

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	CRP Break Request – Lease 2144
Proposed Implementation Date:	Spring/Summer of 2022
Proponent:	Starbuck Hjartarson Seifert
Location:	E2SE4, Section 20, T34N., R4W., & E2SE4, Section 29, T34N., R4W.
County:	Toole, MT
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Starbuck Hjartarson Seifert (Lessee) proposes the breaking and conversion of 155.60 Conservation Reserve Program (CRP) acres under CRP contract 10037, on state land lease no. 2144, referred to herein as the "Project". See Attachment A – Project Location Map for proposed break acres.

The CRP contract expires on 9/30/2022, with the intention of non-renewal by the Lessee for purposes of converting it to agricultural land for small grain production.

The purpose of the conversion from CRP acres to agricultural production acres is to increase the overall revenue on lease no. 2144 for the Common Schools Trust while maintaining the Department of Natural Resources and Conservation (DNRC) land sustainability goals. The Project is expected to occur in the Spring/Summer of 2022.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The Project is located on state-owned land, lease no. 2144 in Toole County, MT. The Lessee (Starbuck Hjartarson Seifert) is the proponent. Agencies involved in the Project include the Natural Resources Conservation Service (NRCS) United States Department of Agriculture (USDA), Teton County Farm Services Agency (FSA), Montana Fish, Wildlife, and Parks (FWP), Montana Salinity Control Association (MSCA), Montana Audubon Society, and the DNRC, Trust Lands Management Division (TLMD).

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

It is the DNRC's understanding that the Lessee will abide by the stipulations under their USDA-NRCS Conservation Plan as determined by the USDA. The DNRC is not aware of any other permits required for the Project on state land described as E2SE4, Section 20, T34N., R4W., **AND** E2SE4, Section 29, T34N., R4W.

3. ALTERNATIVES CONSIDERED:

Alternative A (Proposed Action): Grant Lessee permission to break and convert 155.60 CRP acres to agricultural land for small grain production.

Alternative B (Deny Break/Graze CRP): Deny Lessee permission to break and convert 155.60 CRP acres to agricultural land for small grain production and reclassify land use to grazing.

Alternative C (No Action): Deny Lessee permission to break and convert 155.60 CRP acres to agricultural land for small grain production.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Soil Quality, Stability, and Moisture:

There are three main soil types found within the Project footprint that would be broken for small grain production.

28A – Nishon clay loam, 0 to 1 percent slopes:

The Project area contains approximately 5.10 acres of this soil type. These soils consist of poorly drained soils that can be found in landforms such as closed depressions. Depth to paralithic bedrock is more than 80 inches. Available water capacity is about 10.3 inches; the mean annual precipitation for this region is 10 to 14 inches. The NRCS Web Soil Survey (WSS) farmland classification for this soil type is Not Prime Farmland (Soil Survey of Toole County, Montana, Part 1, 2002). See Table 1 - NRCS Soil Characteristics, below for further information.

386B – Ethridge – Evanston clay loams, 0 to 4 percent slopes:

The Project area contains approximately 77.6 acres of this soil type. These soils consist of well-drained soils that can be found in landforms such as alluvial fans. Depth to paralithic bedrock is more than 80 inches. Available water capacity is about 9.8 inches (Ethridge) and about 9.9 inches (Evanston); the mean annual precipitation for this region is 10 to 14 inches. The NRCS WSS farmland classification for this soil type is Prime Farmland if irrigated (Soil Survey of Toole County, Montana, Part 1, 2002). See Table 1 - NRCS Soil Characteristics, below for further information.

421C – Joplin – Hillon loams, 2 to 8 percent slopes:

The Project area contains approximately 72.9 acres of this soil type. These soils consist of well-drained soils that can be found in landforms such as moraines. Depth to paralithic bedrock is more than 80 inches. Available water capacity is about 9.8 inches (Joplin) and about 8.8 inches (Hillon); the mean annual precipitation for the region is 10 to 14 inches. The NRCS WSS farmland classification for this soil type is Farmland of statewide importance. (Soil Survey of Toole County, Montana, Part 1, 2002). See Table 1 - NRCS Soil Characteristics, below for further information.

