate toward mesic areas in the summer. Credit: Tim Griffiths.

Wet summer habitats, 80% of which are on private lands, have been found to be green magnets for sage grouse raising their young: 85% of leks are located within six miles of these water sources. By removing encroaching junipers on snow-dominated rangelands, ranchers and land managers can actually delay the release of water and maintain higher

> *"Our research suggests that it makes sense to maintain sagebrush-dominated landscapes in these higher-elevation, snow-dominated systems that get the majority of their annual precipitation through snowfall."* ~Jason Williams

streamflows later in the season. Increased water availability also supports the diversity of grasses and forbes, improving rangeland health and providing the "green groceries" wildlife and livestock depend on. With declining snowfall at lower elevations due to a warming climate, this ability for a system to increase water availability will become even more important.

Previous Sage Grouse Initiative Science to Solutions reports have spotlighted the value of conifer removal for other migratory songbirds and for sage grouse, as well as the value for fire resistance and resilience on western rangelands. This latest research now also proves the importance for maintaining or even improving streamflows. The accumulation of data proving the many ecosystem benefits of conifer removal adds scientific validation to the practice. As investment in conifer removal increases across the West, the return on the investment through improved wildlife populations and enhanced ecosystem services for ranchers and other water users will also increase.

Use SGI's New Web Tool for Restoration Planning

Interested in planning a sagebrush habitat restoration project across your landscape? SGI has a new web tool that maps tree canopy cover in high-resolution across sage grouse range. The map allows managers and planners to zoom in on a local site or scale up to a county or state to see where conifers are encroaching on sagebrush landscapes. The raster data is free to download to your GIS for planning and conservation projects. Use SGI's new web tool at **http://map.sagegrouseinitiative.com/**

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Please Cite As

Sage Grouse Initiative. 2016. Sagebrush Rangelands Help Maintain Water Availability. Science to Solutions Series Number 11. Sage Grouse Initiative. 4pp. **http://www.sagegrouseinitiative.com/.**

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To find your local NRCS Service Center, visit the NRCS website at **http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/local/.**

Learn more by visiting: **www.sagegrouseinitiative.com**

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July 2016

Handout 4

Development of Sage Grouse Mitigation and Special Focus:

Guidance Document

How HQT and Guidance Work Together

Montana Sage Grouse Oversight Team

January 30, 2018

Presentation and all meeting materials will be available on the MSGOT Meeting Archive webpage at: https://sagegrouse.mt.gov/Team

Acknowledgements:

- Mitigation Stakeholders (many and diverse)
- BLM, USFWS, USFS, NRCS, FWP
- SWCA Environmental Consultants
- Willamette Partnership
- DNRC OIT, especially the GIS Team & Nick Swartz
- Program: Therese Hartman, Graham Neale
- Countless others …

Roadmap:

- Recap Dec. 15, 2017 Presentation
- Guidance Document:
  - Part 1: Service Areas, Credits
  - Part 2: Debits: calculating the mitigation obligation; 2 new ideas
- How HQT and Guidance Work Together
  - Calculating the mitigation obligation; potential cost
  - hypotheticals: solar farm & buried pipeline
- Full Circle & Suggested Next Steps

Debits

Mitigation Market Place: incentivize voluntary conservation

Mitigation Hierarchy:

1. *Avoid*
2. *Minimize*
3. *Restore*
4. *Compensate*

GOALS:

Maintain viable sage grouse populations and conserve habitat

Maintain flexibility to manage our own lands, our wildlife, and our economy

Credits

As a General Premise

- **Clear, transparent mechanisms to incentivize voluntary conservation**
  - encourage / discourage practices: development & conservation
  - 2 scales: landscape and site-specific
- **Outcomes should be predictable, provide certainty**
- **Mitigation obligations should increase proportional to impacts and their duration**
- **Potential to develop credits should increase with habitat quality**
- **Most credits will come from private lands**
- **Mitigation balances development with conservation**
  - universal principles around a long time

Mitigation Market Place

Development Impacts Habitat

(Debits)

1. Avoid
2. Minimize
3. Restore
4. Compensate

Habitat Quantification Tool = GIS Method to Measure Habitat

Land Conservation Creates Credits:

Stewardship Fund Grants

Private Land Stewardship

Public Land Stewardship

(restoration, enhancement, preservation)

Conservation Actions (Credits)

HQT: the scientific method to evaluate vegetation and environmental conditions related to quality and quantity of habitat

MCA 76-22-103(9)

- A GIS model: used to calculate functional (Fx) acres
- Key variables:
  - vegetation & birds
  - existing disturbance
- Answers the questions:
  - What's the habitat quality before the conservation or development project?
  - What happened to the habitat after the project?

HQT Estimates Functional Acres

(gained or lost)

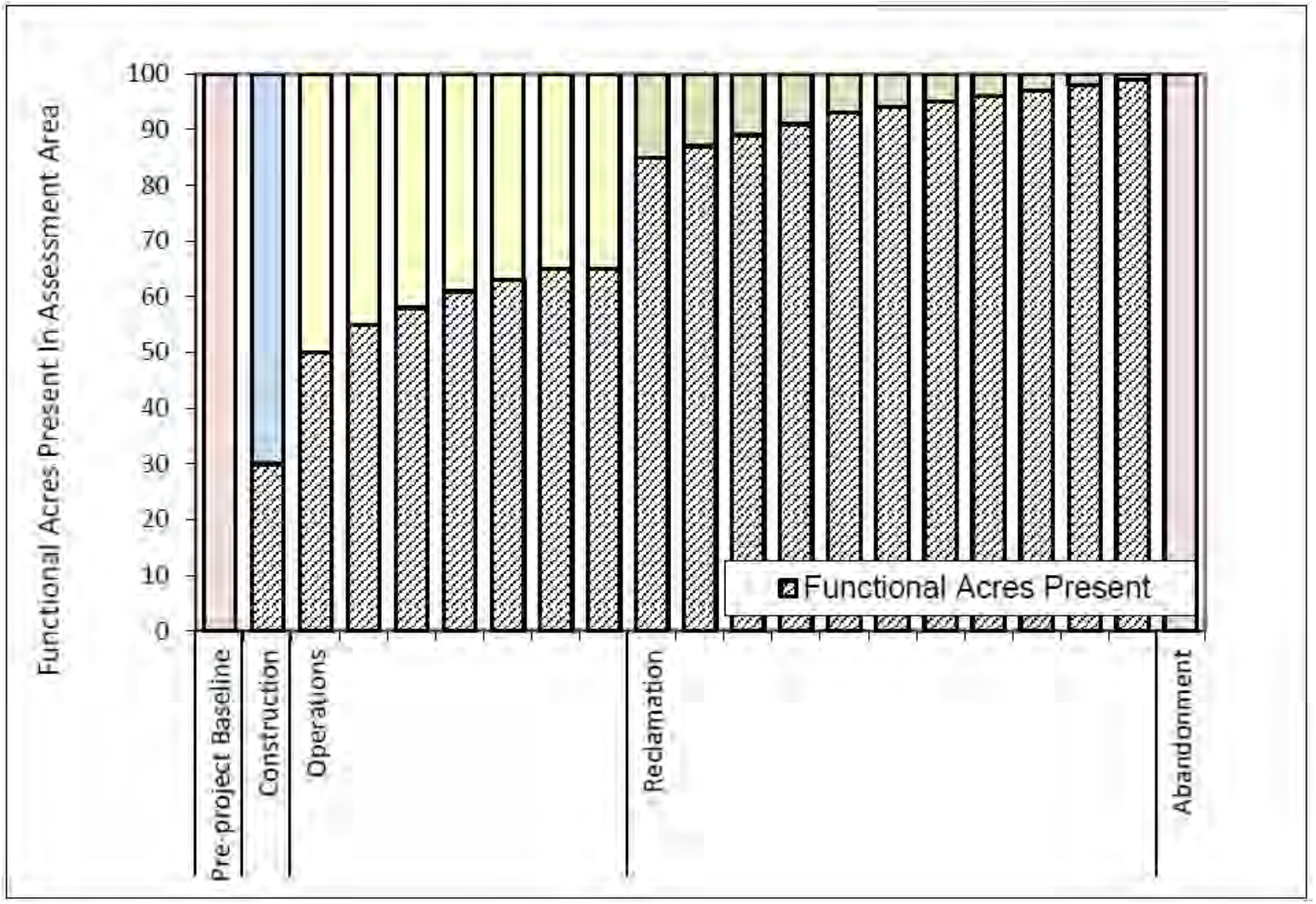
1. Create statewide baseline map: habitat quality
2. Add project (type, size, duration, etc.)
3. Run the model to calculate Fx acres gained or lost

- Development Projects
  - location & project specific: direct and indirect effects
  - time: construction + operations + reclamation

- Conservation Projects
  - location
  - type: preservation, restoration, enhancement

RESULT: single number “raw HQT” score

Phases of a Development Project: HQT Calculations



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Functional Acres Can be Calculated for Each Phase

Solar Farm in a Core Area					
Project Phase	**Year**	**Functional Acres Present**	**HQT Functional Acres Lost**		
Baseline	**2017**	**1271.79**	**0.00**		Fx pre-project baseline
Construction Yr1	2018	367.41	904.38	**904.38**	Fx construction year 1
Operations Yr2-50			44314.62	**44314.62**	Fx operations - year 2 through 50
Reclamation Yr1	2068	790.12	535.19		Fx years 1 - 75 of reclamation - using linear decay
Reclamation Yr2	2069	754.44	517.35		
Reclamation Yr3	2070	772.28	499.51		
Reclamation Yr4	2071	790.12	481.67		
Reclamation Yr5	2072	827.65	463.83	**2497.55**	Fx if reclamation completed by year 5
Reclamation Yr6	2073	812.88	458.91		
Reclamation Yr7	2074	817.80	453.98		
Reclamation Yr8	2075	822.73	449.06		
Reclamation Yr9	2076	827.65	444.14		
Reclamation Yr10	2077	851.78	439.21	**4742.85**	Fx if reclamation completed by year 10
Reclamation Yr11	2078	837.38	434.41		
Reclamation Yr12	2079	842.18	429.61		
Reclamation Yr13	2080	846.98	424.81		
Reclamation Yr14	2081	851.78	420.01		
Reclamation Yr15	2082	878.80	415.20	**6866.89**	Fx if reclamation completed by year 15
Reclamation Yr25	2092	1020.66	390.53	**10883.20**	Fx if reclamation completed by year 25
Reclamation Yr50	2117	1261.98	245.32	**18758.62**	Fx if reclamation completed by year 50
Reclamation Yr75	**2142**	**1271.79**	**0.00**	**21702.42**	Fx if reclamation completed by year 75
Total HQT score			**66921.42**		

Moving Functional Acres into the Mitigation Market:

Expressed as Debits or Credits

HQT
method to evaluate habitat:

- quality
- quantity

Fx acres:

- conservation

  or

- impact

Photo: USFWS

Market

credits & debits are units of trade in a market

- 1 credit = 1 Fx acre
- 1 debit = 1 Fx acre

Units of trade, value:

- $$ / credit
- $$ / debit

Guidance Document: Part 1

- Introduction & Overview
- Service Areas
- Credits
  - How many credits are created?
  - How many credits can move to the market?
  - How to value credits created by Stewardship Account grants to purchase conservation easements?

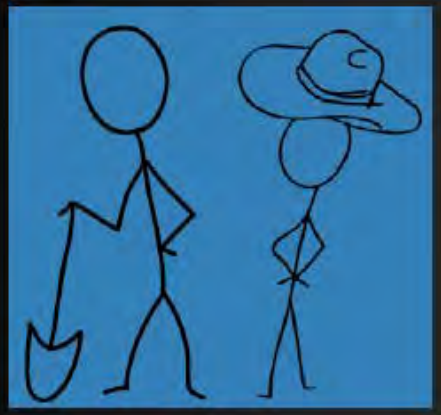
Guidance Document:
a document describing how everyone applies the HQT model results to make decisions

- Sets forth how conservation will be incentivized in the mitigation market
  - o "multipliers" = policy signals to encourage / discourage
  - o developers make business decisions to keep costs as low as possible
  - o credit providers make business decisions, get paid for doing conservation / land stewardship

- Key Components
  - o roles, protocols, procedures
    - – MSGOT, credit site providers, developers, others
  - o multipliers
    - – landscape-scale policy signals: location in SG country
    - – site-specific policy signals: hierarchy & consistency with EO 12-2015
    - – others

Basic Moving Parts

Credits

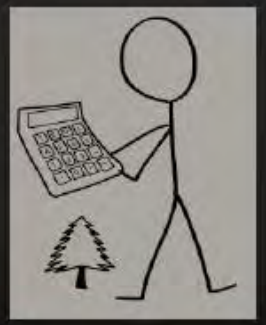


Debits

The **HQT** is the common currency used to balance the mitigation ledger

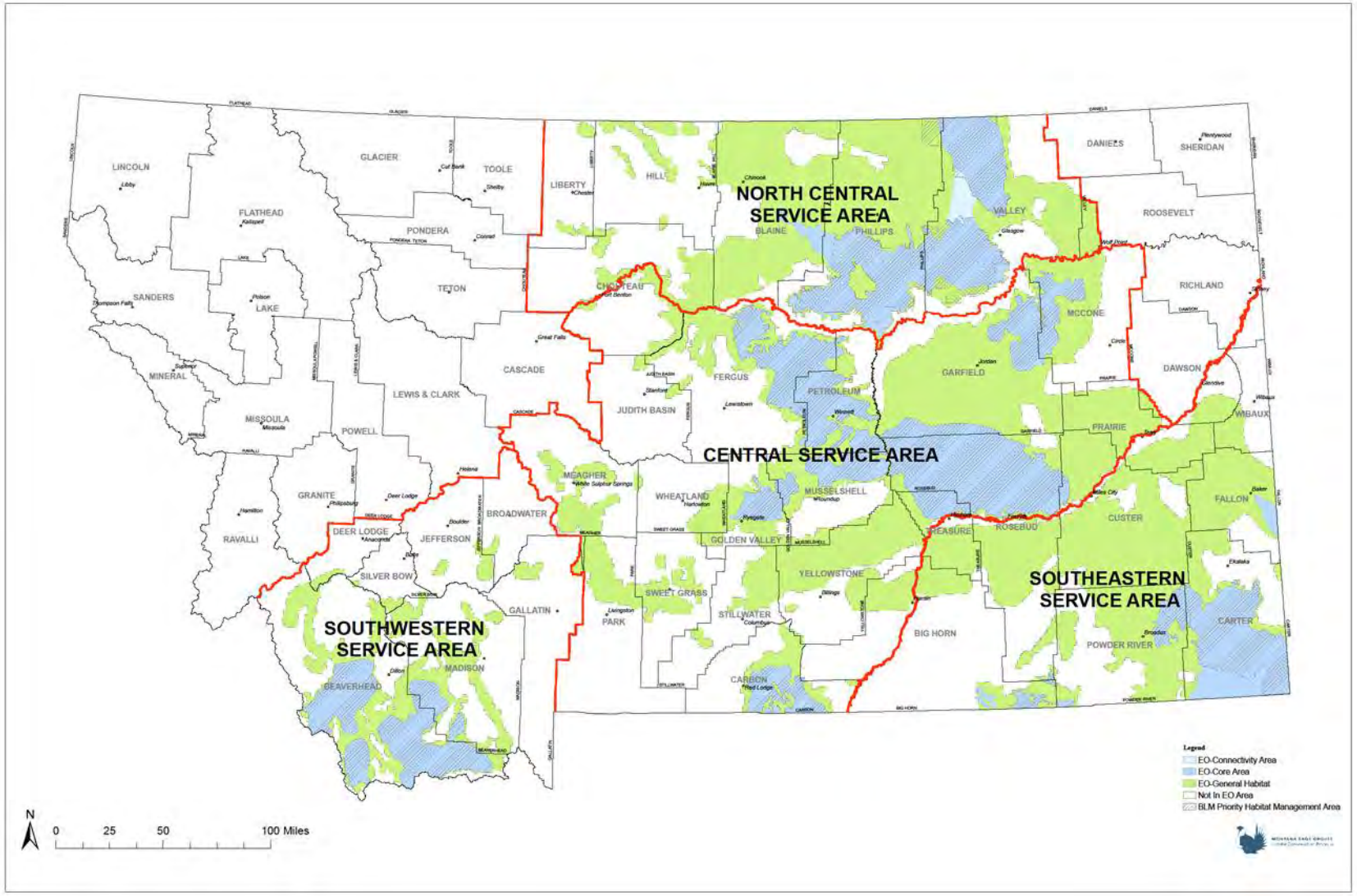
(equitable exchange)

Administration



Four Service Areas

[Stakeholders agreed on 3, limited discussion on 4]



Q: How many total Fx acre credits are created?

A: HQT base map determines

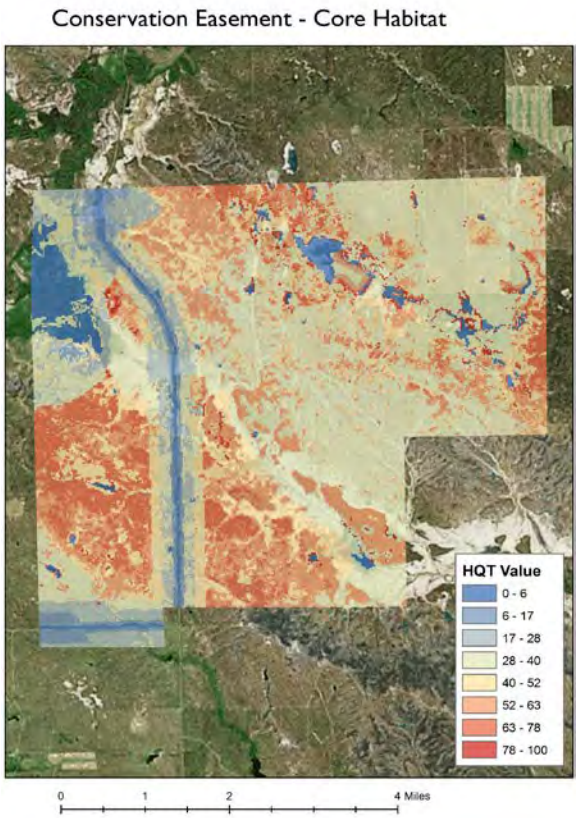
- functional acres depends on habitat quality
- higher quality habitat creates more Fx acre credits / physical acres

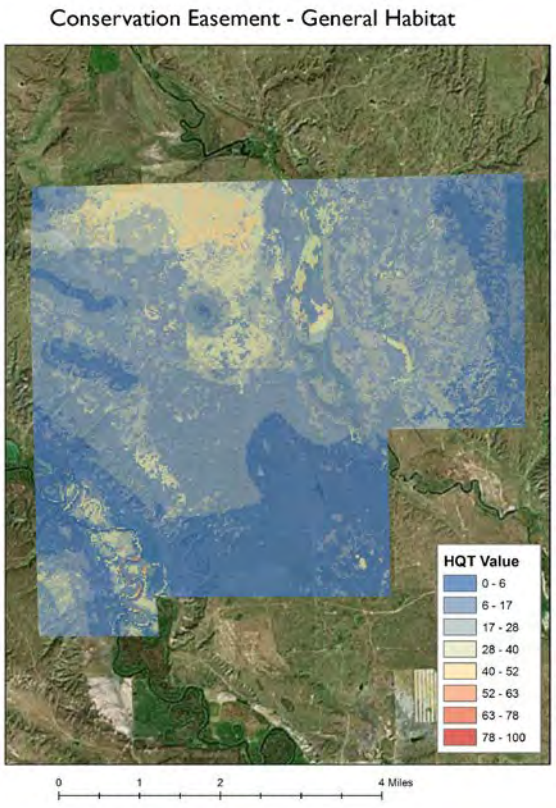
High Quality: high HQT score

Low Quality: low HQT score

Core Area:
773,049 Fx acre credits

(100 yrs)





General Habitat:
247,573 Fx acre credits

(100 yrs)

Q: How many Fx acres can be moved to the market for a conservation easement?

[Stakeholders disagree: fixed % but …]

IDEA: Look at the market appraisal

- CEs purchase development rights
  - also called "avoided loss" since avoiding habitat loss & fragmentation caused by development
  - conversion, subdivision, commercial wind, etc.