Table 1 – NRCS Soil Characteristics

Soil	~Acres	Land Capability Class	T-Factor (tons/ac/yr)	WEG ¹	Estimated Barley Yield (bu/ac)	Estimated WW ² Yield (bu/ac)	Estimated SW ³ Yield (bu/ac)
28A	5.10	3	5	6	0.00	0.00	0.00
386B	77.60	3	5	6	57.50	35.00	39.00
421C	72.90	3.5	5	6	55.00	33.50	37.00
Total/Average	155.60	3.17	5	6	37.50	22.83	25.33

Land Capability Class:

Land capability classification shows, in a general way the suitability of soils for most kinds of field crops. The scale is from 1 to 8; with 1 being the most suitable and 8 being the least suitable. Class 3 soils are described as having severe limitations that reduce the choice of plants that require special conservation practices, or both.

¹ Wind Erodibility Group (WEG)

² Winter Wheat (WW)

³ Spring Wheat (SW)

Typical crop production in this region consists mainly of grains (barley, winter wheat, and spring wheat). Over a 10-year period (2012-2021) barley production in Toole County averaged 41.44 bu/ac, winter wheat production averaged 35.40 bu/ac, and spring wheat (excluding durum) production averaged 29.31 bu/ac. See Table 2 – USDA National Agricultural Statistics Summary. It can be inferred, from the region's yields and productivity status that the choice of plants (i.e. barley, winter wheat, and spring wheat) appear to be on average suitable for the soil conditions described above.

Table 2 – USDA National Agricultural Statistics Summary Toole County⁴

Year	Barley (Bu/ac)	WW (Bu/ac)	SW (Excluding Durum) (Bu/ac)
2012	45.60	39.10	35.30
2013	49.10	41.10	42.50
2014	50.30	35.50	33.80
2015	29.70	31.50	22.80
2016	39.70	41.60	27.00
2017	37.40	36.50	21.40
2018	41.70	34.50	27.60
2019	33.70	31.60	25.00
2020	58.60	34.20	36.40
2021	28.60	28.40	21.30
Average	41.44	35.40	29.31

T-Factor:

The T-Factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. A T-Factor of 1 indicates that the soils are fragile and are more susceptible to damage by erosion, a T-Factor of 5 is for deeper soils that have a low susceptibility to damage by erosion. The soils have a T-Factor of 5 indicating a low susceptibility to erosion. It is inferred that the practice of No-Till farming would be applied to the Project, as it is a current land use practice of the Lessee. It is expected that a No-Till practice would reduce the potential for erosion by wind and/or water.

WEG:

WEG consists of soils that have similar properties affecting their susceptibility to wind erosion in a cultivated area. Soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The soils have a WEG rating of 6 indicating a low to moderate susceptibility to erosion. It is inferred that the practice of No-Till farming would be applied to the Project, as it is a current land use practice of the Lessee. It is expected that a No-Till practice would reduce the potential for erosion by wind and/or water.

Soil Comparison:

This is the Lessee's first state lease; however, he has worked on Starry Range Inc. (a family-owned farm) which has been a lessee of state leased land for 10 years. A review of the soil characteristics on state land leased by Starry Range Inc. indicates they have experience farming similar soils to the ones found within the Project Footprint. See Table 3 – Soil Characteristic Comparison. Due to the similar soils between the Project and Starry Range Inc. state lease, it is expected that any future grain production within the Project footprint would be similar to production on Starry Range Inc. state lease 2806.

⁴ Values obtained from the USDA National Agricultural Statistics Services are an average of non-irrigated and irrigated yields for Toole County, MT since non-irrigated yield data was not consistent. This can result in higher yields than non-irrigated yields.

Table 3 – Soil Characteristic Comparison⁵

	Lease no.2144	Lease no. 2806
Land Capability Class	3.17	4.13
T-Factor (tons/ac/yr.)	5.00	5.00
WEG	6.00	5.50
Estimated Barley Yield (bu/ac)	37.50	42.75
Estimated WW Yield (bu/ac)	22.83	29.13
Estimated SW Yield (bu/ac)	25.33	26.00

Grain Crop Yields:

A review of the Starry Range Inc. production reports for the last 10 years indicated that their barley production was 28.84 bu/ac, over a 2 – year period and spring wheat production was 33.19 bu/ac, over 10 years, for lease no. 2806. See, Table 4 – Starry Range Inc. 10 – Year Production Period.

Table 4 – Starry Range Inc. 10 -Year Production Period

Year	Crop	Total Yield	Unit	Unit Price	Acres	Yield/Acre	Revenue
2012	Summer Fallow	0.00	Bu	\$0.00	327.16	0.00	\$0.00
2012	Spring Wheat	8491.49	Bu	\$8.63	212.50	39.96	\$18,277.22
2013	Summer Fallow	0.00	Bu	\$0.00	212.50	0.00	\$0.00
2013	Spring Wheat	16939.80	Bu	\$5.00	327.16	51.78	\$21,174.75
2014	Summer Fallow	0.00	Bu	\$0.00	230.02	0.00	\$0.00
2014	Spring Wheat	8699.76	Bu	\$5.20	309.64	28.10	\$11,269.53
2015	Summer Fallow	0.00	Bu	\$0.00	309.64	0.00	\$0.00
2015	Spring Wheat	8425.50	Bu	\$4.74	230.02	36.63	\$12,532.08
2016	Malt Barley	4000.00	Bu	\$3.24	97.14	41.18	\$3,240.00
2016	Summer Fallow	0.00	Bu	\$0.00	110.19	0.00	\$0.00
2016	Spring Wheat	10256.66	Bu	\$3.84	332.33	30.86	\$9,803.33
2017	Malt Barley	1602.10	Bu	\$2.54	97.14	16.49	\$1,017.33
2017	Summer Fallow	0.00	Bu	\$0.00	240.74	0.00	\$0.00
2017	Spring Wheat	6756.12	Bu	\$5.90	201.78	33.48	\$9,937.38
2018	Summer Fallow	0.00	Bu	\$0.00	188.73	0.00	\$0.00
2018	Spring Wheat	8327.00	Bu	\$5.08	350.93	23.73	\$10,528.30
2019	Summer Fallow	0.00	Bu	\$0.00	110.19	0.00	\$0.00
2019	Spring Wheat	6090.96	Bu	\$4.00	429.47	14.18	\$6,071.02
2020	Summer Fallow	0.00	Bu	\$0.00	337.88	0.00	\$0.00
2020	Spring Wheat	8053.00	Bu	\$3.91	201.78	39.91	\$7,827.82
2021	Summer Fallow	0.00	Bu	\$0.00	201.78	0.00	\$0.00
2021	Spring Wheat	11234.32	Bu	\$7.69	337.88	33.25	\$21,555.31

A comparison between Starry Range Inc.'s active production years and the same production years to Toole County indicated that Starry Range Inc. on average produces lower yields (bu/ac) for barley than Toole County averages and a similar yield (bu/ac) for spring wheat to Toole County averages, for lease no. 2806. See, Table Starry Range Inc. Production Comparison to Toole County.

⁵ Values obtained in Table 3 are averages of farmable soil per each lease. For the full analysis refer to Attachment B – Soil Characteristic Comparisons.

Table 5 – Starry Range Inc. Production Comparison to Toole County ⁶

Year	Barley (bu/ac)	SW (bu/ac)	Barley (bu/ac)	SW (bu/ac)
2012	-	39.96	-	35.30
2013	-	51.78	-	42.50
2014	-	28.10	-	33.80
2015	-	36.63	-	22.80
2016	41.18	30.86	39.70	27.00
2017	16.49	33.48	37.40	21.40
2018	-	23.73	-	27.60
2019	-	14.18	-	25.00
2020	-	39.91	-	36.40
2021	-	33.25	-	21.30
Average	28.84	33.188	38.55	29.31

Past data indicates that Starry Range Inc. has had successful production of grain crops on similar soils as the Project footprint soils. It is assumed that the Lessee would potentially have the same agricultural production success rate on the 155.60 CRP acres requested for break.

BMPs:

The Lessee has land-use practices that consist of No-Till and a 50/50 summer fallow rotation, as seen in Table 4 above. Lessee will be required to follow all stipulations under their USDA-NRCS Conservation Plan. Additionally, the Lessee by law has to abide by stipulations imposed on the lease by the DNRC, TLMD, any violation of the lease stipulations would result in the cancelation of the lease.