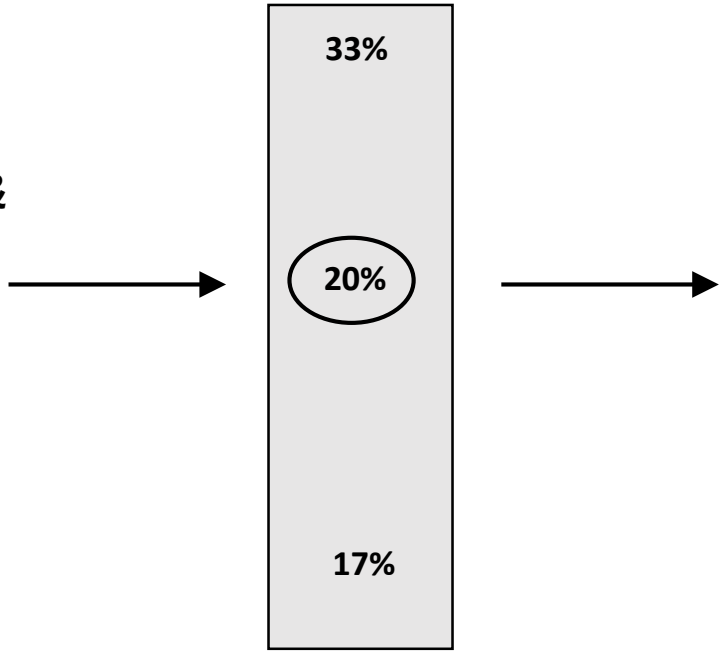
- From the appraisal, learn two things:
  1. percent change in parcel value after CE
  2. cost of the development rights purchased

A: Credits moved to market determined by the % change in appraised property value

- only interested in threats avoided (impacts of development)
- CE protects the habitat
- parcel by parcel approach
- set floor and ceiling
- applicable to all preservation credits

Appraiser looks at terms & comparable properties:

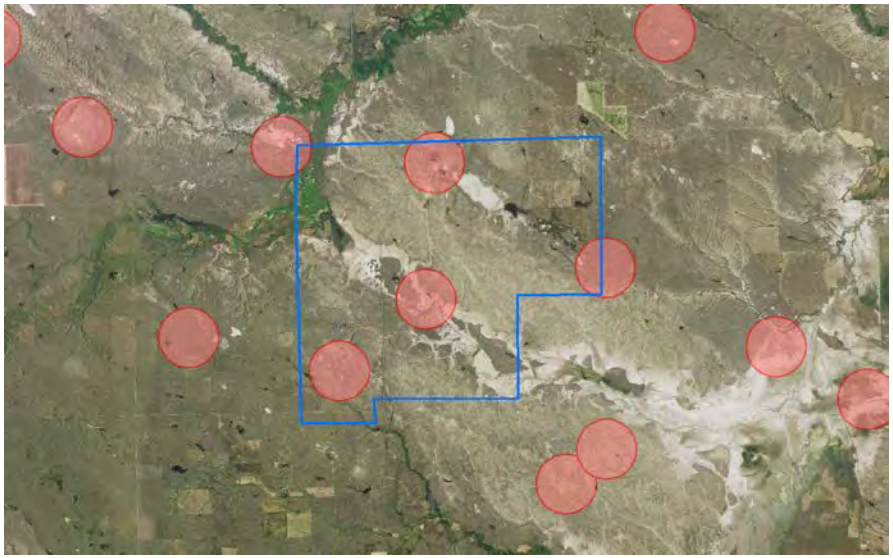
- ***selects 20% change in value, based on the terms and comps***



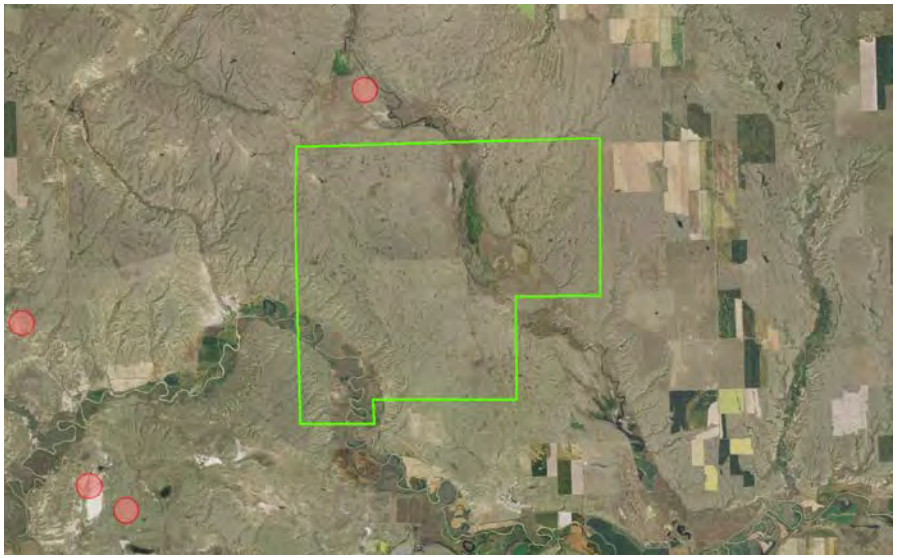
Total Fx acre credits moved to market is 20% of the Raw HQT score

Hypothetical Conservation Easement

- 18,000 acres
- Phillips County
- assume 100-year duration
- aerial image with lek NSOs

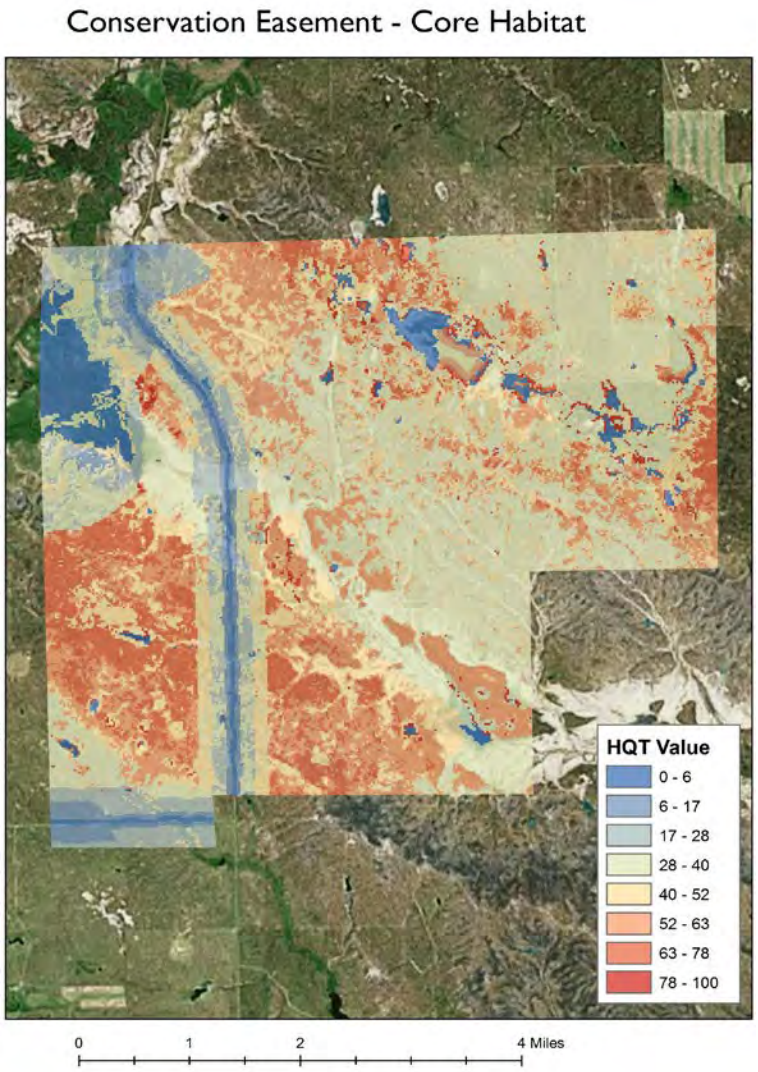


Core Area



General Habitat

Credits Hypothetical Conservation Easement – Core Area



HQT Raw Score:
773,049 functional acre credits, life of project (100 yrs)

<u>Hypothetical Appraisal: range of comps</u>

HIGH – 33%:

- 255,106 Fx acre credits to market

MEDIUM – Appraiser selected – 20%:

- 154,609 Fx acre credits to market

LOW – 17% :

- 131,418 Fx acre credits to market

Credits Hypothetical Conservation Easement – General Habitat

<u>Hypothetical Appraisal: range of comps</u>

HIGH – 33%:

- 81,699 Fx acre credits to market

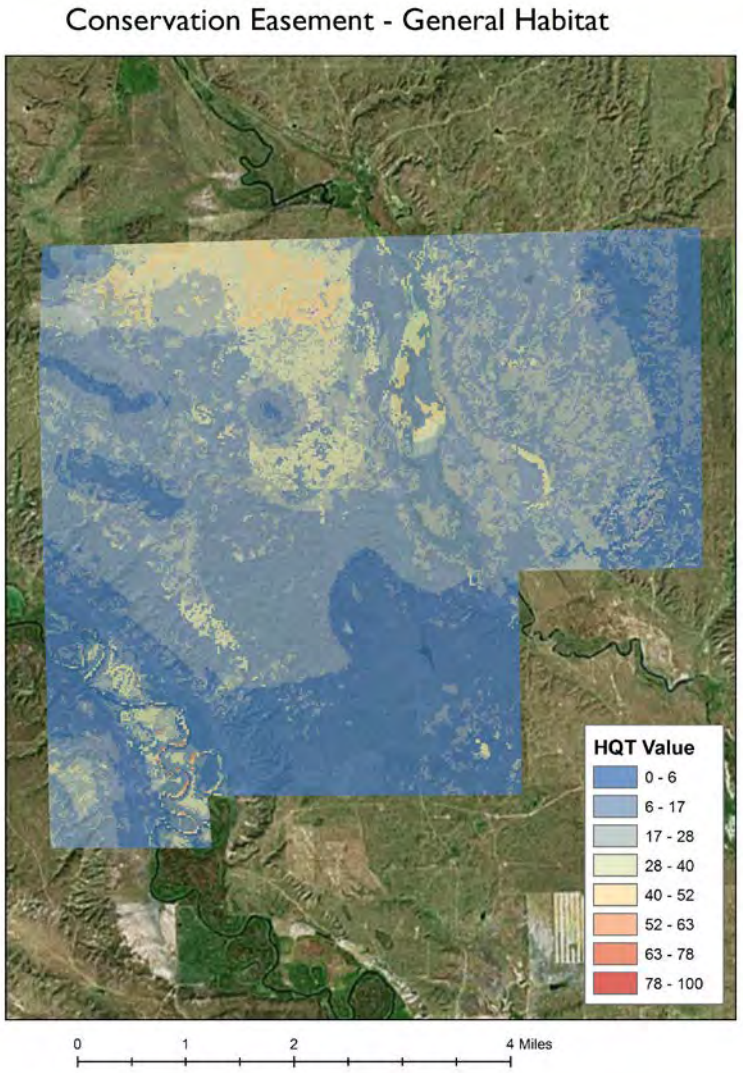
MEDIUM – Appraiser selected – 20%:

- 49,514 Fx acre credits to market

LOW – 17%:

- 42,087 Fx acre credits to market

NOTE:
Fewer Fx acre credits here for an 18,000 acre easement because HQT Raw Score is lower (habitat quality is lower)



HQT Raw Score:
247,573 functional acre credits, life of project (100 yrs)

Justification for Using 3rd Party Appraisal

- Neutral, unbiased, method focused on actual threats of development that are avoided as a result of the easement
  - higher % reflects greater protections on habitat because value of land declines more when development rights worth more
  - accordingly, higher percentage makes more credits available
- Site-specific: reflects unique nature of each easement
  - location and terms
- Better than “one size fits all” or “fixed number” for all parcels, regardless of CE terms, the land, or the market
  - more protective easements generally cost more
  - more protective easements = stronger habitat protection for bird

Q: How to value credits from conservation easements?

[Stakeholders did not specifically discuss]

Idea for MSGOT Stewardship grants: Appraisal

- CEs purchase development rights

- From the appraisal, learn two things:
  1. percent change in parcel value after the CE
  2. cost of the development rights purchased

Idea for Everyone Else: parties freely negotiate

- state not a party

A: Stewardship Account credit price determined by cost of the development rights purchased by the CE and the number of Fx acre credits created

	Habitat Classification	Fx Acres Per Year	Fx Acres for 100-year easement	Cost of purchased development rights (CE) from appraisal	% decline in property market value due to CE	Fx credits to market based on appraisal	Cost per credit based on appraisal
44 Ranch*	Core	7,383.40	738,335.70	$2,140,000.00	20	147,667.10	$14.49
* closed							

- Number of Fx credits available determined by the % change in market value after the CE (appraiser: actual rights purchased, CE terms, comps, market)
- Cost / Credit = appraised value of purchased development rights / Fx acre credits created by the purchased development rights on that parcel
- If sufficient credits unavailable, contribution to Account equal to average cost of credits that would otherwise be required - MCA 76-22-111(1)(b)(ii)

Justification for Using 3rd Party Appraisal

- Neutral, unbiased, certified appraiser
- Market-based dollar value connected to the land
- Cost is directly related to the risk of development (rights purchased will eliminate the threats)
- Reflects market-based value of purchased development rights
- Avoids artificial reflection on grant applicant's effort or success in securing other matching funds
- Avoids making state a "market actor" for the credits it creates using Stewardship Account funds

Nutshell: Guidance Document Part 1

- Four Service Areas

- Fx acre credits available in market from an easement determined by how much the purchased development rights adjusted the property's market value
  - o any easement
  - o consider setting floor and ceiling

- Credit price for Stewardship Account easements also set to the market value of the purchased development rights
  - o consider setting floor and ceiling

Guidance Document: Part 2

- Debits – Method to calculate the total mitigation obligation
  - raw HQT score
  - multipliers adjust obligation
- Two new ideas
  - not previously discussed with Stakeholders
  - address concerns about economic viability

Debits: calculating the mitigation obligation (sum)

[July, 2017 Guidance document; Stakeholders disagree on #2 - multipliers]

1. Raw HQT Score: Fx acres lost for life of project
   - total direct, indirect impacts
   - operations, construction, reclamation
   - type of project, size, habitat quality

2. Multipliers applied to raw HQT score based on hierarchy & consistency with EO: policy signals
   - apply to life of project
   - add 5% or 10% of raw HQT score:
     - landscape signal: 10% core, 5% general, 5% connectivity
     - site-specific consistency with EO: 10% or 5% per departure
     - net conservation benefit: 10% or 5%
     - reserve (risk & uncertainty): 10%

3. Other Policy Elements

Two New Ideas:

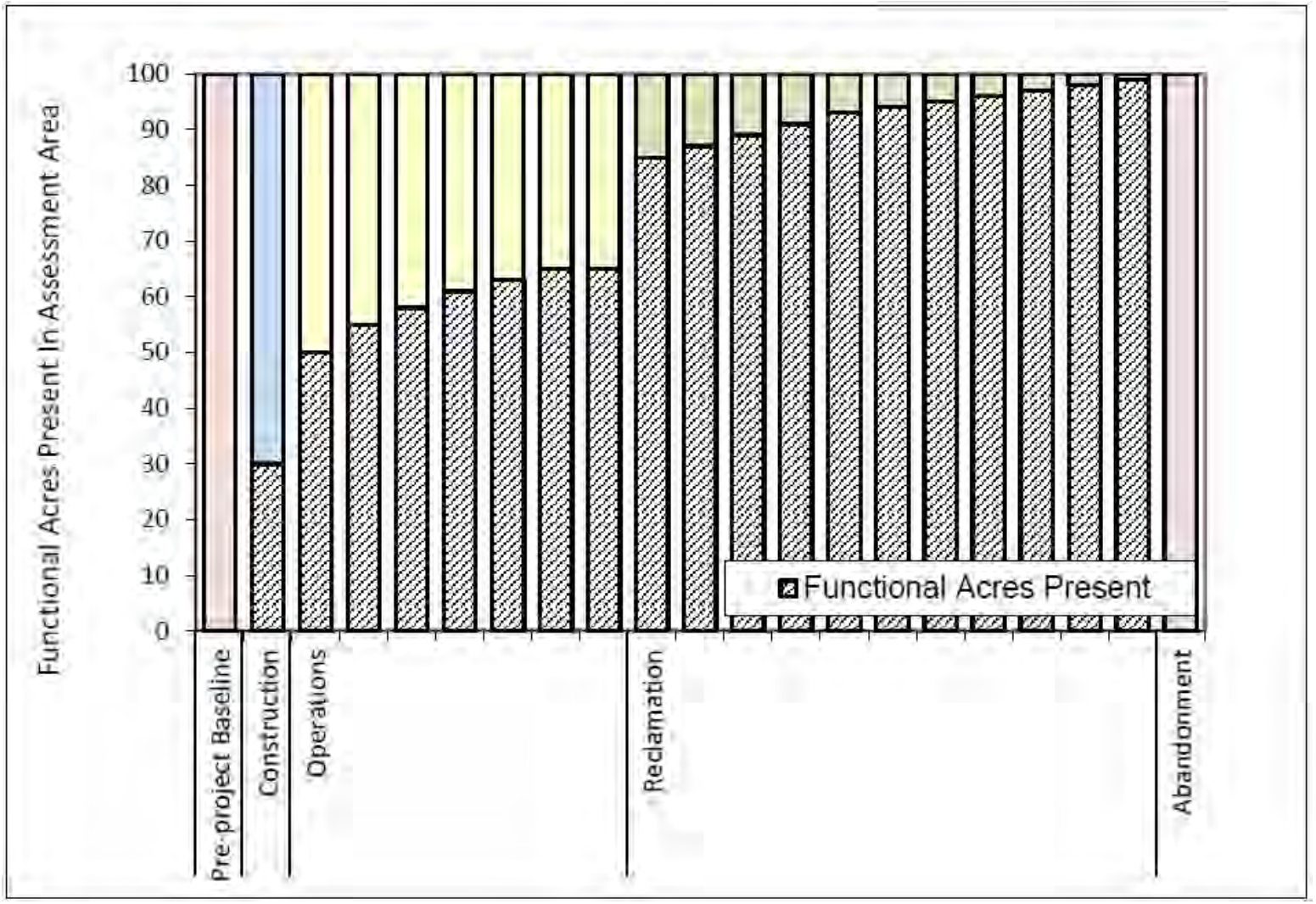
1. Do not apply site-specific multipliers to the reclamation phase

2. Allow for phased:
   - payments to Stewardship Account

     [and / or]

   - documentation that mitigation obligation is met using credits from other sources

Phases of a Development Project: HQT: Fx Acres for Each Phase



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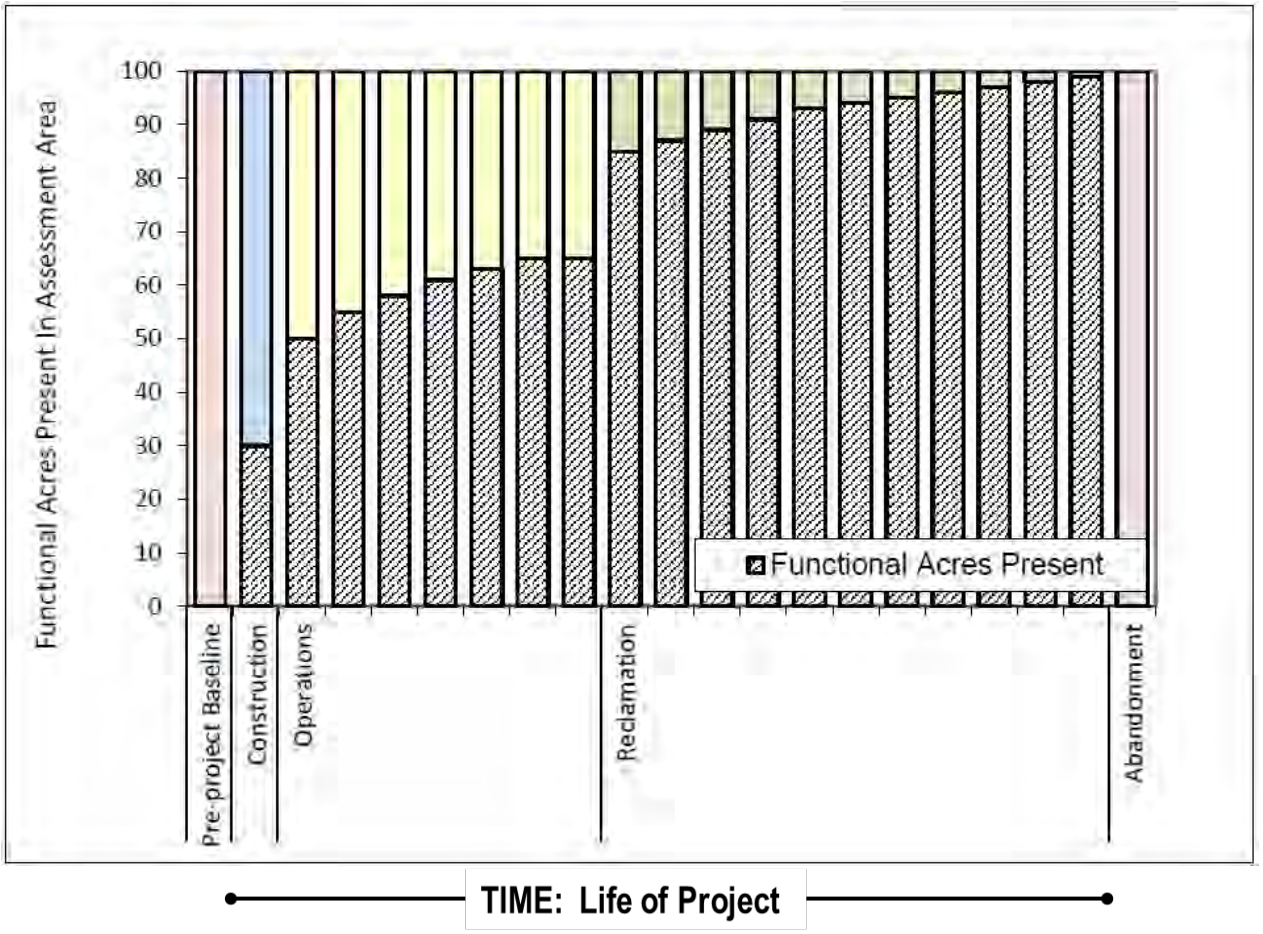
July 2017 Draft Guidance: multipliers apply for life of project