Per Administrative Rule of Montana (ARM) **36.25.121 (1)**:

The department may cancel any lease or license if the lessee or licensee commits fraud or misrepresents facts to the department which, if known, would have had an effect on the issuance of the lease or license, uses the land for any purpose not authorized in the lease or license, or violates the terms of the lease or license or these rules, **fails to manage the land in a husband like manner consistent with conservation of the land resources and the perpetuation of its productivity**, or for any other reason provided by law. The lessee or licensee of a canceled lease or license shall not be entitled to any refunds or exemptions from any payments due to the state.

Determination:

Alternative A:

Effect, Not Likely to Adversely Effect. Soil-breaking activities for conversion to small grain production have the potential to impact soils. Through an analysis and comparison of soil characteristics, Starry Range Inc.'s yield success rate over time, and Lessee farming practices (BMPs), the conversion of the 155.60 CRP acres to agricultural grain production is not expected to result in negative cumulative impacts on soils that would render them unsuitable for future use.

Alternative B & C:

No Effect. Soil degradation is not expected for activities that do not include soil breaking and therefore, cumulative impacts to soils are not expected.

⁶ Note; this table does not include the production year 2020 as the USDA Agricultural Statistics does not yet have data for this year.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Surface or Groundwater Resources:

There are no known Water Rights claims within the Project footprint, per the DNRC, Water Rights Query. A conversation with the Lessee indicated that the 155.60 acres would be farmed in common with adjacent agricultural dryland to the west and north with no plans to irrigate. Sand Coulee is located approximately 1.4 miles northeast of the Project and flows northwest to southeast.

A review of the proposed Project by the MSCA, Scott Brown, Program Director, determined that the “[M]SCA does not see where breaking...will lead to increased salinity” (Scott Brown, 2022).

BMPs:

It is inferred that the practice of No-Till farming would be applied to the Project, as it is a current land use practice of the Lessee. It is expected that a No-Till practice would reduce the potential for agricultural run-off.

The Lessee by law has to abide by stipulations imposed on the lease by the DNRC, TLMD, any violation of the lease stipulations would result in the cancelation of the lease. See ARM **36.25.121 (1)** discussed above in **Section 4**. Additionally, the Lessee will be required to follow all stipulations under their USDA-NRCS Conservation Plan.

Determination:

Alternative A:

Effect, Not Likely to Adversely Effect. The Project has the potential to increase agricultural run-off into nearby water features, however, with the implementation of the USDA-NRCS Conservation Plan and the native grass buffer zones that surround Sand Coulee, and the distance and little change in elevation from the Project to Sand Coulee, cumulative impacts are not expected.

Alternative B and C:

No Effect. Impacts on water features are not expected for activities that do not include soil breaking and therefore, cumulative impacts to water features are not expected.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Air Quality:

There are no Nonattainment areas located on or near the Project per the Environmental Protection Agency (EPA) Nonattainment area maps (NEPAssist, 2022). The breaking of the 155.60 CRP acres has the potential to cause dust particles to become airborne.

BMPs:

Lessee will be required to follow all stipulations under their USDA-NRCS Conservation Plan.

Determination:

Alternative A:

Effect, Not Likely to Adversely Effect. The Project has the potential to cause temporary dust particles to become airborne during soil breaking activities. Since the activity is temporary the Project is not expected to result in long-term negative cumulative impacts on air quality.

Alternative B & C:

No Effect. Impacts to air quality are not expected for activities that do not include soil breaking and therefore, cumulative impacts to air quality are not expected.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Vegetative Community:

Vegetation within the Project footprint consists of an established CRP stand; a site visit conducted by DNRC staff on 06/30/2021 determined the CRP mainly consists of alfalfa (*Medicago sativa*), and crested wheatgrass (*Agropyron cristatum*). The surrounding land consists of agricultural dryland (north, east, & west), grazing land (east), and CRP (south). Currently, the 155.60 CRP acres are not set up for grazing as there is no fencing to separate the Project acres from adjacent land. However, if the Lessee were to install fencing, potential grazing conditions for this vegetative community would be set at an approximate base rate of 0.7 animal unit months (AUMs)/ac, for the first three years, which amounts to 109 AUMs (155.60 ac* 0.7 AUMs/ac = 108.92 AUMs). After three years the base rate would be lowered to 0.4 AUMs/ac which amounts to 63 AUMs (155.60 ac* 0.4 AUMs/ac = 62.24 AUMs).