<u>IDEA</u>: Site-Specific multipliers only apply to Construction & Operations *[not discussed by Stakeholders]*

- Once project stops & infrastructure removed, Operations done: EO stips no longer applicable
- Reclamation phase is already accounted for in initial raw HQT score: therefore mitigation still applicable
- Proportional & reasonable application of EO
- Mitigation still adequate, timely
  - o risk and uncertainty multiplier applied life of project

IDEA: Phased Payments

[not discussed by Stakeholders]



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Payments or documentation: at the beginning of each project phase

- construction, operations, or reclamation

Nutshell: Guidance Document Part 2

- Total Fx acres lost (debits):
  - raw HQT score + (sum of all multipliers) + other policy elements

- Site-specific multipliers applied only during construction & operations
  - more reasoned application of using a modifier for EO stips
  - still sound because reclamation included in raw score for all other modifiers

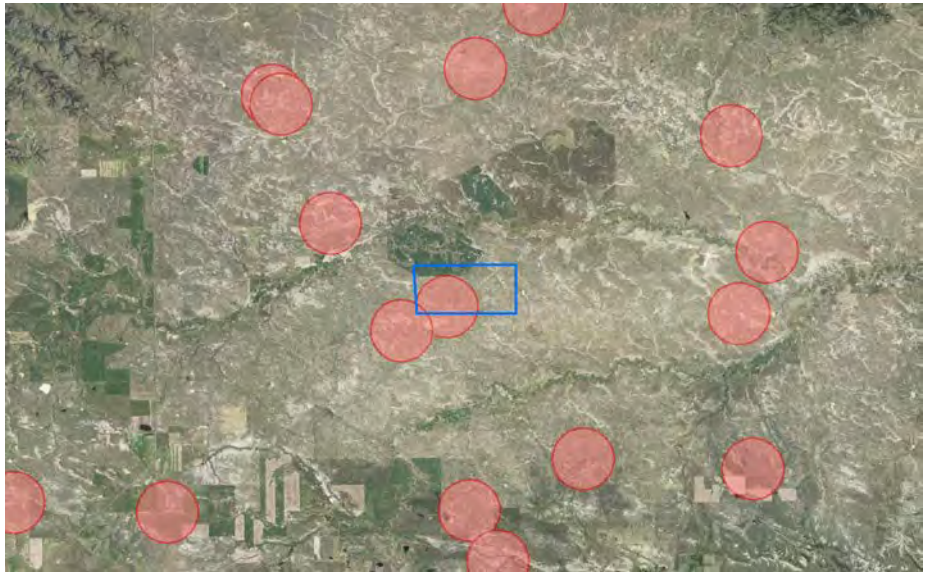
- Possible to add flexibility, MSGOT discretion:
  - phased payments to Stewardship Account [or]
  - allow phased documentation
  - mitigation must still be timely (offsets in place before impacts)

HQT and Guidance Working Together

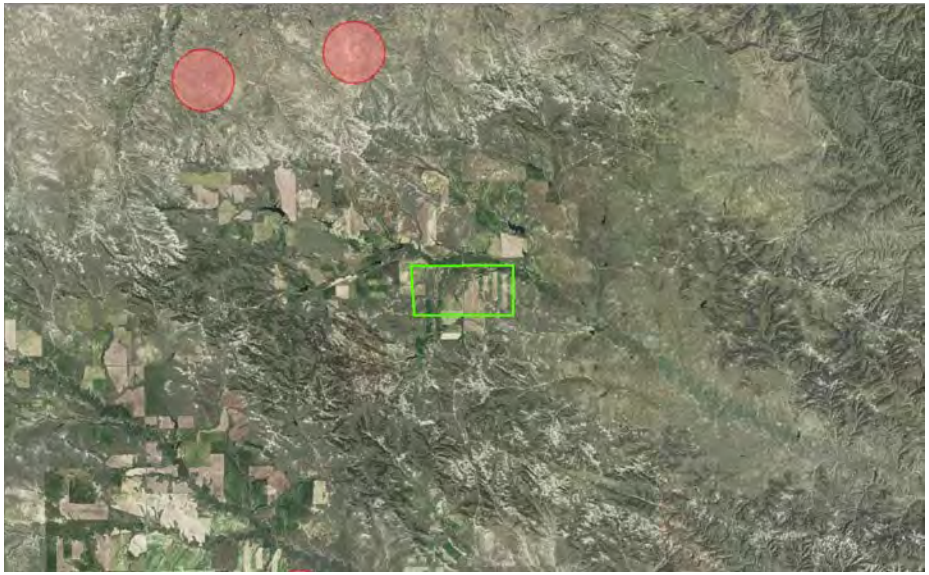
- For the following hypos:
  - o used Sept. 2017 base map provided by SWCA
  - o assume MSGOT adopted:
    - appraisal method to determine credits from Stewardship account easements: 44 Ranch
    - only applied multipliers during construction, operations
- Scenarios: Core and General Habitat
  - o no hierarchy / many departures from the EO
  - o follow hierarchy / few departures from the EO
- Mitigation obligation
- Cost if used 44 Ranch credits

Hypothetical Energy - Solar

- 1000 acre solar farm
- Phillips County
- 50-year construction/operation phase
- 75 years until reclamation phase complete



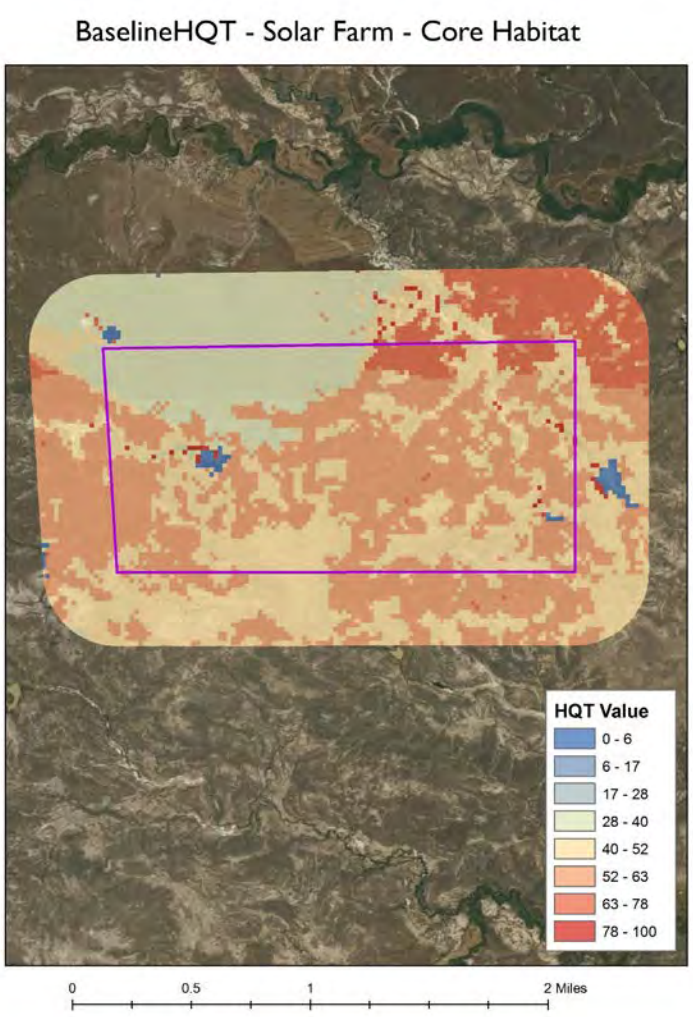
Core Area

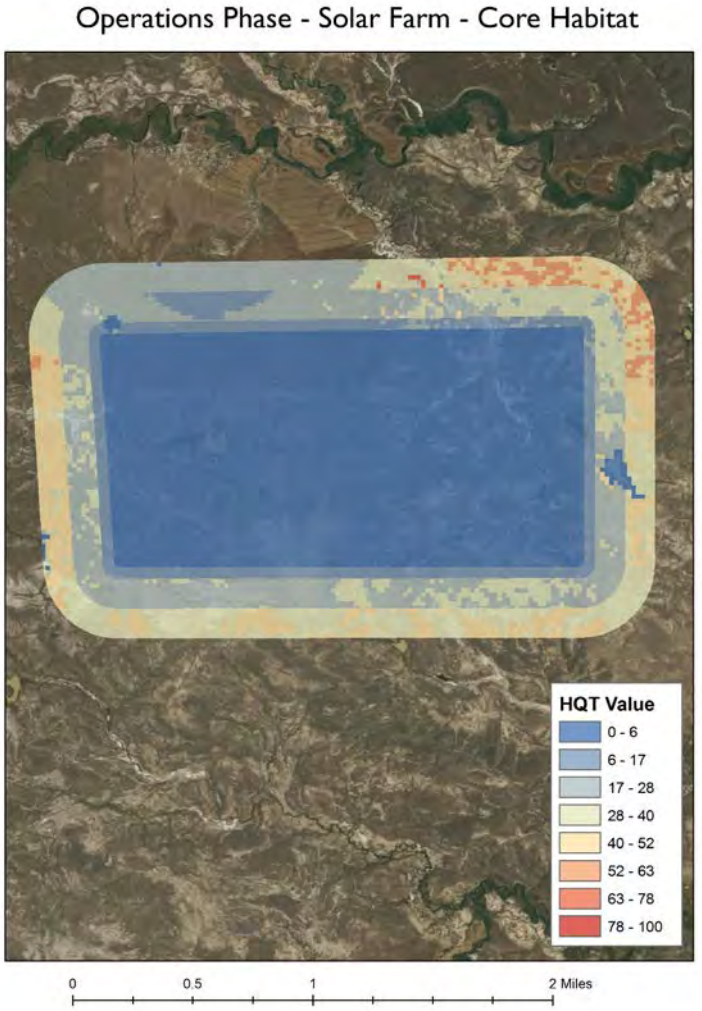


General Habitat

Hypothetical Energy – Solar: Core Area

- High baseline values (left) mean high quality habitat
- Construction and operations (right): direct and indirect impacts





Debits Solar Farm Hypo: Core Habitat

HQT and Guidance - components of the total score	No hierarchy Departure from EO	Follow hierarchy No departure from EO
Raw HQT Score • **Construction, Operations, Reclamation**	**66,921.42**	**66,921.42**
Risk and Uncertainty: 10% • **Construction, Operations, Reclamation**	**6,692.14**	**6,692.14**
Landscape signal: 10% core • **Construction, Operations, Reclamation**	**6,692.14**	**6,692.14**
Site-specific EO signals: 10% for each departure from EO • **Construction and Operations only** • **Modifiers: NSO; Seasonal Use; Transportation; Noise; Vegetation removal**	**76,690.88 (n = 16)**	**22,609.50 (n = 5)**
TOTAL DEBITS (Raw HQT + risk + landscape + site-specific)	**156,996.58**	**102,915.20**
Using credits from 44 Ranch Appraisal = $14.49/credit	**$2,274,880.40**	**$1,491,241.20**
OTHER POLICY ELEMENTS		
Full cost accounting	**??**	**??**
Service Area (assume within Area of impact)	**??**	**??**
Timeliness (assume offsets done before impacts)	**??**	**??**
Total Cost (not including other policy elements)	***$2,274,880.40***	***$1,491,241.20***

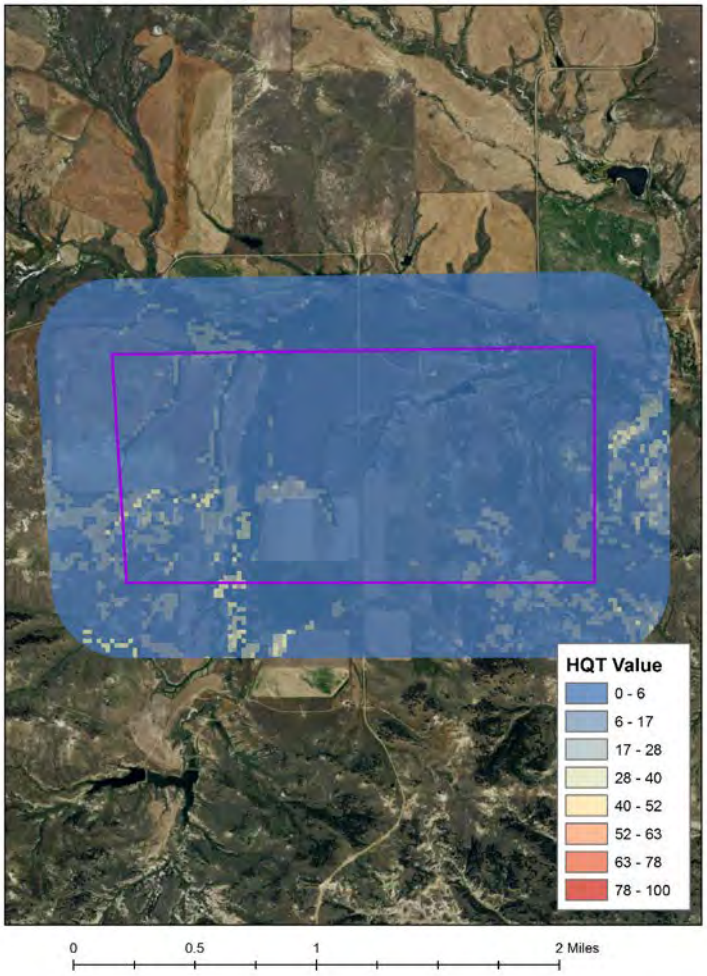
10% NCB would add 6,692.14 Fx acres to total debit score and would cost $96,969.10.

This is 4% of the total mitigation No Hierarchy obligation, and 6% when Hierarchy is followed.

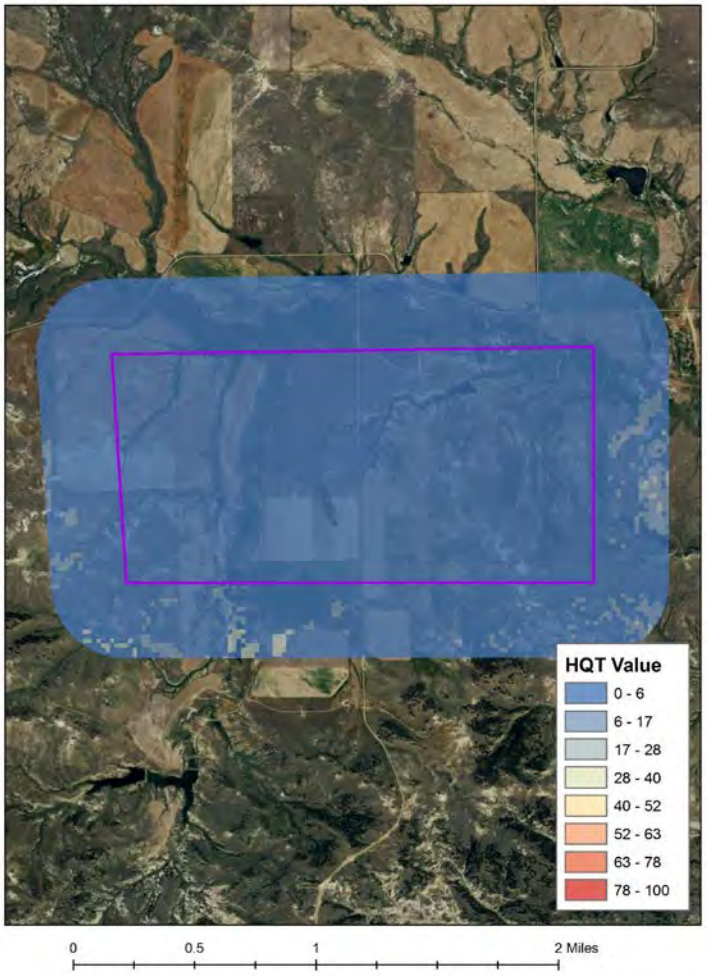
Hypothetical Energy – Solar: General Habitat

- Low baseline values (left) mean low quality habitat
- Construction and operations (right): direct and indirect impacts

BaselineHQT - Solar Farm - General Habitat



Operations Phase - Solar Farm - General Habitat



Debits Solar Farm Hypo: General Habitat

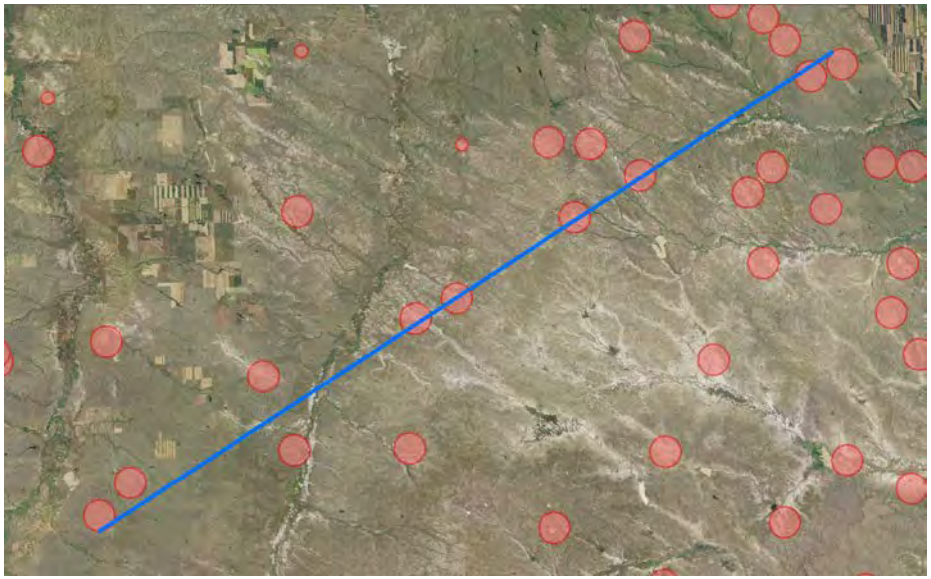
HQT and Guidance - components of the total score	No hierarchy; Departure from EO	Follow hierarchy; No departure from EO
Raw HQT Score • Construction, Operations, Reclamation	3,300.49	3,300.49
Risk and Uncertainty: 10% • Construction, Operations, Reclamation	330.05	330.05
Landscape signal: 5% General Habitat • Construction, Operations, Reclamation	165.02	165.02
Site-specific EO signals: 10% for each departure from EO • Construction and Operations only • Modifiers: None	0 (n = 0)	0 (n = 0)
TOTAL DEBITS (Raw HQT + risk + landscape + site-specific)	3,795.56	3,795.56
Using credits from 44 Ranch Appraisal = $14.49/credit	$54,997.66	$54,997.66
OTHER POLICY ELEMENTS		
full cost accounting	??	??
Service Area (assume within Area of impact)	??	??
Timeliness (assume offsets done before impacts)	??	??
Total Cost (not including other policy elements)	*$54,997.66*	*$54,997.66*

10% NCB would add 330.05 Fx acres to total debit score and would cost $4,782.42.

This is 8% of the total mitigation No Hierarchy obligation and 8% when Hierarchy is followed.

Hypothetical Infrastructure – Pipeline (major)

- 30 miles long, 200 feet wide
- Valley and Phillips Counties
- 1-year construction / operation phase: buried feature
- 75 years until reclamation phase complete



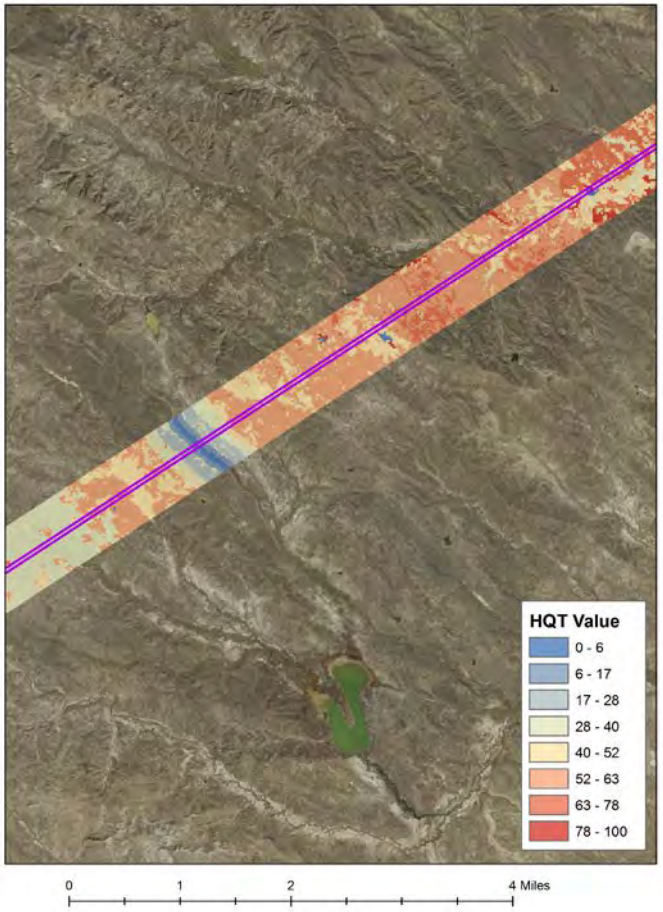
Core Area

General Habitat

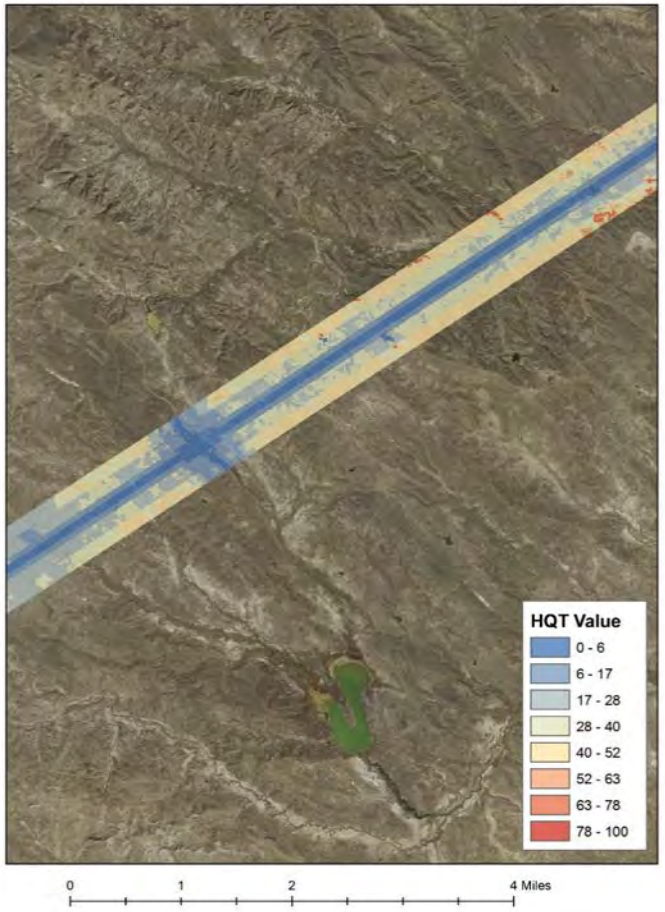
Hypothetical Infrastructure – Pipeline (major): Core Area

- High baseline values (left) mean high quality habitat
- Construction and operations (right): direct and indirect impacts

BaselineHQT - Pipeline - Core Habitat



Operations Phase - Pipeline - Core Habitat



Debits Major Pipeline Hypo: Core Habitat

HQT and Guidance - components of the total score	No hierarchy Departure from EO	Follow hierarchy No departure from EO
Raw HQT Score • **Construction, Operations, Reclamation**	**14,929.41**	**14,929.41**
Risk and Uncertainty: 10% • **Construction, Operations, Reclamation**	**1,492.94**	**1,492.94**
Landscape signal: 10% core • **Construction, Operations, Reclamation**	**1,492.94**	**1,492.94**
Site-specific EO signals: 10% for each departure from EO • **Construction and Operations only** • **Modifiers: NSO; Seasonal Use; Transportation; Noise; Vegetation removal**	**18,080.23 (n = 54)**	**2,343.73 (n = 7)**
TOTAL DEBITS (Raw HQT + risk + landscape + site-specific)	**35,995.52**	**20,259.02**
Using credits from 44 Ranch Appraisal = $14.49/credit	**$521,575.08**	**$293,553.19**
OTHER POLICY ELEMENTS		
full cost accounting	**??**	**??**
Service Area (assume within Area of impact)	**??**	**??**
Timeliness (assume offsets done before impacts)	**??**	**??**
Total Cost (not including other policy elements)	***$521,575.08***	***$293,553.19***

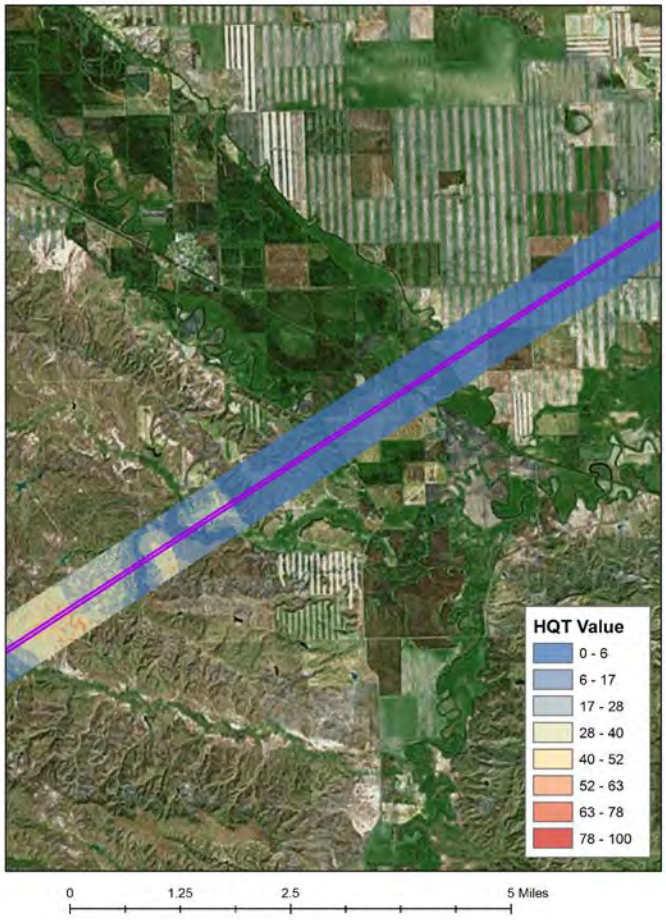
10% NCB would add 1,492.94 Fx acres to total debit score, and would cost $21,632.70.

This is 4% of the total mitigation No Hierarchy obligation and 7% when Hierarchy is followed.

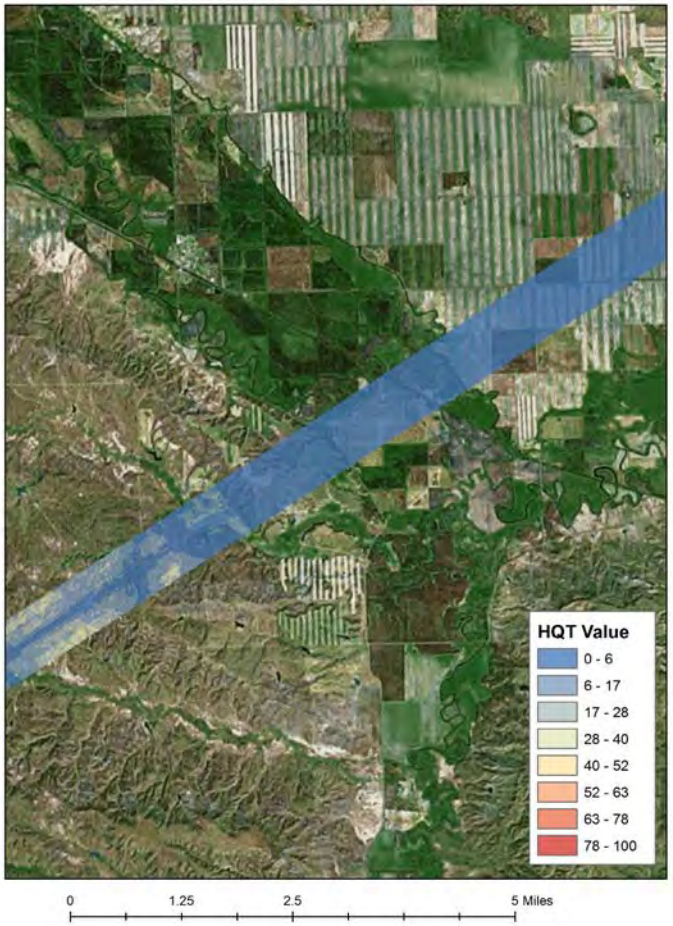
Hypothetical Infrastructure – Pipeline (major): General Habitat

- Low baseline values (left) mean lower quality habitat
- Construction and operations (right): direct and indirect impacts

BaselineHQT - Pipeline - General Habtitat



Operations Phase - Pipeline - General Habitat



Debits Major Pipeline Hypo: General Habitat

HQT and Guidance - components of the total score	No hierarchy; Departure from EO	Follow hierarchy; No departure from EO
Raw HQT Score • **Construction, Operations, Reclamation**	**2,645.89**	**2,645.89**
Risk and Uncertainty: 10% • **Construction, Operations, Reclamation**	**264.58**	**264.58**
Landscape signal: 5% General Habitat • **Construction, Operations, Reclamation**	**132.29**	**132.29**
Site-specific EO signals: 10% for each departure from EO • **Construction and Operations only** • **Modifiers: Seasonal Use; Transportation; Vegetation removal**	**283.60 (n = 3)**	**63.02 (n = 1)**
TOTAL DEBITS (Raw HQT + risk + landscape + site-specific)	**3,326.36**	**3,105.78**
Using credits from 44 Ranch Appraisal = $14.49/credit	**$48,198.95**	**$45,002.75**
OTHER POLICY ELEMENTS		
full cost accounting	**??**	**??**
Service Area (assume within Area of impact)	**??**	**??**
Timeliness (assume offsets done before impacts)	**??**	**??**
Total Cost (not including other policy elements)	***$48,198.95***	***$45,002.75***

10% NCB would add 264.58 Fx acres to total debit score, and would cost $3,833.76.

This is 7% of the total mitigation No Hierarchy obligation and 8% when Hierarchy is followed.

What Drives the Total Number of Debits?

A. Raw HQT Score (policy neutral)*

- ***habitat quality, project attributes (type, size, duration)***

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A. **Raw HQT Score (policy neutral)***
   - *habitat quality, project attributes (type, size, duration)*

B. **Landscape scale policy signal (modifier)**
   - ***Where are you in SG habitat: core area vs. general habitat vs. outside?***
   - ***proportional to raw HQT score***

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- *Where are you in SG habitat: core area vs. general habitat vs. outside?*
- *proportional to raw HQT score*

C. Site-specific policy signal (modifier)*

- ***What are you doing once you get there? Hierarchy?***
- ***Consistent with EO stipulations?***
- ***proportional to raw HQT score***

What Drives the Total Number of Debits?

A. Raw HQT Score (policy neutral)*

- *habitat quality, project attributes (type, size, duration)*

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- *Where are you in SG habitat: core area vs. general habitat vs. outside?*
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C. Site-specific policy signal (modifier)*

- *What are you doing once you get there? Hierarchy?*
- *Consistent with EO stipulations?*
- *proportional to raw HQT score*

D. Risk & Uncertainty (modifier)

- ***credit site not as good as predicted; impact greater than predicted***
- ***reclamation not as successful as planned***
- ***HQT scores not perfectly estimated; no confidence intervals – error unknown; underlying GIS data not very precise***
- ***proportional to raw HQT score***

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- *proportional to raw HQT score*

E. Other policy elements

- ***service areas, timeliness, full cost accounting***

What Drives the Total Number of Debits?

A. Raw HQT Score (policy neutral)*

- *habitat quality, project attributes (type, size, duration)*

B. Landscape scale policy signal (modifier)

- *Where are you in SG habitat: core area vs. general habitat vs. outside?*
- *proportional to raw HQT score*

C. Site-specific policy signal (modifier)*

- *What are you doing once you get there? Hierarchy?*
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- *HQT scores not perfectly estimated; no confidence intervals – error unknown; underlying GIS data not very precise*
- *proportional to raw HQT score*

E. Other policy elements

A* + B + C*+ D + E = total debits

Why Landscape Scale Policy Signals Matter to a "Core Areas" Strategy

- *Core Areas Multiplier: best habitat left*
  - *habitat quality is high, HQT scores high*
  - *contains 75% of breeding males*
  - *important for long term persistence and dispersal (stepping stones)*
- *EO 12-2015 discourages new disturbance in core; stips more conservative*
- *Any new development in becomes part of landscape*
  - *habitat loss & fragmentation of remaining, valuable intact blocks*
- *Increased disturbance lowers habitat quality and quantity unless mitigation is timely, effective*
  - *decreases incentive to site properly in the future*

Why Site-Specific Policy Signals Matter: Preserve Integrity of the EO

- *If no incentive to be consistent with the EO, no need to try*
  - *habitat loss and fragmentation not curtailed*
  - *impacts to habitat and population increase*

- *EO stips are already a compromise, not as conservative as science suggests they should be*
  - *mitigation helps make up for that*

- *Recognizes different stips by project type, habitat quality, location*

- *Lek-centric for a reason: bird ecology*

- *Some activities evade EO 12-2015 altogether*

Why Applying the Hierarchy Matters: Reduce Residual Impacts & Obligations (cost)

- *Hierarchy reduces project impacts to the smallest possible effect*
- *Accomplished through avoiding and minimizing landscape level and site-specific impacts through strategic planning and business decisions*
- *Residual impacts are unavoidable because new or increased activity or surface disturbances in habitat will have some level of impact on sage-grouse*
- *Remaining unavoidable residual impacts reconciled through compensatory mitigation*
- *Only way to avoid residual impacts is to not implement a project in sage-grouse habitat*

Nutshell: What Drives Total Cost?

- Total cost based on total mitigation obligation (Fx lost)
  - raw HQT score
  - multipliers based on raw HQT score
  - results proportional, commensurate with impacts to habitat
- Project Attributes: some will be inherently more costly
  - large projects above ground in core
  - long duration
  - do not follow hierarchy
  - depart from EO stipulations
- Underlying habitat quality: the base map (red vs. blue)
  - location, location, location!
  - core areas have higher HQT baseline scores

Nutshell: HQT and Guidance Working Together

- HQT results are commensurate, proportional to project's direct and indirect impacts for the full life of project
  - policy neutral
  - objective
  - repeatable
- Use policy to encourage / discourage actions
- Policy signals: landscape and site specific multipliers
  - determined by whether follow hierarchy
  - determined by consistency with EO
  - also commensurate, proportional to the project itself

Coming Full Circle:

- HQT: estimates gains or losses in functional habitat
  - scale of measurement (important to be accurate)
  - if not accurate, could overestimate / underestimate:
    - impacts of development
    - benefits of conservation actions
- Business decisions by all: be proactive, plan well
- Guidance: policy, protocols, & roles
  - multipliers encourage / discourage actions
  - fosters proactive planning, informed decisions by all
- Market sets price
  - 1 Fx acre gained = 1 credit
  - 1 Fx acre lost = 1 debit

Suggested Next Steps:

- DNRC GIS Team: fully integrated, automated HQT GIS model
  - any project type, complex geometry
  - base map & pilot project testing

- [Stakeholder meeting if desired]

- Finalize HQT model on state computers and 2 documents

- May 4 MSGOT Meeting:
  - 2 documents & consider proposed rules
    - "circular" points to the documents
  - if approved: initiate scientific peer review, public comment

- Possible RFP: add Mitigation and HQT to website

- Sept. 14 MSGOT Meeting:
  - consider adopting final rules

SAGE GROUSE HABITAT CONSERVATION PROGRAM

EXECUTIVE ORDER 12-2015 CONSISTENCY REVIEW SUMMARY REPORT

Report Period: December 6, 2017 through January 22, 2018

Report Date: 1/22/18 at 12:47:03

The Sage Grouse Program (Program) compiles statistics to document its performance while reviewing all proposed activities in Greater sage-grouse habitats designated as a Core Area, General Habitat, or a Connectivity Area pursuant to Executive Order 12-2015. Through the consultation process, the Program reviews the proposed project for consistency with Executive Order 12-2015. The Program provides written documentation of its review to the project proponent, who then submits the Program's letter with their permit application to the respective permitting agency.

The following statistics for the period December 6, 2017 to the close-of-business on January 22, 2018.

All Projects:

- 44 projects are in draft[1]
- 84 total projects actually submitted for review (includes withdrawn, archived, Core Areas, General Habitats, Connectivity Area, and projects missing data)
  - 10 were withdrawn by proponent[2]
  - 1 were archived[3]
  - 7 returned to proponents for more information[4]
- 66 total active or completed projects[5]

[1] ***Draft*** means the proponent is still working on the project in the virtual sandbox and has not formally submitted it for Program review. In the Draft stage, proponents can explore options and modify projects prior to initiating the consultation process. The website stores their information, and proponents work at their own pace. The Program does not start the review process until the proponent clicks the "submit" button, which officially enters the information into the system and notifies the program that a new project has been submitted.

[2] ***Withdrawn*** means the proponent withdrew the request for Program review of the project for some reason of their own accord (e.g. changed their mind). The Program can't withdraw a project on a proponent's behalf.

[3] ***Archived*** refers to legacy projects submitted in the old system or stored by the Program for future reference.

[4] ***Returned*** means the Program returned the project to the proponent because it did not have sufficient information to complete the review. Proponents receive an email with information about why their project was returned. Occasionally, project proponents request that the Program return the project after the official submission because the project proponent desires to make a change of their own accord.

- 13 currently under Program review[6]
- 53 completed reviews; response letters provided and proponent advanced to permitting[7]
- ***53/66 = 80.3% all projects completion rate (withdrawn, archived and returned not included)***[8]

<u>Core Areas</u>:

- 28 - projects in Core Areas
    - 9 withdrawn; 0 archived
    - 2 currently returned to the proponent for more information
- 4 still under Program review
- 13 completed reviews; letters provided and proponent advanced to permitting
- ***13/17 = 76.47% Core Area completion rate (withdrawn, archived and returned not included)***

<u>General Habitat</u>:

- 53 projects in General Habitat
    - 1 withdrawn; 0 – archived
    - 5 currently returned to the proponent for more information
- 9 still under Program review
- 38 completed reviews; letters provided and proponent advanced to permitting
- ***38/47 = 80.85% General Habitat completion rate (withdrawn, archived and returned not included)***

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[5] ***Active or completed reviews*** is the total number of submitted projects for which Program review has either been requested by a member of the public or completed by the Program.

[6] ***Currently under review*** means the Program has received a submitted project, has all the necessary information, and is still reviewing the project.

[7] ***Completed review*** means the Program has completed its review and provided written documentation (a letter) to the proponent who can then initiate a permit application with the appropriate permitting agency and move forward.