The Natural Heritage Program database did not indicate plant species of concern within Township 34N., Range 4W.

BMPs:

The Lessee by law has to abide by stipulations imposed on the lease by the DNRC, TLMD, any violation of the lease stipulations would result in the cancelation of the lease. See ARM **36.25.121 (1)** discussed above in **Section 4**. Additionally, the Lessee will be required to follow all stipulations under their USDA-NRCS Conservation Plan.

Determination:

Alternative A:

Effect, Likely to Adversely Effect. Conversion of the 155.60 CRP acres to agricultural land for small grain production will result in a permanent impact on the vegetative community, which has the potential to result in cumulative effects.

Alternative B:

Effect, Not Likely to Adversely Effect. Grazing of the 155.60 CRP acres has the potential to result in impacts to the vegetative community through trampling and/or removal of vegetation, however, with the DNRC's lease stipulations, it is not expected to result in cumulative impacts.

Alternative C:

No Effect. Impacts on the vegetative community are not expected for activities that do not include soil breaking or grazing and therefore, cumulative impacts on the vegetative community are not expected.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Habitat:

The Project site is not considered Critical Habitat per the EPA. The 155.60 CRP acres provide habitat for a variety of big game species, predators, upland game birds, ground nesting birds, and small mammals.

A review of the proposed Project by FWP, Ryan Rauscher, Wildlife Biologist, determined that “[a]ny net loss of permanent vegetative cover and conversion to grain production will be negative for wildlife species in general, and specifically problematic for ground nesting birds, small mammals, upland game birds, deer populations, and pronghorn in the area. Given that this parcel is near limited native habitats, the net loss of permanent cover reduces the wildlife values on a larger scale than just the parcel itself. Because of those considerations, I would ask that DNRC not allow either tract to be broken” (Ryan Rauscher, 2022).

BMPs:

The Lessee by law has to abide by stipulations imposed on the lease by the DNRC, TLMD, any violation of the lease stipulations would result in the cancelation of the lease. See ARM **36.25.121 (1)** discussed above in

Section 4. Additionally, the Lessee will be required to follow all stipulations under their USDA-NRCS Conservation Plan.

Determination:

Alternative A:

Effect, Likely to Adversely Effect. The Project has the potential to impact wildlife species through the reduction of habitat, given the analysis by Ryan Rauscher, the Project is expected to result in cumulative impacts on habitat and the wildlife species that depend on them.

Alternative B:

Effect, Not Likely to Adversely Effect. Livestock grazing has the potential to impact wildlife species through trampling and/or removal of vegetation and interactions that can cause displacement, however, due to the DNRC's lease stipulations, it is not expected to result in cumulative impacts.

Alternative C:

No Effect. Impacts on wildlife habitats are not expected for activities that do not include soil breaking or grazing and therefore, cumulative impacts to habitat are not expected.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Species of Concern/Threatened/Endangered:

Federally listed species that occur in Toole County, Montana include Grizzly Bear (*Ursus arctos horribilis*), Red Knot (*Calidris canutus rufa*), and Whitebark Pine (*Pinus albicaulis*).

The Natural Heritage Program database identified the Sprague's Pipit (*Anthus spragueii*), Golden Eagle (*Aquila chrysaetos*), Ferruginous Hawk (*Buteo regalis*), Chestnut-collared Longspur (*Calcarius ornatus*), Long-billed Curlew (*Numenius americanus*), Thick-billed Longspur (*Rhynchophanes mccownii*) and the Brewer's Sparrow (*Spizella breweri*) within Township 34N., Range 4W. as species of concern.

Wetlands:

The National Wetland Inventory identified a wetland within the Project footprint with a classification code of PEM1A, see Attachment C – Wetland Map. For a complete description of wetland, classification codes go to <https://www.fws.gov/wetlands/data/Mapper.html>.