[8] ***Completion rate*** is calculated as number of projects formally submitted for which the Program had complete information and could initiate review divided by the number of projects for which the Program has completed its review, expressed as a percent.

Connectivity Areas:

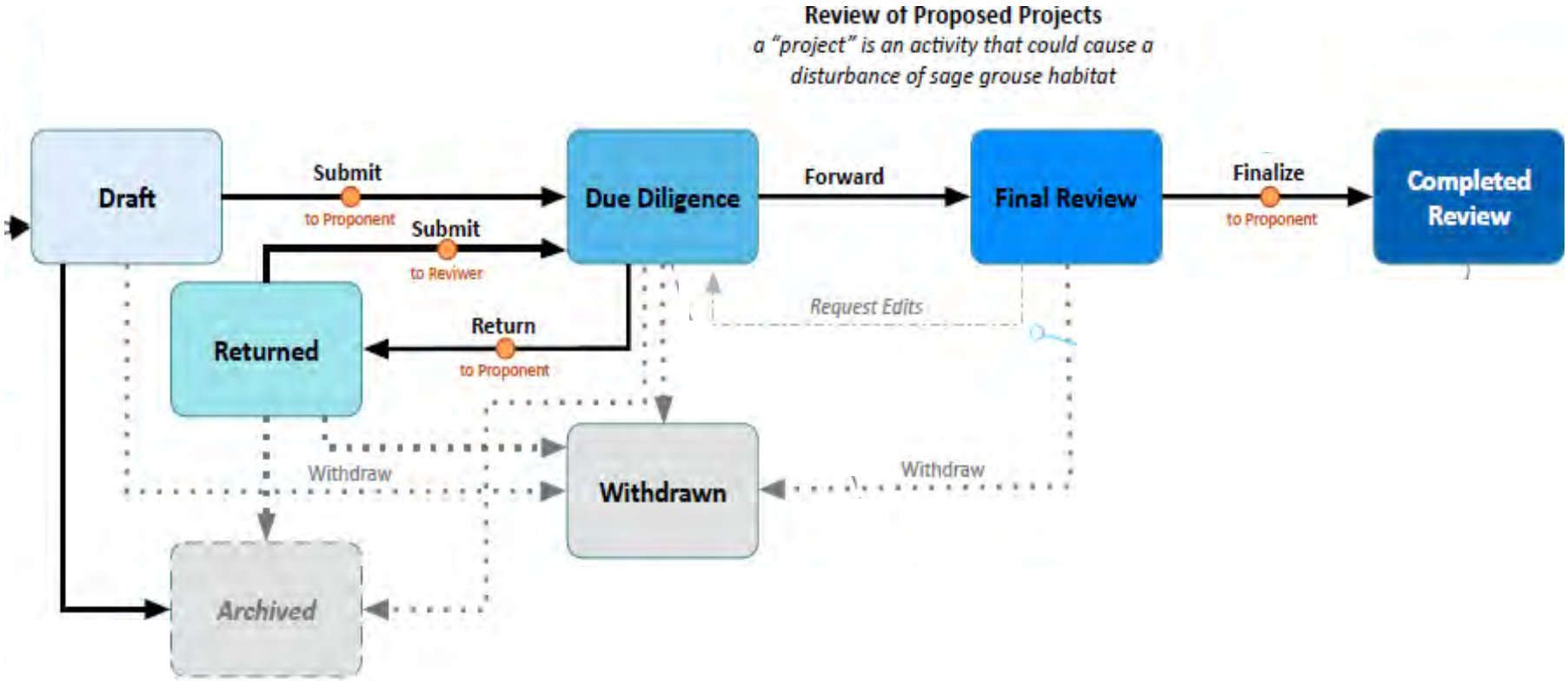
- 0 project in Connectivity Areas
    - 0 withdrawn; 0 – archived
    - 0 currently returned to the proponent for more information
- 0 still under Program review
- 0 completed review; letter provided and proponent advanced to permitting
- ***0/0 = NA% Connectivity Area completion rate (withdrawn, archived and returned not included)***

Other:

All other projects were either outside designated habitats or were submitted without location information for the proposed project. The majority of these were submitted prior to launching the new website.

- 3 outside EO habitat
    - 0 withdrawn; 1 archived because the proponent did not respond to Program requests for complete information
    - 0 currently returned to the proponent for more information
    - 0 still under Program review
    - 2 completed reviews with letters sent
- 0 missing disturbance data (0 in progress, 0 letters sent); proponent did not respond to Program requests for information

SAGE GROUSE HABITAT CONSERVATION PROGRAM
EXECUTIVE ORDER 12-2015 CONSISTENCY REVIEW WORKFLOW PROCESS



Montana Greater Sage-grouse Population Report

Submitted by Montana Fish, Wildlife and Parks

September 27, 2017

Montana Greater Sage-grouse population estimates and associated uncertainty, and the number of known breeding sites (called leks) are presented in this report in compliance with MCA 87-1-201(1)(11), as amended in 2017.

Population Estimates

Montana Fish, Wildlife and Parks (FWP) worked with Dr. Paul Lukacs, University of Montana, to estimate sage-grouse population numbers based on counts of displaying males at leks using *N*-mixture models. Results are presented in Figure 1 and Table 1. This modeling approach is a robust analytical method for estimating population size and trend over time for species like sage-grouse that congregate at discrete breeding sites (McCaffrey et al. 2016). Although FWP maintains a database of male counts at leks that date back to 1952, only data from 2002 onward could be used with this modeling approach. To convert the estimated number of males to a population estimate, we multiplied the estimate by an estimated female to male ratio.

Some Caveats…

All models are an approximation, not truth, and rely on certain assumptions. The assumptions that were made in the development of these population estimates include:

- FWP does not count females but can estimate the number of females based on an assumed sex ratio. We used an average ratio of 2.45:1 females to males based on published literature (Knick and Connelly 2011). While we accounted for the uncertainty in this published ratio in our overall confidence intervals, annual population numbers may be larger or smaller than estimated depending upon the actual ratio in each year.
- Only data from known leks were used in the calculations. This could lead to under-estimating the true population if there were a sizeable number of unknown leks.
- Models assumed each male visited one lek. This could lead to over-estimating the true population if individual males visited and were counted at multiple leks.
- Models assumed each male was detected independently. This could lead to under-estimating the true population if detection of some individuals was dependent upon detection of other individuals.

Sage-grouse population numbers oscillate over a period of 8 – 10 years across large scales (Fedy and Doherty 2011). The lower numbers estimated for Montana's population in the years 2008 – 2014 relative to preceding or subsequent years are likely due, in part, to natural population fluctuations. It is not appropriate to make decisions based on estimates from a single or few years without putting them in the context of a longer timeframe. It is also important to recognize that count data are collected in spring, when population numbers are likely at their lowest. Fall population numbers can be considerably higher in years with good reproduction.

There are other analytical models that have utility for estimating population size and trends, such as Integrated Population Models. However, these models require additional demographic information, such as recruitment data, that are currently unavailable statewide. FWP may explore additional modeling techniques in the future as new data become available.

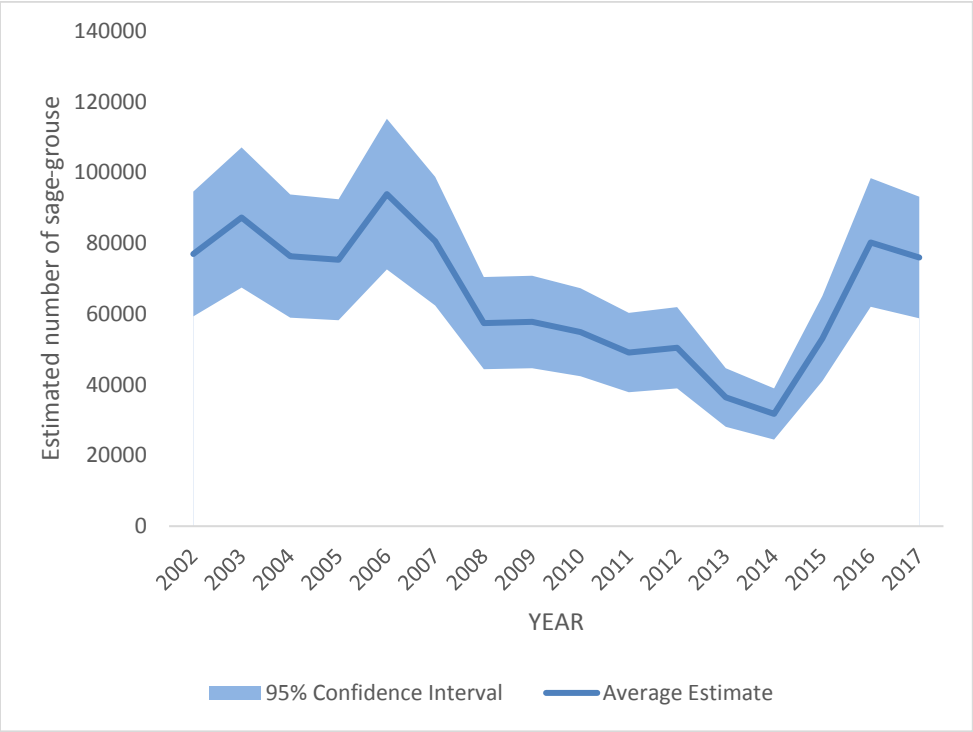


Figure 1. Graphical representation of Greater Sage-grouse population estimates in Montana, 2002 – 2017. In general terms, confidence intervals are the range of values that describe the uncertainty associated with the population estimate.

Table 1. Numerical estimates of sage-grouse numbers and associated uncertainty from *N*-mixture models in Montana, 2002-2017.

Year	**Population Estimate**	**Standard Error**	**95% Confidence Interval**	
			Lower Bound	*Upper Bound*
2002	76989	9005	59339	94639
2003	87303	10117	67474	107132
2004	76362	8890	58938	93786
2005	75352	8707	58286	92418
2006	93909	10866	72612	115206
2007	80600	9291	62390	98810
2008	57423	6647	44395	70451
2009	57749	6682	44652	70846
2010	54873	6341	42445	67301
2011	49086	5720	37875	60297
2012	50490	5863	38999	61981
2013	36400	4217	28135	44665
2014	31757	3696	24513	39001
2015	53116	6138	41086	65146
2016	80245	9276	62064	98426
2017	75979	8775	58780	93178

Number of Leks

FWP maintains a spatial database of Greater Sage-grouse leks, summarized by activity status in Table 2. FWP staff are continually working to confirm and record new lek locations and update status. The number of known confirmed active leks in 2017 is almost double the number in 2002, in large part because of increased survey effort by FWP staff.

Table 2. Number of known Greater Sage-grouse leks in Montana by activity status, 2002 – 2017.

Year	Confirmed Active	Confirmed Inactive	Confirmed Extirpated	Never Confirmed Active	Unconfirmed	Total
2002	550	79	17	29	512	1187
2003	615	84	17	47	519	1282
2004	651	88	19	56	531	1345
2005	676	94	19	64	543	1396
2006	719	96	19	67	604	1505
2007	754	98	20	72	630	1574
2008	811	100	22	75	590	1598
2009	852	104	25	91	552	1624
2010	947	110	40	118	447	1662
2011	970	125	50	151	383	1679
2012	979	133	50	181	352	1695
2013	980	144	59	201	329	1713
2014	984	155	65	233	285	1722
2015	986	174	65	251	257	1733
2016	990	188	66	264	255	1763
2017	1001	203	66	261	265	1796

Status Definitions:

Confirmed Active - Data supports existence of lek. Supporting data defined as 1 year with 2 or more males lekking on site followed by evidence of lekking (Birds - male, female or unclassified; -OR- Sign - vegetation trampling, feathers, or droppings) within 10 years of that observation.

Confirmed Inactive - A Confirmed Active lek with no evidence of lekking (Birds - male, female or unclassified; -OR- Sign - vegetation trampling, feathers, or droppings) for the last 10 years. Requires a minimum of 3 survey years with no evidence of lekking during a 10-year period. Reinstating Confirmed Active status requires meeting the supporting data requirements.

Confirmed Extirpated - Habitat changes have caused birds to permanently abandon a lek (e.g., plowing, urban development, overhead power line) as determined by the biologists monitoring the lek.

Never confirmed active – An Unconfirmed (UC) lek that was never confirmed active. Requires 3 or more survey years with no evidence of lekking (Birds - male, female or unclassified; -OR- Sign - vegetation trampling, feathers, or droppings) over any period of time.

Unconfirmed - Possible lek. Grouse activity documented. Data insufficient to classify as Confirmed Active status.

References

McCaffrey, R., J.J. Nowak, and P.M. Lukacs. 2016. Improved analysis of lek count data using N-Mixture models. Journal of Wildlife Management; DOI: 10.1002/jwmg.21094.

Knick, S.T. and J.W. Connelly, eds. 2011. Greater Sage-grouse: Ecology and conservation of a landscape species and its habitats. Studies in Avian Biology, University of California Press, Berkeley, CA.

Fedy, B.C. and K.E. Doherty. 2010. Population cycles are highly correlated over long time series and large spatial scales in two unrelated species: greater sage-grouse and cottontail rabbits. Oecologia; DOI 10.1007/s00442-010-1768-0

OFFICE OF THE GOVERNOR
STATE OF MONTANA

STEVE BULLOCK
GOVERNOR

MIKE COONEY
LT. GOVERNOR

January 17, 2018

Mr. Tony Tooke, Chief
U.S. Forest Service
U.S. Department of Agriculture
1400 Independence Avenue, S.W.
Washington, D.C. 20250

Dear Chief Tooke:

On behalf of the State of Montana, please accept these comments in response to the Department of Agriculture U.S. Forest Service's (USFS) Notice of Intent (NOI) to prepare an environmental impact statement regarding on greater sage-grouse land management plan amendments adopted in September 2015 published in the Federal Register on November 21, 2017.[1]

The USFS land management plan amendments now being reconsidered were finalized in September 2015, after lengthy planning efforts across the range of the Greater Sage-grouse (GRSG). In Montana, the Beaverhead-Deerlodge National Forest Plan was amended (B-D Amendment) and incorporated into a Record of Decision that also included Idaho, Nevada, and Utah. More specifically, lands within the Beaverhead-Deerlodge National Forest (B-D NF) were addressed in the Forest Service Great Basin Planning Area, Idaho/Southwest Montana Sub-Regional Planning Area. The B-D NF has approximately 410,700 acres of GRSG habitat, or approximately 11% of the forest.

The USFS has not proposed specific plan or policy changes for public comment at this time, instead only stating that the USFS "is considering the possibility of amending some, all, or none of the Forest Service land management plans that were amended in 2015."[2] Therefore, I fully expect that states and the public will be afforded notice and an opportunity to review and comment on any specifically-proposed policy changes and amendments in the future. I encourage the USFS to meaningfully collaborate with the Western Governors' Association through the Sage Grouse Task Force prior to making any changes.

[1] 82 Fed. Reg. 55346-47 (Nov. 21, 2017).
[2] 82 Fed. Reg, 55346 (Nov. 21, 2017).

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There is a long history of bipartisan, state-led collaboration to conserve GRSG across its range in the west. States have served as the primary convener of diverse stakeholders for decades and have been the primary drivers of policy initiatives targeting sage-grouse conservation through executive action and through the Western Association of Fish and Wildlife Agencies and the Western Governors' Association Sage Grouse Task Force.

Alongside other western Governors, I have worked hard to strike the right balance between conservation, sportsmen, energy development, agriculture and ranching, tribes, and local governments. Montana's goal is to maintain viable sage grouse populations and conserve habitat to maintain management authority of our lands, our wildlife, and our economy so that a listing under the federal Endangered Species Act is never warranted.

I appreciate the opportunity to provide formal written comment during the USFS's NOI scoping period. This letter supplements comments previously provided to USFS representatives and through the Western Governors' Association Sage Grouse Task Force in response to (Interior) Secretarial Order 3353 and to the Bureau of Land Management's (BLM) NOI.

I recognize that the USFS has its own distinct laws and regulations for planning and implementation. This letter will address the USFS's 2015 B-D Amendment for GRSG. Because the GRSG provisions in the federal land management plans (USFS and BLM) were developed in tandem and analyzed together by the USFWS in reaching its conclusion in 2015 that GRSG did not warrant listing range-wide under the federal Endangered Species Act,[3] my BLM comment letter is enclosed for your review and incorporated by reference. The Background Section and many of the General Comments are also relevant here and warrant your thoughtful consideration.

SUMMARY

Montana's comments are informed by the earnest and diligent efforts a diverse group of stakeholders undertook when I issued our first executive order in 2013 and through the tangible track record and experience gained collectively since 2015 when implementation of the B-D Plan Amendment and Montana's Strategy formally began. Montana has thoughtfully considered and engaged with stakeholders on the question of whether implementation of the existing B-D Amendment, alongside Montana's Strategy has revealed inconsistencies or implementation conflicts of such significance that another plan amendment is needed to resolve them. We find the answer to be no. Montana has found ways to successfully address issues through bipartisan collaboration between private landowners, conservation groups, industry, and state and federal partners.

[3] 80 Fed. Reg. 59858 (Oct. 2, 2017).

Across the range of GRSG, the USFS should also ensure that any newly proposed changes to the federal sage-grouse plans not create further inconsistencies with state policy rather than resolve them. Federal land use plans were always expected to evolve based on changing needs and circumstances. Modernization through adaptive implementation of the land use plans should address changing conditions, incorporate new science and build consistency with state strategies across all ownerships. Formal plan amendments should not be triggered at every turn. If that were the case, the USFS would be perpetually planning and not focused on implementation and learning through experience. The USFS should exhaust the full range of administrative tools to address any concerns and resolve conflicts before resorting to lengthy, costly plan amendments under the National Environmental Policy Act (NEPA).

More specifically, the USFS should not divert valuable staff time and budget resources away from its other priorities of active forest management, fuels reduction, and restoration, particularly after the 2017 fire season. In southwest Montana, these endeavors are complimentary to GRSG habitat conservation by addressing the identified threats of wildfire and conifer encroachment into sagebrush habitat.

That being said, however, a limited plan amendment may be needed in the area of mitigation if other adaptive implementation approaches are not legally supported. I encourage the USFS to defer to and adopt Montana's mitigation framework because it will fulfill the intent of and satisfy the requirements of the existing B-D Plan Amendment. Montana's framework is transparent and objective, providing certainty for developers, credit site providers, the state, and the USFS.

Lastly, given that Montana is included in a regional ROD with multiple states, I respectfully request that the USFS exclude the B-D NF in Montana from any NEPA processes that the USFS might undertake to address concerns expressed by other states contained within the Great Basin ROD.

COMMENTS

1. **The USFS should avoid costly and time-consuming plan amendments so that the full measure of available funds and staff resources are prioritized and dedicated to active forest management, fuels reduction, and restoration projects. This is imperative considering the 2017 wildfire season. These activities are complimentary to conserving GRSG habitat on B-D NF lands by taking a proactive, integrated approach to addressing threats due to wildfire and conifer encroachment.**

The USFS has been an integral partner in the WGA's National Forest and Rangeland Management Initiative, begun under my leadership in 2017.[4] The core philosophy behind the Initiative and four management principles are: collaboration, partnership, urgency, and resilience. Four administrative priorities were identified, which do require the commitment and resources of state and federal managers for implementation. I urge you to resist the temptation to divert resources from these shared priorities to amend GRSG land use plan across the west. It is important that the USFS preserve its near- and long-term capacity to manage national forest lands.

Specific to B-D NF sagebrush habitats in southwest Montana, habitat loss and fragmentation due to wildfire and conifer encroachment are conservation concerns. Unless effectively treated, encroachment rates are predicted to increase and the extent of conifer within GRSG range is expected to expand.[5]

Some pioneering interagency collaborative work has been done in southwest Montana to successfully address conifer encroachment into sagebrush habitats, even when the B-D Amendment does not explicitly identify an estimated number of acres that should be treated in the coming years. I encourage continuation of collaborative efforts to manage the interface and pledge engagement of the state's forestry and wildlife professionals. Continuation of targeted treatment of encroaching conifers is not mutually exclusive from other USFS priorities or those identified by the Initiative. Proactive application of mechanical treatments and commercial harvest techniques and prescribed fire will help avoid uncontrolled wildfires, create vegetative mosaics, address the wildland-urban interface, and help restore sagebrush habitat.

2. The USFS should defer to and adopt Montana's mitigation framework because it will fulfill the intent and satisfy the requirements of the existing B-D Amendment, and it is a transparent, objective approach that will provide certainty for developers, credit site developers, Montana, and the USFS.

Mitigation plays an important role in GRSG conservation by balancing the impacts of development with conservation. In other words, mitigation is the proactive way to balance development with conservation. All states within the range rely upon mitigation as a fundamental part of their approach to conservation of the species, which along with compensatory mitigation on federal lands, was instrumental in the USFWS 2015 finding that listing was not warranted. The USFWS even cited mitigation in the list of elements contained within the federal land use plans and amendments upon which it relied.[6] Mitigation allows economic development to move forward without jeopardizing conservation or exacerbating the threat of habitat loss and fragmentation.

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[4] *See* the First Year Report at: http://westgov.org/initiatives/national-forest-and-rangeland-management-initiative.
[5] *See* 80 Fed. Reg. 59858, 59914 (Oct. 2, 2015).
[6] *See* 80 Fed. Reg. 59858, 59875 (Oct. 2, 2015).

States have the responsibility to establish appropriate statutes, regulations, policies and programs to manage GRSG, including the mitigation hierarchy and compensatory mitigation. The federal government has responsibilities related to habitat through the management of public lands, which should also include the mitigation hierarchy and compensatory mitigation for residual impacts.

The Montana Greater Sage Grouse Stewardship Act and Executive Order 12-2015 establish that Montana will observe the full mitigation hierarchy for development projects, including compensatory mitigation for residual impacts. In fact, the Montana Legislature has found that allowing a project developer to provide compensatory mitigation for the loss of resource functions or value at an impact or project site is consistent the purpose of incentivizing voluntary conservation measures for GRSG habitat and populations.[7]

The current B-D Amendment provides for compensatory mitigation. That is entirely appropriate and should remain as an integral facet of the USFS's approach to permitting development and other human activities on federal land.

Montana's approach to compensatory mitigation is consistent with the existing B-D Amendment. Montana's methodology to estimate the functional habitat values impacted or conserved, respectively, is transparent, objective, and based on the best available science. Montana's mitigation framework will fulfill the intent of and satisfy the requirements of the existing B-D Amendment. A plan amendment is not likely required.

When residual impacts to GRSG habitat or populations are documented by a state process, USFS should defer to state-supported compensatory mitigation approaches. This allows developers to adhere to a single approach across state, private, and federal ownerships within a single state, which provides certainty.

A single unitary approach within a state across all landownerships is especially important in Montana where important GRSG habitat is a checkerboard pattern of mixed ownerships. Montana stakeholders have agreed on the value of a single, unitary mitigation framework in Montana that would be applicable across all landownerships: state, private, and federal lands. Inconsistent state and federal standards may incentivize inefficient development practices in landscapes with mixed ownership, ultimately impacting both habitat and responsible development efforts. I urge the USFS to defer to and adopt Montana's mitigation framework.

Please also see the enclosed letter submitted in response to the BLM NOI request for comment. Montana provided more exhaustive background and perspectives on mitigation.

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[7] *See* Mont. Code Ann. §§ 76-22-101 et seq., especially § 76-22-111 (2017).

3. **Should the USFS decide to amend the Forest Service Great Basin Planning Area GRSG amendments to address concerns expressed by other states or to resolve litigation, I respectfully request that you sever Montana from the effort and issue a separate Record of Decision specific to the B-D NF in Montana.**

Lands within the B-D NF were addressed in the Forest Service Great Basin Planning Area Record of Decision that included the states of Idaho, Nevada, and Utah and the B-D NF in southwest Montana. Montana has not experienced the concerns expressed by other states covered in the Great Basin Planning Area ROD and is not a party to any of the litigation challenging USFS or BLM GRSG land use plans or GRSG plan amendments. To the extent that USFS may seek to resolve plaintiffs' claims through new NEPA planning processes, Montana seeks to be independent of those efforts and have its own Record of Decision.

Montana seeks implementation by the B-D NF, with guidance and oversight provided by the Northern Region Regional Forester. Nonetheless, I expect that coordination across the Regions will still occur, as some local GRSG populations in southwest Montana are migratory and depend on seasonal habitats in Idaho for their year-round survival.

Thank you for the opportunity to comment. I look forward to continuing our work to improve national forest and rangeland management outcomes through adaptive actions informed by our collective experiences, and to continue supporting the collaboration among diverse partners that resulted in the 2015 not warranted finding.

Sincerely,

STEVE BULLOCK
Governor

CC Robert Harper, Washington Office Director Water, Fish, Wildlife, Air and Rare Plants
Nora Rasure, Regional Forester, Intermountain Region
Leanne Marten, Regional Forester, Northern Region
John Shivik, Sage-grouse Coordinator, Intermountain Region
Electronic submission via email to the U.S. Forest Service at
comments-intermtn-regional-office@fs.fed.us

Encl: Comment letter submitted to BLM in response to Interior's Notice of Intent

During this meeting, the Montana Sage Grouse Oversight Team extended the public comment opportunity for the mitigation agenda items and related meeting materials presented and discussed during the December 15, 2017 and January 30, 2018 meetings. Comments had to be received by 5:00 p.m. on February 9, 2018. The Sage Grouse Program announced the extension to all interested parties who have "opted-in" to receive announcements from the Program by joining the list-serve mailing list on the Program's website (i.e. the Interested Parties list).

The following comments were received by the deadline.

There will be additional comment opportunities on efforts to develop a mitigation framework during future Oversight Team meetings and any formal rule making processes approved and initiated by the Oversight Team.

TROUT HEADWATERS, INC.

Experience EcoBlu™

Client Technical Memo

To: Sage Grouse Oversight Team (SGOT)

Re: Sage-Grouse Mitigation Efforts Public Comment

From: Michael Sprague, Trout Headwaters, Inc.

Date: February 9, 2018

As former president of the National Mitigation Banking Association, current board member of the National Environmental Banking Association, a concerned small business owner, and a Montana taxpayer, I offer you the following comments, observations and suggestions relating to the current program and its implementation.

Despite some limited progress to date, it would appear unfortunately that the State of Montana is continuing to confuse sage-grouse 'conservation' with sage-grouse 'mitigation.' In its simplest form, mitigation is simply a plan or program to offset an impact created on the landscape by development.

Forgiving this simple equation, let's say we start with two(2) acres of species habitat at some specific quality. Now, we damage one(1) of those acres and render it non-functional for the species. How many acres of viable habitat do we have remaining? Easy answer is 'one acre.' So, if we are attempting to truly offset our impact to the one acre of habitat by for example simply preserving some other acre, has a real offset to that impact been achieved? Easy answer is 'no.' While we have *conserved* an acre of habitat we have *not mitigated* for the acre impacted.

This unfortunate confusion has not been fully addressed and appears to now be in the process of formalization by the State of Montana.

The situation will cause further damage to existing species habitats, will increase the potential for lawsuits against the state by environmental NGOs, and may ultimately cause need for listing by the U.S. Fish & Wildlife Service under the Endangered Species Act. And, all this will then undermine the basic motivation of the Sage-Grouse Act.

In established mitigation programs, species conservation credits are calculated based on *ecological uplift* and in consideration of landscape level values, habitat types affected, and proximity to critical habitats (baseline).

Creating real offsets necessitates habitat improvements and should result in documented, field-validated net positive affect to the species' ability to shelter, feed, and breed.

Mitigation efforts should include:

- the use of exclusion areas
- caps on habitat disturbance to prevent negative impacts
- timing stipulations for noise or other activities which may disturb sage-grouse
- removing water sources determined likely to spread West Nile virus
- limiting activities or practices that may result in wildfires
- best management practices for treatment of invasive plant specie
- predator attractant management
- marking or removing fences to minimize direct mortality of birds
- reestablishing native vegetation

Most importantly, projects must be designed to contribute to the recovery of the species using strategies that prevent fragmented landscapes, restore core areas, and increase connectivity.

Mitigation projects should be sited in locations that have been identified in conservation plans that will most likely successfully and fully compensate for losses elsewhere to sage-grouse and their habitats. Such locations should be located within current or historic range for the species.

Projects should be based on improving biological conditions and supported by reliable, repeatable, and quantitative science-based methods.

Compensatory mitigation may be established on private, public, or tribal lands with the first criteria being that specific areas provide the greatest benefit and reduce the greatest threats to sage-grouse. Priority areas chosen for mitigation projects should be biologically based and integrated among private and public land ownerships.

Considerations should include:

- Physical characteristics of the site
- Landscape-scale features such as habitat diversity, function, and connectivity
- Juxtaposition of the compensatory mitigation site relative to other areas of suitable habitat and ecological features
- Ecological and legal compatibility with adjacent land uses
- Compatibility with existing conservation plans and assessments
- Development trends
- Anticipated land use changes

To be effective, it is essential that efforts to offset unavoidable impacts through mitigation target the highest priority conservation actions for a population. Measurement of outcomes should be achieved using standard methods that link to sage-grouse population size in order to improve consistency and efficiencies while demonstrating that actions will provide the necessary level of mitigation.

Actions or plans proposed as mitigation projects must be accompanied by adaptive management, active monitoring, as well as legal, and financial assurances that ensure the mitigation action or plan in place will be effective for the intended duration.

At a site-level scale, the mitigation actions taken on a given site should measurably offset impacts from another site and programmatically provide a net benefit to sage-grouse at the population scale. For example, marking fence lines and removing invasive juniper may not adequately offset permanent, limiting-factor, habitat impacts. However, these actions, in combination with other actions including permanent protection and active management, may collectively provide a net benefit.

Site-level agreements should include a description of the amount of mitigation (or credits) to be provided including a brief explanation of the metric used for this determination. They should also include a process for adaptive management that will address uncertainties including new information and unforeseen or unregulated situations (e.g. weather, fire). Each agreement should identify discrete ecological and administrative performance standards to be met as well as possible contingencies and consequences for not meeting standards.

Monitoring should be designed to validate the effectiveness of the mitigation, answer program questions, contribute to knowledge gaps, and provide data to inform adaptive management decisions.

Mitigation projects should target areas that provide the greatest benefit while reducing the greatest threats to sage-grouse given jurisdictional and other constraints.

Lands already designated for conservation purposes should not be used as compensatory mitigation unless the proposed compensatory mitigation project would add additional conservation benefit above and beyond that attainable under an existing land designation(ie: easement). This includes public lands dedicated for conservation purposes; private lands enrolled in government programs that compensate landowners who permanently protect, restore, or create habitat for sage-grouse; and lands already protected by a habitat management agreement with the Service or similar programs.

Actions proposed as compensatory mitigation, regardless of land ownership, should provide benefits additional to those that would be achieved if the mitigation actions had not taken place. The additional value may result from conservation benefits to sage-grouse associated with *restoration* or *enhancement* of habitat; *management actions* that protect, maintain or create habitat (e.g., fire protection measures, legal and financial site protections); *other activities* (e.g., reduction of threats from disease or predation); *or most likely a combination of all three categories.*

The plan to establish mitigation credits by a simple conservation easement does not adequately involve field assessment and determination of ecological uplift. In short, pre-project *baselines* must be established. Pre-project baseline refers to the habitat and/or species population conditions at any given point in time against which conservation actions are measured to determine ecological gain or loss.

Baseline conditions should be assessed and measured using the same methodology employed to predict future conditions during project planning stages and ultimately to verify project conditions and associated credits during periodic and final monitoring of mitigation sites.

Baseline methods should be consistently employed across the area covered by the mitigation program unless variation of conditions and available data justify differences.

In summary, there are substantial structural and programmatic problems with the existing plans:

1. Low Standards for Mitigation

Credits are initially to be generated by the simplest form of preservation with no enhancement, restoration, adaptive management, financial assurances and other elements typically association with compensatory mitigation. Ultimately, these low standards (while potentially attractive to some in industry looking only short-term) will prove damaging to the species and its habitats.

2. Non-Convertible Credits

The details mentioned in my comments above are consistent with (and some taken directly) from the U.S. Fish & Wildlife Service (USFWS) Framework for Sage-Grouse Mitigation (Ginger et al). Since the planned initial credit releases from the SGOT program are obviously not consistent with this framework or the mitigation standards adopted by the USFWS, IF the species status should change from CANDIDATE to LISTED, investments by the state and others in these credits would be non-compliant and credits under the program would become useless and valueless. Further, industry projects in process during such a change in status would be stopped or interrupted due to sub-standard credits being purchased.

3. Conflict of Interest

As I have previously pointed out to DNRC and SGOT, there is an obvious and apparent conflict of interest stemming from the program positioning itself as both the regulatory body *requiring mitigation* and the *seller of credits* set up to answer the requirement(s).

4. State-subsidized Damages to Public Resources

Because the program has been funded by taxpayer dollars and the SGOT is currently intending to sell credits to private industry in order to offset their impacts, there is a substantial risk that without full-cost accounting the program puts itself in a position of helping to enable (and ultimately subsidize) destruction and degradation of habitats for the species. Again, this situation is unlikely to satisfy federal concerns longer-term about the species.

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February 9, 2018

Montana Sage Grouse Oversight Team
Attn: Ms. Carolyn Sime, Montana Sage Grouse Conservation Program Manager
1539 Eleventh Ave.
Helena, MT 59601

RE: ***Comments Regarding the Mitigation Policy***

Dear MSGOT Members:

At the January 30, 2108 MSGOT meeting our industry coalition asked for and received the opportunity to respond in writing with comments regarding the mitigation policy presented by Ms. Sime. Ms. Sime's presentation contained three new ideas that have not had stakeholder review and we appreciate the time to provide thoughtful comment. Chair Tubbs also said any solutions or proposals we could offer would be appreciated. We intend to do both. However, since the mitigation policy does have several key points where our industry coalition is not in agreement with other stakeholders, and this is the first time the issue has been before the entire MSGOT, we will have to provide some background.

These comments are submitted on behalf of the following organizations:

The Montana Coal Council
Montana Petroleum Association
The Treasure State Resource Association
The Montana Contractors Association

As you know, the Mitigation Policy (MP) is tied directly to the Habitat Quantification Tool (HQT). While the HQT is designed to quantify sage grouse habitat function, policy decisions within the MP will drive functional acre outcomes from the HQT making it necessary they be developed together.

In July 2017, our coalition provided comments on the so - called "red flag" review of the MP. At that time, we identified several issues with the draft MP (which are presented below) and were at impasse with other members of the stakeholder group. Our concerns with the MP are:

1. Requirement to do compensatory mitigation if stipulations are met.
2. Attaching a multiplier to each and every stipulation.
3. Net Benefit requirements
4. Service Areas
5. A baseline for credit projects of 60%
6. Adjacent land activity related to a credit project.

Our comments related to the January 30, 2018 meeting are focused primarily on the new ideas, two of which are suggestions to address points on which our group and the rest of the stakeholders failed to agree. However, given the timeline, we will use this opportunity to put all our remaining issues in front of the MSGOT.

January MSGOT Meeting Comments:

Service Areas: We agree with the recommendation to increase the number of service areas to four. We believe that credit availability may create a situation where there are not enough credits to cover the debits of a new project in the same service area. We would support allowing service credits to be utilized in adjacent service areas with no required MSGOT action, and non-adjacent areas with the approval of the MSGOT.

Credit Project Baseline:

On July 29, 2017 our industry coalition filed comments on the "red flag" version of the MP. We expressed concern about the application of a 60% limit on post project functional acres for a credit project. Our position was that both credit and debit projects are run through the HQT with the result being a corresponding number of functional acres. We believe there should be no baseline adjustment to the functional acre numbers or project credits resulting from interaction with the HQT as described in part 2.1.4 of the draft MP.

Reducing the number of functional acres by an arbitrary number, as suggested in the draft MP, or using the third party appraisal process as suggested at the January 30, 2018, MSGOT meeting, erodes the number of available conservation credits. 76-22-109(4), MCA directs the MSGOT to prioritize projects that maximize the number of credits generated per dollar of grant funds awarded. Applying a credit baseline adjustment, whether a fixed number or based on an appraisal, seems adverse to the intent of the sage grouse conservation act.

Consider that the original number of surface acres in the 44 Ranch was approximately 18,000 acres -- all located in sage grouse core area. Application of the HQT to the entire 18,000 acre parcel results in a functional acreage of 7383. This is already a significant reduction – especially in light of 18,000 acres of core habitat being protected. A further reduction of the number of credits will substantially decrease credit availability and increase credit price to the point development projects in need of credits may not be economically viable. Such a result is not a stated goal of the Montana Sage Grouse program and statute.

Our July comments also expressed concern regarding a proposal that the HQT take activities on adjacent lands into account when applying the HQT to a credit project. Lands that are used for credit projects are almost always private and are often bordered by other private lands. Under the appraisal approach, individual landowners would receive very few credits unless neighboring land owners took actions, or ceased certain actions, on their land. This would create an undue influence and encourage additional excessive government regulation of private lands.

Coalition position: Perform analysis on credit projects with the HQT and use the functional acre output as full credits to transfer to a future credit market.

Stipulations and Multipliers

The creation of stipulations regarding activity in sage grouse country has a long history going back to the 2005 Wildlife Conservation Plan developed by the Department of Fish Wildlife and Parks. As concerns about the sage grouse grew, states in the sage grouse range began to develop conservation programs --- led by the State of Wyoming.

Montana's sage grouse program grew from industry and agricultural appeals to Governor Bullock to convene a council. This led to two Executive Orders requiring mitigation activities in certain situations that were seen to be harmful to sage grouse. The Montana Legislature took up the charge and passed SB 261, bringing us to the point we are at today. Oil, gas and coal interests have been actively engaged in finding a reasonable management solution that allows our natural resource economy to move forward while providing a conservation strategy for sage grouse.

From the beginning, we have understood that meeting the stipulations contained in the Executive Orders would demonstrate that a project would not cause declines in sage grouse populations and therefore NOT be required to provide compensatory mitigation. The support of the oil and gas industry was predicated on this understanding.

As SB 261 was drafted, it was apparent that the bill needed to provide a mitigation off ramp for any project whose site selection was not flexible and therefore unable to comply with the stipulations in the Executive Order. Mitigation language was included in SB 261 for that purpose.

As you know, the Executive Orders from Governor Bullock established the parameters of Montana's sage grouse conservation program which was developed by following the Wyoming sage grouse conservation program as closely as possible. Wyoming clearly states that; "if a project complies with the stipulations contained in EO 2015-4 for greater sage grouse conservation no compensatory mitigation is required by the State of Wyoming because impacts to the species have been mitigated by the project proponent".

Our conservation mitigation discussions have become mired in blurry definitions of mitigation. Whether mitigation is following a hierarchy of avoidance, minimization, restoration, and

compensation or means just compensation its meaning has been difficult to follow throughout the evolution of the Montana sage grouse conservation program and this rule making process.

Coalition Position: Projects that adhere to all the stipulations are not required to provide compensatory mitigation in all sage grouse habitat areas.

Multipliers on Stipulations:

We appreciate the new ideas that Ms. Sime outlined regarding how the mitigation policy would calculate disincentive multipliers for projects in sage grouse habitat. Our initial observation is that the idea of not applying site specific multipliers to the reclamation phase of a project is meant to address concerns about the impact of numerous multipliers on development (debit) projects. Our coalition does have a concern that a 10% multiplier added to the impacts of a project for each stipulation that is not satisfied increases the number of functional acres impacted significantly. The table below illustrates the multipliers the MP currently assesses on development projects.

Stipulation for core areas	Multiplier (percentage)
Debit Project in Core	10
Debit Project in GEN/CON	5
Within 0.6 miles of lek	10
Within 2 miles seasonal	10
Exceed 5% disturbance DDCT	10
Access Road less that 2 miles/lek	10
Exceed Noise Limits	10
Violate timing restriction for vegetation removal	10
O/G and mining exceed 1 well per 640 acres	10
Stipulations for General and Connective Areas	
Within .25 miles of a lek	10
Violate seasonal timing restrictions	10
violate overhead powerline restrictions	10
Exceed noise limits	10
Potential Additional Multipliers	
Credit development in adjacent service area to debit project	10

Admittedly, we do not understand this idea completely. However, the concept of reducing the total impact is worth exploring. We are concerned that a 5% (general/connectivity habitat) and 10% (core habitat) multiplier for each stipulation that is violated (per departure) is excessive.

Coalition positon: Focus multipliers on the most significant stipulations as opposed to everyone in the EO. Work with the stakeholder group to understand the idea of not applying the functional acres lost to the reclamation phase of the project.

Phased Payments to the Stewardship Account

On the surface, this idea sounds acceptable. However, we need time to digest the ramifications. Coalition Position: Work with the Program to understand this idea and the impact on a development program.