BMPS:

The Lessee by law has to abide by stipulations imposed on the lease by the DNRC, TLMD, any violation of the lease stipulations would result in the cancelation of the lease. See ARM **36.25.121 (1)** discussed above in **Section 4**. Additionally, the Lessee will be required to follow all stipulations under their USDA-NRCS Conservation Plan.

Determination:

Alternative A:

Effect, Likely to Adversely Effect. The Project has the potential to impact wildlife species through the reduction of habitat, given the analysis by Ryan Rauscher in **Section 8** above, the Project is expected to result in cumulative impacts on habitat and the wildlife species that depend on them.

The Project will impact a Freshwater Emergent Wetland.

Alternative B:

Effect, Not Likely to Adversely Effect. Livestock grazing has the potential to impact wildlife species through trampling and/or removal of vegetation and interactions that can cause displacement, however, due to the DNRC's lease stipulations, it is not expected to result in cumulative impacts.

Alternative C:

No Effect. Impacts on wildlife habitats are not expected for activities that do not include soil breaking or grazing and therefore, cumulative impacts to habitat are not expected.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Historical and Archeological Sites:

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE.

Determination:

Alternative A, B, & C:

Because the area of potential effect on state land was once cultivated, because the Holocene age soils in the APE are relatively thin, and because the local geology is not likely to produce caves, rock shelters, or sources of tool stone, no additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during Project-related activities, all work will cease until a professional assessment of such resources can be made.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Visual and Noise:

The Project is located approximately 8 miles northeast of Cutbank, Montana (population 3,058). The Project will not result in any above-ground structures and noise impacts will not increase in this area as a result of the Project.

Determination:

Alternative A:

Effect, Not Likely to Adversely Effect. The Project has the potential to impact visual and noise resources through the removal of the CRP and grain production activities afterward, however, due to adjacent private land being in-active grain production cumulative impacts on visual and noise resources are not expected.

Alternative B & C:

No Effect. Impacts to visual and noise resources are not expected for grazing activities or activities that do not include soil breaking and therefore, cumulative impacts to visual and noise resources are not expected.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Limited Resources:

CRP is a limited resource for wildlife populations in the area. The CRP provides habitat for a variety of big game species, predators, upland game birds, ground nesting birds, and small mammals.

BMPs:

The lessee by law has to abide by stipulations imposed on the lease by the DNRC, TLMD, any violation of the lease stipulations would result in the cancelation of the lease. See ARM **36.25.121 (1)** discussed above in **Section 4**.

Determination:

Alternative A:

Effect, Likely to Adversely Effect. The Project has the potential to impact wildlife species through the reduction of CRP acres, a limited resource that provides habitat. Given the analysis, by Ryan Rauscher in **Section 8** above, the Project is expected to result in cumulative impacts on limited resources.

Alternative B:

Effect, Not Likely to Adversely Effect. Livestock grazing has the potential to impact limited resources, such as CRP habitat, through trampling and/or removal of vegetation and interactions that can cause displacement of wildlife, however, due to the DNRC’s lease stipulations, it is not expected to result in cumulative impacts.

Alternative C:

No Effect. Impacts to limited resources, such as CRP habitat, are not expected for activities that do not include soil breaking or grazing and therefore, cumulative impacts to habitat are not expected.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Surrounding lands are owned by private landowners with a mixed surface use of agricultural grain production, CRP, and grazing. Any future development in the area will likely be restricted to these types of land uses as well as utility development, with non-significant impacts to the surface. Future development projects are not expected to have negative cumulative impacts.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter “NONE” if no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Human Health and Safety:

Personnel involved with Project activities include the Lessee. Farming and ranching activities can increase exposure to pesticides if chemical control is used for managing weeds, respiratory diseases (i.e. Organic Dust Toxic Syndrome and Farmer’s Lung), noise-induced hearing loss from farm machinery, and skin disorders from working long hours in the sun (e.g. contact dermatitis and skin cancers) (Rein, USDA, 1992).

BMPs:

Prevention measures that can be employed to reduce health hazards include following pesticide labels and wearing the appropriate Personal Protective Equipment (PPE) to reduce pesticide exposure, wearing respirators to reduce respiratory diseases, wearing hearing protection to prevent noise-induced hearing loss, and using sunblock and wearing protective clothing (i.e. long-sleeved shirts, pants, and wide-brimmed hats) to reduce skin disorders (Rein, USDA, 1992).