Net Benefit

Our coalition has opposed this policy since it was infused into federal guidance, policy and planning documents as a result of a Presidential Memo from President Obama. We understand that the Trump Administration has rescinded the no net loss/net gain policy. We understand that Secretary of Interior Zinke's recent orders are determining how to remove the no net loss/no net gain policy from existing federal documents. During one of our stakeholder meetings we had the opportunity to meet former Wyoming Governor Dave Freudenthal and discuss the Sweet Water Conservancy program in Wyoming. Governor Freudenthal expressed his opinion that net gain has nothing to do with conservation and is in essence a tax on development. We agree with that statement. Our coalition has expressed this view to the Secretary of the Interior and the BLM in its recent comment period.

Coalition Position: Remove net benefit from the MP.

Stakeholder Meetings

We have not had a formal stakeholder meeting since mid-2017. We also recognize the pressure on the MSGOT and the Program to get the HQT and the MP implemented. Given the new ideas and the proposed timeline of bringing the HQT and MP to the formal rulemaking stage by the May 4, 2018, MSGOT meeting, we feel a stakeholder meeting would be beneficial. The focus of a new stakeholder meeting should be on the current status of the HQT as it migrates to the State computer system in GIS based format and the ideas brought forth in the January 30, 2018 MSGOT meeting.

Thank you for allowing us to provide more thoughtful comments based on the presentations at the January 30, 2018, MSGOT meeting.

Sincerely,

BROWNING, KALECZYC, BERRY & HOVEN, P.C.

By _____
David A. Galt, Consultant

Exempt Activities
We are appreciative of the time that members of the Sage Grouse Oversight Team have taken to craft a thoughtful list of exemptions. It is our hope that as the Oversight Team continues its work that they continue to consider exemptions of activities that do not impact Sage Grouse or their habitat.

New Proposals
We appreciate the work that was done to provide the Sage Grouse Oversight Team with additional information about the potential use of phased payments in an effort to address some of the concerns previously voiced by stakeholders. That said, we believe that this new information does require additional vetting and input from stakeholders prior to being considered as an alternative to what has been previously proposed and analyzed at length by stakeholders and members of the SGOT. It is our hope that additional stakeholder meetings will be help to further focus on the ideas presented at the January 30th meeting of the Sage Grouse Oversight Team.

Thank you for the opportunity to comment and your ongoing work on this important issue.

Respectfully,

Shelby DeMars, Executive Director
Montana Association of Oil, Gas, and Coal Counties

February 8, 2018

VIA EMAIL

Ms. Carolyn Sime
Manager, Sage Grouse Conservation Program
Montana Depart of Natural Resources

Re: Environmental Comments on January 30, 2018, MSGOT Meeting

Dear Ms. Sime:

Thank you very much for the opportunity to comment on the issues raised in the January 30, 2018, meeting of the Montana Sage Grouse Oversight Team (MSGOT) regarding the Habitat Quantification Tool and its accompanying technical and guidance documents for the Montana Sage Grouse Mitigation Program. These comments are submitted on behalf of the Environmental Defense Fund, the Montana Association of Land Trusts, Montana Audubon, the Montana Wildlife Federation, The Nature Conservancy in Montana, and the Theodore Roosevelt Conservation Partnership. Because these comments are in addition to those made at the January 30 MSGOT meeting, we request that you please distribute these comments to all the MSGOT members.

Our organizations support a robust Montana Sage-Grouse Mitigation Program. The simplest definition of mitigation is "the action of reducing the severity, seriousness, or painfulness of something." Mitigation "done right" involves smart planning, efficient and effective decision-making, and predictability for project proponents, as well as a multitude of other stakeholder interests, which can result in positive outcomes for all – the public, communities, businesses, and the environment.

Ed Arnett of the Theodore Roosevelt Conservation Partnership offers a helpful metaphor to explain this concept in a recent blog post (http://www.trcp.org/2018/01/22/beer-metaphor-helps-explain-need-habitat-mitigation/). Let's say you and I are sitting at a bar enjoying our favorite beverage and you've finished half of yours when I suddenly knock it over, spilling what's left. Would you feel the effects of my actions were mitigated if I bought you half a drink? How about if I grabbed a napkin, soaked up the remains of your drink, and squeezed it back into your glass? Even if you were to accept this and drink the remaining soaked-up beverage, there would still be a loss to you.

There is a foundational hierarchy to mitigation, and it starts with doing no harm: The very best way to mitigate impacts of development on habitat is to avoid those impacts in the first place. After all, some places are just too important to develop, or it might not be possible to replace that habitat elsewhere. Think about the very best wintering area for a mule deer herd. Some may argue those deer "will just go somewhere else" if a project goes in that would have impacts. But will they? Even if they do alter their course, we have no way of knowing if they are just as likely to survive a harsh winter on different terrain. Wouldn't it be better to avoid the area in the first place? Avoidance is the best form of mitigation because a resource not impacted yields the least amount of work to offset impacts. In other words, let's try to avoid knocking the drink over in the first place.

The next step in this hierarchy is to minimize impacts. A project developer should employ a wide range of actions to avoid as much disturbance as possible to animals in the area. For example, stipulations can be proposed for an energy project, or a proposed transmission line could be located along an existing road system to minimize fragmenting otherwise undisturbed habitat.

If unavoidable impacts occur, the third step in the mitigation hierarchy is to compensate for the loss by creating habitat somewhere else. This might involve securing a conservation easement on private land or restoring nearby habitat with treatments designed to improve conditions for the affected species overall. Compensatory mitigation for a new road system or transmission line in sagebrush habitat could involve, for example, payments by the developer to cut invasive juniper trees in Southwest Montana that have pushed out sage species' preferred cover. Planning efforts of this type help minimize conflicts and communicate what is expected early in the process, thus reducing time and costs while better assuring effectiveness. Returning to our original metaphor, truly mitigating the impact on you would, at the very least, mean buying you a new drink. I should probably consider buying the next round, too, which is a rough illustration of how multipliers work.

With these basic principles in mind, we will turn to the issues raised at the January 30 MSGOT, as well as to several other issues where stakeholders have been unable to reach agreement to date.

Issue One (Slide 15): What Service Areas should the Guidance Document use? We support the new service areas set out at the MSGOT Presentation, which divide the previously single Central area into two smaller areas.

Previously, there had been concerns expressed about a single large Central Service Area extending from the Montana-Wyoming border to the Montana-Canadian border. This was because under that scenario, it was possible to provide compensatory mitigation for impacts on the Wyoming border (i.e. Carbon County) with projects on the Canadian border (i.e. Phillips and Valley County), even though the birds in those two areas do not share a common gene pool. Those concerns led to the idea to split the one big area into two, with the Missouri River providing the boundary, as reflected in slide 15. We support this change, which will help ensure that impacts on one population of sage-grouse are mitigated by projects supporting the same population.

There remain unresolved issues relating to whether a developer can use credits in one service area when credits are not available in an adjacent service area. We believe this issue is one on which stakeholders should be able to reach agreement, but the conditions under which that approach could be considered still need to be laid out, including specific terms and options such as potential increased ratios or fees and demonstration of the benefit to sage-grouse.

Issue Two (Slides 17-25): What is the appropriate credit baseline for conservation easements? We believe more discussion is necessary on this issue, as the issue is extremely complicated, and stakeholders had not previously discussed the solution presented at the MSGOT meeting.

At the January 30 MSGOT meeting, Sage Grouse Program Manager Sime proposed to use market appraisals to determine the credit baseline for conservation easements. This issue is extremely complicated, and the stakeholders have already considered a variety of different proposals before hearing this new idea for the first time at the MSGOT meeting. We suggest that Ms. Sime convene a webinar for all stakeholders to explain her proposal in more detail, and then accept additional comment from the stakeholders before arriving at a final decision on this issue. The idea of using a market appraisal to determine the credit baseline for sage grouse conservation easements is a critical concept within the mitigation framework and before its possible incorporation into the program, it is essential it be thoroughly reviewed and discussed, and fully understood.

Issue Three (Slides 29-31): Should site-specific multipliers only apply to the Construction and Operations Phases for Mitigation? Pending further details, we agree with this general thrust of this proposal.

Applying site-specific multipliers only to the Construction and Operation Phases, and excluding the multipliers from the reclamation phase is another issue that has not been previously discussed by the stakeholders. On its face, the proposal makes some sense; once operations are completed, the stipulations placed as conditions on the project, which serve as the basis for some of the multipliers, are no longer applicable. On the other hand, other multipliers, such as the risk and uncertainty of providing full compensatory mitigation, as well as the landscape multiplier for developing in priority habitat, are still applicable. Pending final discussions relating to the use of multipliers in the program, as well as any further details regarding this proposal, we are generally inclined to support the proposal as a reasonable limitation on developer liability for compensatory mitigation.

Issue Four (Slides 32-33): Should MSGOT have discretion to allow for phased payments to the Stewardship Account and/or allow for phased documentation? Assuming mitigation offsets are in place prior to impacts, we support this proposal.

This proposal illustrates one of the best aspects of the Montana Mitigation Program: because the legislature has funded the creation of mitigation credits prior to the occurrence of any impacts to sage-grouse habitat, there is no temporal lag between a project's impact and the provision of compensatory mitigation. If mitigation credits are already in place, which seems to be a pre-condition of this proposal, we support MSGOT having the discretion to allow phased payments or provide phased documentation.

Issue Five (Slides 13, 28): Are the Debit and Credit Adjustments (multipliers) in the Guidance Document appropriate? Yes, we support the adjustments as described in the Guidance.

The multipliers set out in the Guidance are critical to ensuring maintenance of adequate sage-grouse habitat and populations and achieving the net conservation benefit standard. Because of the uncertainty regarding restoration rates of sagebrush habitat, as well as the very real threats of catastrophic wildfire or invasive weeds, to achieve even a no net loss of habitat means that outcomes must be structured to result in a net conservation gain. The way to accomplish that is by use of carefully considered and implemented multipliers, as provided for in the Guidance, to ensure there is sufficient functional habitat to offset that which is lost or affected over some duration of time.

The U.S. Fish and Wildlife Mitigation Framework for Greater Sage-Grouse (2014), on page 19, emphasizes the use and importance of multipliers in mitigation programs:

> Multipliers can be built into the crediting or debiting side of the metrics to create incentives for avoidance of impacts or preservation of habitat in high priority areas. Reserve ratios or retirement ratios can be used to set aside credits for unexpected events or to permanently retire a proportion of credits, never to be used as offsets, to insure net gain.

In the Montana program, multipliers are used to send signals to encourage or discourage desired behavior, just as the Fish and Wildlife guidance suggests. For example, as we discussed above, it's better and cheaper to avoid putting projects in priority habitat than to degrade priority habitat and then restore or protect other areas. As a result, the Guidance places a small penalty, or multiplier, for developing in priority habitat. Similarly, we want developers to comply with the conditions, or stipulations, on development that the State has developed in Governor Bullock's Executive Order No. 12-2015 ("EO"), to ensure minimization of damage to sage-grouse habitat. Again, use of a multiplier incentivizes compliance with those conditions.

Issue Six (Slide 28): Should Montana use a net conservation benefit goal for compensatory mitigation? Yes, Montana should use a net conservation benefit goal. At a minimum, we believe there should be no-net-loss of the remaining habitat or its biological function necessary to support sage-grouse. To that end, the net conservation benefit standard is necessary to result in no such loss of functional habitat in Montana.

Montana has consistently and correctly stated a goal of net conservation benefit as the means to prevent the listing of the Greater Sage-grouse. Specifically, the Montana EO provides in Paragraph 7, Attachment A, that,

> MSGOT shall develop incentives to accelerate or enhance required reclamation in habitats in and adjacent to Core Areas, including but not limited to stipulation waivers, funding for enhanced reclamation, and other strategies. <u>Incentives shall result in net benefit to, and not cause declines in, sage grouse populations</u> (Emphasis supplied)

Montana's Review of State Regulatory Authority over Activities in Sage Grouse County (2015) ("Montana's Regulatory Review"), provided by Governor Bullock to the U.S. Fish and Wildlife Service confirms this point, stating,

> The MSGOT is to develop a comprehensive mitigation program that includes guidance for offset mitigation. EO, para. 13. It is the intent to condition the application of sequencing requirements such that, at a minimum, neutral or positive sage-grouse population trends and habitats would be maintained, with the goal of achieving net conservation benefit for the species. (Page 1, paragraph 4) (Emphasis supplied).

The Fish and Wildlife Service has emphasized the difficulty of restoring degraded sagebrush:

> [R]estoration of disturbed [sagebrush] areas is very difficult. Not all areas previously dominated by sagebrush can be restored because alteration of vegetation, nutrient cycles, topsoil, and living (cryptobiotic) soil crusts has exceeded recovery thresholds. Additionally, processes to restore sagebrush ecology are relatively unknown. *Beginner's Guide to Greater Sage-grouse*, pp. 2-3 (https://www.fws.gov/greatersagegrouse/factsheets/Primer1-SGBeginnersGuide.pdf).

There has been some discussion in the stakeholder group regarding the direction the new Administration might take in setting mitigation goals. However, both the BLM and USFS Records of Decision for sage-grouse currently require a net conservation gain standard. In any event, given the language in the Montana EO and Regulatory Review letter, it remains clear that for the Montana mitigation program, the goal is net conservation benefit.

Leaving a place better than we found it is a basic principle of conservation. Nowhere is it more applicable than in this context. Montana's use of this standard positions it as a national leader on this issue, ensuring the availability of productive sagebrush habitat for generations to come and decreasing the likelihood of a future listing under the Endangered Species Act. There's no other way to go from less habitat to no net loss of habitat unless mitigation accounts for the complete area affected and the risk that mitigation will not be wholly successful. To reverse the decline of sage-grouse, a net gain in habitat simply makes sense.

Issue Seven (Slide 37): If a project developer complies with all relevant stipulations in the EO, can mitigation still be required? Yes. Stipulations in the EO set forth the requirements for projects allowed to occur in sage-grouse habitat that will minimize impacts, but do not eliminate loss of habitat through space and time per se.

The EO clearly requires that both relevant stipulations AND mitigation sequencing be followed to ensure sage-grouse populations are maintained.

Attachment D of the EO sets out a variety of stipulations that projects in Core and General sage-grouse habitat must meet, some of which apply generally and others of which are industry or activity-specific.

It has been suggested that compliance with these industry/activity-specific stipulations means that no mitigation is required for a project. Paragraph 24 of Attachment A of the EO, however, states that,

> Land uses or activities that follow the sequencing requirements of this Conservation Strategy (including mitigation as appropriate) and that are consistent with the stipulations set forth in Attachment D shall be deemed sufficient to demonstrate that the project will not cause declines in sage grouse populations (Emphasis supplied).

This language is echoed in the fifth paragraph on page 1 of Montana's Regulatory Review. The Governor's cover letter transmitting the Review, dated August 31, 2015, states that, "Compliance by… state agencies with the Program is mandatory."

Of course, if there are no remaining direct and indirect impacts to sage-grouse populations and habitat after application of the stipulations, then compensatory mitigation will not be necessary. However, since impacts to sage-grouse habitat can, and likely will, occur even if there is general compliance with the stipulations, employing compensatory mitigation is essential to ensuring that large swaths of sagebrush habitat are not impaired due to development activities.

Moreover, given that some of the stipulations in Attachment D are forward-looking in nature and thus could not possibly be fully complied with at the time a determination of the need for mitigation is initially made, requiring mitigation in addition to stipulations is the only logical direction for Montana's program. For example, Paragraph 11 of the Core Area stipulations in Attachment D sets out expectations of project proponents to monitor and evaluate affected leks. If the project causes declines in affected leks,

> [T]he operator will propose adaptive management responses to increase the number of birds. If the operator cannot demonstrate a restoration of bird numbers to baseline levels… within three years, operations will cease until such numbers are achieved. In the interim, the operator, permitting agency and the Program will create additional adaptive management efforts to restore sage grouse population numbers and baseline numbers, as well as restore project operations.

The only possible basis for arguing that compliance with the stipulations precludes the imposition of compensatory mitigation is that Wyoming currently does not require compensatory mitigation under those circumstances. Paragraph 1 on page two of the EO states that, the Montana is to be operated in a manner "generally consistent" with the State of Wyoming, and that "[u]nless clearly stated otherwise, ambiguities regarding implementation of the EO should be resolved in a way that is consistent with this intent.

There is, however, no ambiguity whatsoever on the question of stipulations or mitigation: the Montana EO clearly specifies that stipulations must be met and the mitigation sequencing applied before a project is deemed in compliance. As a result, there is no occasion to look to the practice in Wyoming.

Again, thank you very much for the opportunity to submit these comments. If you have any questions, or would like further information, please contact Len Barson of The Nature Conservancy, lbarson@tnc.org, (206) 498-4629.

Sincerely,

Environmental Defense Fund

The Montana Association of Land Trusts

Montana Audubon

The Montana Wildlife Federation

The Nature Conservancy in Montana

The Theodore Roosevelt Conservation Partnership

Ms. Carolyn Sime
Sage Grouse Conservation Program Manager
Department of Natural Resources & Conservation
1539 11th Avenue
Helena, MT 59620

February 8th, 2018

Ms. Sime,

On behalf of the Montana Association of Oil, Gas, and Coal Counties (MAOGCC) and its 34 member counties, I present the following comments for your consideration regarding the Sage Grouse Habitat Quantification Tool (HQT) and mitigation policy. Additionally, are our comments that specifically address the two new ideas presented at the January 30th meeting of the Sage Grouse Oversight Team.

Compensatory Mitigation
We appreciate that the process of working with stakeholders in forming the mitigation policy has been very thorough and has sought to address many stakeholder concerns. However, there is still a fair amount of ambiguity regarding what circumstances require compensatory mitigation.

It remains unclear at what point a project that is in violation of a stipulation of the Executive Order is required to engage in compensatory mitigation—if at all—when other methods of mitigation, such as avoidance, minimization, and restoration may be used successfully.

In addition to the above, we also have ongoing concerns about the use of multipliers on project impacts/debits and the devaluation of functional acres/credits in the mitigation plan. The use of a 10% multiplier may inaccurately inflate the impact of a debit project, while a high devaluation of post project functional acres on a credit project caused by the application of a third-party appraisal will make attaining enough credits to offset inflated project debits extremely difficult. It is our hope that the Sage Grouse Oversight Team will seriously consider a lower multiplier on debit projects and allowing a higher percentage of functional acres under a conservation easement to be used on credit projects.

From:	Kim Colvin
To:	Sime, Carolyn
Cc:	"Andrew Dana"; montanamalt@q.com; Brian Martin; jberkey@tnc.org; "Kendall Van Dyk"
Subject:	Appraised values and Sage Grouse Credits
Date:	Friday, February 09, 2018 9:24:32 AM

Dear Caroline,

Thank you for your call a week or so ago. I understand that after our conversation there was a meeting where a presentation was made that outlined a method to use the appraised value for a specific conservation easement to value "sage Grouse Credits". As we discussed this is like valuing apples with oranges.

As I specifically mentioned in our phone call, one cannot wholly extrapolate the appraised value of a specific conservation easement, which is valuing a set portion of a bundle of rights outlined in a specific easement document, using market value indicators for agricultural and recreational land sales that are encumbered with conservation easements by various agencies into the value of the established "Sage Grouse Credits" on any given property. There are just too many other factors of value involved with the appraisal of such a property. And, as I noted it is a very nuanced situation. While a certain portion of the rights relinquished may have to do with issues surrounding habitat this is most certainly not driving the market in any way shape or form. A rancher purchasing a ranch in northeastern Montana with a conservation easement on it is not asking himself if the Sage Grouse habitat has value to him. He is asking if that conservation easement encumbered property will be more difficult to manage for him with his cow herd. He is asking himself if he is willing to have a partner in the land such as a land trust. (these are just two of a myriad of issues he would be looking at) He is not asking himself if the Sage Grouse are happy there.

As I discussed with you there may be a way correlate something from the market but until people find value in Sage Grouse habitat, and start buying ranches to preserve it, there is no market data to support the value of Sage Grouse Credits on a given property. I gave you the example of the man who called me and wanted to buy 80 acres near Glasgow for $500 per acre and use it to mitigate 30 credits of wetlands where they had established that a credit is worth $16,000 making the property worth $6,000 per acre instead of the $500 per acre and I told him I could not support that in the market and he admitted that the $16,000 is something the middle man has made up and would reap the benefits from. There is no influence in the market for wetlands mitigation as it is not a primary driving force in the market. This is similar to the situation with the Sage Grouse Credits. You are trying to make something up to assign value to them and using a the appraisal as a direct valuation source for the Sage Grouse Credits is misleading. More work needs to be done.