Determination:

Alternative A, B, & C:

Effect, Not Likely to Adversely Effect. Farming activities have the potential to increase exposure to health hazards, however, if the personnel involved with the Project activities employ prevention measures it is not expected to result in cumulative impacts on health and safety.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Land Use:

Current land use on lease no. 2144 consists of 155.60 CRP. Alternative A would result in the future land use consisting of 155.60 agricultural acres for small grain production; Alternative B would result in the future land use consisting of 155.60 grazing acres; Alternative C would result in the future land use consisting of 155.60 CRP acres.

Potential Production:

Grain Crop Production:

Past data indicates that the Lessee (part of Starry Range Inc.) has had successful production of grain crops on similar soils as the Project footprint soils. It is assumed that the Lessee would potentially have the same agricultural production success rate on the 155.60 CRP acres requested for break, See **Section 4** above. A review of the return rate on Starry Range Inc. state leases no. 2806 indicated that the average 10-year rate of return is \$24.69/acre. See Table 4 – Starry Range Inc. 10 -Year Production Period, above. In addition, the Lessee competitive bid lease no. 2144 at 35.50% crop share or greater of \$25.00/acre, which is representative of the local area production.

Grazing Production:

Potential production for the state on grazing leases is dependent upon the grazing rate. Per **ARM 36.25.110(3)**:

The rental rate for all grazing leases and licenses shall be on the basis of the animal-unit-month (AUM) carrying capacity of the land to be leased or licensed. The minimum annual rental rate per AUM is the weighted average price per pound of beef cattle on the farm in Montana as determined by the Montana National Agricultural Statistics Service of the U.S. Department of Agriculture (USDA Nass) for the previous year, multiplied by:

- (a) 8.13 in calendar year 2012;
- (b) 8.72 in calendar year 2013;
- (c) 9.03 in calendar year 2014;
- (d) 9.89 in calendar year 2015; and
- (e) 10.48 in 2016 and all calendar year thereafter.

The 9-year average minimum grazing rate is \$11.23/AUM, See Table 6 – 9 – Year Average Minimum Grazing Rate. AUMs are determined by the health of the vegetative community, see **Section 7** for the AUM analysis for the Project.

Table 6 – 9 – Year Average Minimum Grazing Rate

Year	Minimum Grazing Rate
2012	\$8.13/AUM
2013	\$8.72/AUM
2014	\$9.03/AUM
2015	\$9.89/AUM
2016	\$10.48/AUM
2017	\$14.01/AUM
2018	\$11.03/AUM
2019	\$13.10/AUM
2020	\$12.92/AUM
2021	\$13.41/AUM
2022	\$12.83/AUM

CRP Production:

Currently, the CRP stand on lease no. 2144 has a return rate of \$14.62/acre. After review by the NRCS, the stand would need to be replanted as Western Wheatgrass (*Agropyron cristatum*) makes up more than 80% of the plant community. The cost to replant the CRP would be covered by the Lessee.

Production Summary:

Based on the past data presented above, an estimated predicted value can be calculated per each Project alternative. See Table 7 – Predicted Production Values Per Project Alternative.

⁷Table 7 – Predicted Production Values for the DNRC Per Project Alternative

	AUMs	Rate/ AUM	Agricultural Acres	Rate/ Acre	CRP Acres	Rate/ Acre ⁸	Annual Predicted Revenue for Trust
Alternative A	-	-	155.60	\$25.00	-	-	\$3,890.00
Alternative B – First 3 Years	109	\$11.23	-	-	-	-	\$1,224.07
Alternative B – 3 Years After	63	\$11.23	-	-	-	-	\$707.49
Alternative C	-	-	-	-	155.60	\$14.62	\$2,274.87

Determination:

Alternative A:

Effect, Beneficial Effect. All Project alternatives will have a beneficial effect on the revenue of lease no. 2144 with Alternative A being the most productive and Alternative B being the least productive. However, Alternative A aligns with the Lessee’s management goals which will reduce the risk of the Lessee forfeiting the lease.