The bundle of rights is very nuanced. Sage Grouse Habitat has not been one of the sticks in the bundle that has been deemed to have value in this market place. The State of Montana is making it a stick and trying to create a market for Sage Grouse Credits.

I just want to be clear that I did not support a full on correlation between appraised value and the value of a Sage Grouse Credit. What I did recommend was a brain storming session where we all get together (appraisers, you, land trusts, the folks that developed the credit model etc.) and mind map

the valuation issue to come up with some clear guidelines regarding a value of a credit if that is how it must be according to the law. It has become clear to me that you did not agree with my suggestion to have a brain storming session and have moved forward with the appraised values as the indices for the value of Sage Grouse Credits. Appraisal is a very complicated and nuances world. I would suggest that more work needs to be done on your proposal regarding this issue. The appraisers who are on the ground doing the work are not going to agree with the use of their appraisals in this manner as the sales are indicating something very different than what you are proposing.

Thank you,

Kim

Kim C. Colvin, PhD, ARA

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February 9, 2018

Mr. John Tubbs, Chair
Montana Sage Grouse Oversight Team (MSGOT)

Email submittal to Ms. Carolyn Sime, Manager
Montana Sage Grouse Habitat Conservation Program
P.O. Box 201601
1539 11th Ave
Helena, MT 59620

Dear Chairman Tubbs and MSGOT Members:

Please accept the following input on behalf of Cloud Peak Energy (CPE) and myself in response to topics discussed at the January 30, 2018 MSGOT meeting in Helena. These comments address the new ideas presented for consideration by Ms. Sime during that meeting, as well as a few other components of that power point presentation. A CPE team member attended the meeting, and I was able to listen to the archived audio recording while following along with the presentation downloaded from the State's official website. We appreciate these opportunities to participate in the public process, as well as MSGOT's invitation to provide suggestions for consideration regarding the new ideas presented at this meeting.

SERVICE AREAS

We believe increasing the number of Service Areas in the state will help the Program achieve its goal of ensuring that adequate credit options are available for qualified project needs. In addition, we support the flexibility proposed to allow applicants to pursue credits in Service Areas outside of their project area, if necessary, due to lack of opportunities within in it and when approved by MSGOT. We further support the suggestion made by one of the MSGOT members during the meeting to allow credits to be pursued within any Montana Service Area, if not available within the project Service Area, rather than limiting those options only to areas immediately adjacent to their project. This approach maximizes the availability of credit options, particularly at this early stage in the program, and ensures that the benefits of mitigation actions occur where they will do the most good at any given time.

We appreciate and support the Program's proposal to create an additional Service Area, and to allow flexibility in pursuing credits elsewhere when they are not available within the affected project's Service Area.

NEW PROGRAM IDEA: MARKET APPRAISALS FOR CALCULATING FUNCTIONAL ACRE CREDIT VALUE

We recognize the challenge of finding an adequate and equitable way to determine the manner in which functional acre credits can be moved into the "market," and then to assign a dollar value to those credits. We appreciate the Program's efforts to find an alternative to methods that have been discussed among stakeholders to date, but believe more work is needed on this issue.

We support the Program's efforts to determine how best to quantify and assign value to functional acre credits to be moved to the market to help address mitigation needs. However, we have the following concerns about the proposed market appraisal approach.

- Assuming the floor and ceiling caps used in the presentation example were in place, the market appraisal percentage approach presented at the meeting would result in only a small proportion (maximum of 33%) of the functional acres identified for each conservation easement (CE) through the Habitat Quantification Tool (HQT) to be available for market as mitigation credits.

- While this does not affect the biological conservation value of the CE for sage-grouse, it greatly diminishes its value as a source of functional acre credits. As mentioned during the public comment period of the January 2018 meeting, the total functional acre credits (147,667, slide #24 of the presentation) generated for the 44 Ranch using the market appraisal approach would barely meet the number needed (102,915, slide #37) to offset debits generated in Core Area under the "best-case" scenario for the hypothetical solar farm example presented. Those total credits would not be sufficient to offset the worst-case debits (156,997, slide #37) associated with that project example.

- The market appraisal approach also limits the potential financial value of the CE to the landowner by making only a relatively small percentage of total functional acre credits identified in the raw HQT score available for market. Because lands under easement forego their development rights (income source), we believe this approach could inadvertently dis-incentivize landowners to consider putting property under easement when only a small percentage of their acreage will provide a potential source of income to offset what they might have gained by allowing development to occur.

SUGGESTED ALTERNATIVES FOR CONSIDERATION:

- Rather than use the percent decline in property value (a financial metric) due to the CE, the Program might consider using the proportion of original acreage deemed to be "functional" (a biological metric) for sage-grouse through the HQT process as the basis for determining the percentage of functional acre credits to be moved to market.

  Using the hypothetical conservation easement example provided during the meeting, the 44 Ranch had 18,000 acres in Core Area to be placed under a CE. The HQT process

identified 7,383.4 (41% of 18,000) functional acre credits per year, for a total of approximately 738,336 (7,383.357 x 100) functional acres over the 100-year life of the easement (slide #24 of the presentation).

Table 1 below shows the results from applying the original appraisal approach (20% decline in market value, top row) as presented at the January 2018 MSGOT meeting, and results using the proposed 41% metric in this case. As noted, that was the percentage of original CE acres identified by the HQT as functional acre credits per year. The 100-year total functional acres would then be multiplied by that same percentage (738,336 x 0.41) to calculate the number of functional acre credits available for market.

Table 1. Calculating functional acre credits available for market using a functional acre percentage approach vs. market appraisal approach.

Habitat Classification	Fx Acres per Year	Fx Acres for 100-year CE	Cost of purchased development rights (CE) from appraisal	% change	Fx credits to market based on % change	Cost per credit
Core (financial metric)	7,383.4	738,336[1]	$2,140,000	20[2]	147,667[4]	$14.49[6]
Core (biological metric)	7,383.4	738,336	$2,140,000	41[3]	302,718[5]	$7.07[7]

[1] 7,383.357 x 100
[2] Percent decline in property market value due to CE
[3] Percent of original acreage identified by HQT as "functional" for sage-grouse (7,383.4/18,000)
[4] 738,336 x 0.20
[5] 738,336 x 0.41
[6] $2,140,000/147,667
[7] $2,140,000/302,718

This HQT-based approach is even more "neutral and unbiased" than an approach based on market appraisals because it relies completely on the physical and biological characteristics of the property as calculated through the HQT and removes the potential influence (unintended) of an appraiser. As Chairman Tubbs pointed out during this discussion, "strenuous" arguments can occur over appraisal values. It also creates the potential for more functional acre credits to be available with each CE, which could potentially benefit sage-grouse, the landowner, and the project proponent both in terms of mitigation options and economic feasibility due to a reduced cost per credit acre.

However, even this objective approach could still leave a considerable amount of functional acre credits available but under-utilized for the life of the CE. In this case, 435,618 (59%) of the 738,336 total function acres would remain biologically valuable but unavailable for use as credits in the market place for the duration of the CE (100 years).

- Therefore, another option for maximizing the availability of functional acre credits would be to multiply the 100-year total by 59% (738,340 x 0.59) instead of 41% (Table 2, bottom row). In other words, the approach would be to maximize available functional acre credits by using the higher of the two percentages; either the original percentage (41%) of functional (7,383.4) vs. original total (18,000) acres or the percentage of remaining functional acres (100% - 41% = 59%).

Table 2. Calculating functional acre credits available for market using a "highest value" functional acre percentage approach vs. market appraisal approach.

Habitat Classification	Fx Acres per Year	Fx Acres for 100-year Easement	Cost of purchased development rights (CE) from appraisal	Greater Value: Original or Balance of % change	Fx credits to market based on % change	Cost per credit
Core (financial metric)	7,383.4	738,336[1]	$2,140,000	80[2]	590,669[4]	$3.62[6]
Core (biological metric)	7,383.4	738,336	$2,140,000	59[3]	435,618[5]	$4.91[7]

[1] 7,383.357 x 100
[2] 100% - percent (20%) decline in market value due to CE
[3] 100% - 41% percent of original acreage identified by HQT as "functional" for sage-grouse (7,383.4/18,000; 41%)
[4] 738,336 x 0.80
[5] 738,336 x 0.59
[6] $2,140,000/590,669
[7] $2,140,000/435,618

The same concept could be used with the market appraisal approach, though the level of objectivity would not be as high. In this example, the appraisal indicated that the market value of the property declined by 20% due to the CE (Table 1). Using this concept, the balance (100% - 20% = 80%) of the property value that remained would be the multiplier used to calculate functional acre credits available for market (Table 2, top row).

In either case, the goal of using the greater value would be to maximize the number of functional acre credits associated with each CE, to the benefit of the resource, landowner, and project proponent. Each approach would retain its respective level of neutrality; the HQT-based percentage approach would have the greater level of neutrality.

- One final option to consider would be to place a minimum percentage value (e.g., 25%) on functional acre credits associated with each CE and add that minimum to the original percent change in market value or the original percentage of total acres identified as functional for sage-grouse by the HQT. Table 3 illustrates the results of this approach

Table 3. Calculating functional acre credits available for market with a minimum percentage: functional acre percentage approach vs. market appraisal approach.

Habitat Classification	Fx Acres per Year	Fx Acres for 100-year Easement	Cost of purchased development rights (CE) from appraisal	Minimum 25% plus original % change	Fx credits to market based on % change	Cost per credit
Core (financial metric)	7,383.4	738,336[1]	$2,140,000	45[2]	332,251[4]	$6.44[6]
Core (biological metric)	7,383.4	738,336	$2,140,000	66[3]	487,302[5]	$4.39[7]

[1] 7,383.357 x 100
[2] Base of 25% + original percent (20%) decline in market value due to CE
[3] Base of 25% + 41% percent of original acreage identified by HQT as "functional" for sage-grouse (7,383.4/18,000; 41%).
[4] 738,336 x 0.45
[5] 738,336 x 0.66
[6] $2,140,000/332,251
[7] $2,140,000/487,302

under this scenario. However, the 25% minimum introduces an arbitrary component into the equation that may not be desirable and would be more challenging to defend.

Each approach outlined above presumes that the HQT has accurately assessed the physical and biological conditions for each property. This includes incorporating Third Level site-specific data identified as "*an important step in the Montana HQT*" in the July 2017 draft HQT Technical Document. Our understanding is that the tool cannot yet incorporate this Third Level site-specific data.

We fully support the comment made at the January 2018 meeting by the representative (John Bradley?) from the Montana Wildlife Federation stressing the need for "patience" and diligence (added) in developing the HQT to ensure that it is performing as needed in all aspects to provide the critical and accurate information necessary to assist with this statewide conservation/mitigation effort.

NEW PROGRAM IDEA: DO NOT APPLY SITE-SPECIFIC MULTIPLIERS AFTER COMPLETION OF THE RECLAMATION PHASE OF PROJECTS

The goal of this proposal from the Program is to apply site-specific debit multipliers for Executive Order (EO) signals (i.e., departures) only during the construction and operation phases of each project, as outlined in Ms. Sime's presentation. The premise is that once active operations are completed, including final reclamation measures, everyone is really just "waiting for plants to grow" with only minimal site presence needed to conduct regular monitoring to ensure that reclamation goals and standards are being met for bond release or other permit requirements.

Based on our initial understanding of this proposal, we support this new idea. This proposal reinforces the lack of need for such stipulations upon completion of reclamation, when potential departures from EO stipulations are not likely to occur.

That said, we do have concerns about other Program considerations regarding reclamation.

- Most importantly, we do not believe that the HQT process is correctly adjusting for functional acres present/lost under an accelerated reclamation outcome.

  For example, in slide #10 of the January 30, 2018 presentation, the approach shown simply "stops counting" at Reclamation year 5 for accelerated completion, resulting in a total of 2,497.55 HQT functional acres lost for that category during years 1 through 5. However, that approach greatly exaggerates the "debits" under an accelerated reclamation phase because it currently has no way in which to "weight" the increased rate of success during each of those 5 years, as it should. That is, the total in the "lost" column should get back to "0" by year 5 under this scenario, not remain at 463.83.

  We are not sure how to rectify this inaccuracy, but strongly believe it should be addressed as part of the final adjustments to the HQT process.

- We also have serious concerns about the use of a 75-year timeframe as the standard period for successful reclamation. This period seems to have been based on the rate of natural recolonization of sagebrush following calamities such as wild fire; that is our impression from the information provided in the July 2017 draft HQT Technical Document. As noted in comment TH41 of that document, it does not appear that any other restoration timelines were considered. For example, surface coal mines in Montana, and perhaps other extractive industries, have rigorous reclamation requirements outlined in their State mining permits. As a result, reclamation regularly meets or exceeds required goals or standards within 10-11 years, far sooner than the 75-year period being applied to each project as a matter of course for the HQT process.

  We encourage the Program to develop specific reclamation timeframes for different categories of disturbance (energy, cultivation, etc.) to account for documented advances in reclamation techniques for sagebrush.

- Minor points for comment:
  - It is interesting to see that the graphs on slides #9, #30, and #32 all show Functional Acres Present increasing slightly during the Operations phase (as for the Reclamation phase), though the level of activity during operations presumably remains relatively constant. The latter component is reflected in the actual HQT calculations for functional acres lost in each operational year, as indicted by the total value represented in the table on slide 10 (and as shown for each year in our project's results). We are curious about what the graphic in your presentation is trying to depict for that period. Is that indicating that impacts are gradually

declining somehow or birds are becoming acclimated to operations during that period?

If so, that should probably be reflected in corresponding reductions in the HQT Functional Acres Lost column during the operational years.

- On those same graphs, the final column is referred to as the **"Abandonment" phase**. That **should be changed to "Completion"** to more accurately reflect what has occurred. Plus, the word abandonment has an extremely negative connotation that should be avoided unless actually warranted.

NEW PROGRAM IDEA: ALLOW FOR PHASED PAYMENTS INTO THE STEWARDSHIP ACCOUNT

As explained during the meeting presentation, project proponents would have various options to meet their mitigation obligations, whether through payment schedules into the Stewardship Account or through documentation that mitigation obligations have been met using credits from other sources. For example, rather than the current lump sum payment made prior to initial surface disturbance, project proponents would be able to provide payments (or documentation) at the beginning of each project phase: construction, operation, or reclamation.

Based on our initial understanding of this proposal as presented at the January 2018 MSGOT meeting, we support this idea. If deemed necessary, uncertainties related to future payment could be removed through guarantees secured by bonding.

ADDITIONAL INPUT

- CPE appreciated its involvement in the process to develop the initial conservation efforts for sage-grouse through Executive Orders guiding various activities and options for avoiding, minimizing, and compensating for potential impacts to the species and its habitat in Montana. They have not been directly involved in the Stakeholders meetings to develop the HQT or its guiding Technical Document.

  We support the scheduling of a Stakeholders meeting prior to the May 4, 2018 MSGOT meeting. We believe it is critical for trying to resolve outstanding differences among members and to further discuss the new ideas presented by the Program at the January 2018 meeting, as well as proposed alternatives to those ideas. We request to be notified of the meeting date and location so that we can attend.

- We also request clarification on this final point. On slide #28 of the Program's January 30, 2018 presentation, bullet #2 shows the multiplier percentages to be applied to various departures from EO stipulations (i.e., policy signals). However, the percentages for General Habitat do not always match what is shown in subsequent tables (e.g., slide #39, Solar-General Habitat and slide #44, Pipeline-General Habitat). In both tables, site-specific EO signals are valued at 10%, whereas slide #28 indicates a 5% multiplier would be applied for such signals in General Habitat. The same discrepancy between the slides

applies for the Net Conservation Benefit (NCB) percentage shown in the note below each of those tables.

Please clarify which percentage value is correct for each EO signal for future reference.

Thank you in advance for your time and consideration in reviewing this input. Again, we appreciate the opportunity to participate and contribute.

Sincerely,

Gwyn McKee
President/Principal Biologist
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g_mckee@vcn.com

cc: Darryl Maunder, Director Environmental and Regulatory Affairs, Cloud Peak Energy

From: Beth Madden
To: DNRC Sagegrouse
Subject: Montana Sage Grouse Conservation planning
Date: Thursday, February 08, 2018 1:15:38 PM

To the Sage Grouse Oversight Team:

Thank you for your work on behalf of sage grouse. I write to you as a wildlife biologist, a bird hunter, and a Montanan who values the importance of conservation to our economy. As you move forward in the planning efforts, please have a goal for "net conservation benefit" for sage grouse habitat. Meaning: there should be **no-net-loss of the remaining sage grouse habitat** in Montana. This approach is essential for keeping our sage grouse plan strong, and ensuring a conservation success here.

As you know: Montanans really want a strong sage grouse conservation program - it is good for the state! We have the opportunity to lead in sage grouse conservation and protect more than 350 other species.

Thanks for your consideration.

Sincerely,
Elizabeth Madden
408 Overbrook Drive
Bozeman, MT 59715

From: Bruce Smith
To: DNRC Sagegrouse
Subject: Sage grouse conservation
Date: Thursday, February 08, 2018 10:05:21 PM

In the interest of conserving sage grouse and the habitats they rely on, Montana should pursue a net conservation benefit goal for sage grouse habitat. Like sage grouse, a variety of sagebrush-obligate species can only be conserved by maintaining quality sagebrush landscapes.

Bruce Smith
305 Old Forest Creek Trail
Bozeman, MT 59718

From: Dwight Guynn
To: DNRC Sagegrouse
Subject: Net conservation benefit goal
Date: Thursday, February 08, 2018 2:25:13 PM

I strongly support a sage grouse management program that has a net conservation benefit goal. We cannot afford to lose more sage grouse habitat. Keep up the good work.

From:	Guy D Bateman
To:	DNRC Sagegrouse
Subject:	sage grouse conservation program
Date:	Thursday, February 08, 2018 5:16:41 PM

Montanans want a strong sage grouse conservation program. Implementing a strong program will ensure that the sagebrush steppe habitat will be intact for multiple uses including ranching, energy development, wildlife habitat, hunting, and other recreation. Montana should use a "net conservation benefit" goal for sage grouse habitat. There should be no net loss of the remaining sage grouse habitat in Montana. That approach is essential to keeping our sage grouse plan strong.

Thank you.

--
Guy D. Bateman, PO Box 17931, Missoula, MT 59808; 406-250-9425

From: Harvey Nyberg
To: DNRC Sagegrouse
Subject: Sage Grouse Conservation
Date: Thursday, February 08, 2018 11:57:12 AM

Please move forward on the Montana sage grouse conservation plan. This plan was developed by an extensive collaborative effort an represents the best plan to conserve sage grouse and the myriad os species that share the sage steps habitat. This is the best path forward for sage grouse, Montana wildlife and the people of Montana.

Harvey Nyberg
Lewistown, MT 59457

From: Jay Gore
To: DNRC Sagegrouse
Subject: Montana sage grouse conservation plan.
Date: Friday, February 09, 2018 9:41:24 AM

If you are redoing the governors sage grouse plan, be sure your version is for NO net loss of grouse habitat. Manage on a habitat bases, not on a population bases.

Jay Gore
Missoula

From: jim
To: DNRC Sagegrouse
Subject: Sage grouse
Date: Friday, February 09, 2018 1:04:00 PM

You are the only ones helping the grouse. To much money on grouse land?Good luck

Sent from my Verizon, Samsung Galaxy smartphone

From: ken barrett
To: DNRC Sagegrouse
Subject: Sage Grouse
Date: Thursday, February 08, 2018 11:33:42 AM

I strongly encourage the team to develop a net conservation benefit goal for sage grouse habitat. As you well know when we have good sage grouse habitat, we have good habitat for multiple species. Sage grouse populations have suffered enough, it's time to give them a helping hand.

- Ken Barrett

Bozeman, Montana

From:	kristeen keup
To:	DNRC Sagegrouse
Subject:	Strong sage grouse conservation program PLEASE
Date:	Thursday, February 08, 2018 12:44:14 PM

I am a born and raised Montanan.

Montanans want a strong sage grouse conservation program. We have an opportunity to lead in sage grouse conservation and protect more than 350 other species. **Implementing a strong program will ensure that the sagebrush steppe habitat will be intact for multiple uses including ranching, energy development, wildlife habitat, hunting, and other recreation.**

Montana should use a "net conservation benefit" goal for sage grouse habitat. There should be no-net-loss of the remaining sage grouse habitat in Montana, an essential approach to keeping our sage grouse plan strong.

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Peace. Understanding. Light.
Namaste,
Kristeen M. Keup