Alternative B & C:

Effect, Not Likely to Adversely Effect. All Project alternatives will have a beneficial effect on the revenue of lease no. 2144 with Alternative A being the most productive and Alternative B being the least productive. However, Alternatives B and C do not align with the Lessee’s management goals which could result in forfeiting the lease.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Determination:

Alternative A, B, & C:

No Effect. The Project would not result in any new jobs nor eliminate any, therefore cumulative effects on the employment market are not expected.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Revenues:

See **Section 15** above.

Determination:

Alternative A:

Effect, Beneficial Effect. All Project alternatives will have a beneficial effect on the revenue of lease no. 2144 with Alternative A being the most productive and Alternative B being the least productive. However, Alternative A aligns with the Lessee’s management goals which will reduce the risk of the Lessee forfeiting the lease; negative cumulative effects on taxes and revenue are not expected.

Alternative B & C:

Effect, Not Likely to Adversely Effect. All Project alternatives will have a beneficial effect on the revenue of lease no. 2144 with Alternative A being the most productive and Alternative B being the least productive. However,

⁷ Note, these are predicted production values for the DNRC based on past data and should not be taken as exact values.

⁸ CRP Rate/ Acre was obtained from the current CRP Contract rate and is assumed to be representative of future rates.

Alternatives B and C do not align with the Lessee's management goals which could result in forfeiting the lease; negative cumulative effects on taxes and revenue are not expected.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Demand for Government Services:

The Project is not legally accessible to the public. Additional government services (e.g. fire protection, police, schools, etc.) are not required for agricultural production or grazing activities.

Determination:

Alternative A, B, & C:

No Effect. Future Project activities on the tract are not expected to impact traffic or increase the demand for government services. Therefore, the Project is not expected to have negative cumulative impacts on government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Locally Adopted Environmental Plans and Goals:

The DNRC classifies and reclassifies state land in accordance with its capability to support a particular use.

The following classes are established in accordance with **77-1-401, MCA**:

- (a) Class 1 shall be grazing land
- (b) Class 2 shall be timber land
- (c) Class 3 shall be agricultural land
- (d) Class 4 shall be cabin sites and land uses other than grazing, timber or agricultural.

Current land classification on lease no. 2144 is 155.60 agricultural acres (Class 3). Alternative A and C would not require a change to the land classification and Alternative B would require the 155.60 agricultural acres to be reclassified to grazing (Class 1).

Determination:

Alternative A, B, & C:

No Effect. Reclassification of land, if to occur, is not expected to affect the Project and therefore cumulative impacts are not expected.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Legal Access and Recreational Opportunities:

The Project is not located on legally accessible land to the public and therefore has no recreation potential for the public, but it does provide habitat for species that provides a positive regional impact.

Determination:

Alternative A:

Effect, Likely to Adversely Effect. The Project has the potential to impact regional recreational hunting activities through the reduction of CRP acres that currently provide habitat for wildlife. Given the analysis, by Ryan Rauscher in **Section 8** above, the Project is expected to result in the reduction of wildlife habitat which could potentially reduce wildlife species and recreational hunting opportunities for the area. The Project is expected to have cumulative impacts on access to and quality of recreational activities.

Alternative B:

Effect, Not Likely to Adversely Effect. The Project has the potential to impact regional recreational hunting activities through trampling and/or removal of vegetation and interactions that can cause displacement of wildlife which can reduce wildlife species and recreational hunting opportunities for the area. However, due to the DNRC’s lease stipulations, it is not expected to result in cumulative impacts on access to and quality of recreational activities.

Alternative C:

No Effect. Impacts to regional recreation opportunities are not expected for activities that do not include soil breaking or grazing and therefore, cumulative impacts on access to and quality of recreational activities are not expected.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Determination:

Alternative A, B, & C:

No Effect. The Project will not require additional housing and is not expected to have cumulative impacts on population and housing.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Social Structures:

The Project is located approximately 10 miles southeast of Glacier Hutterite Colony and approximately 10 miles east of Blackfeet Nation. No archeological sites were identified within the Project footprint.

Determination:

Alternative A, B, & C:

No Effect. The Project is consistent with the surrounding land use, therefore, negative cumulative effects on native or traditional lifestyles or communities are not expected.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Determination:

Alternative A, B, & C:

No Effect. The Project will not result in any new activities to occur in the area and therefore it is not expected to cumulatively impact the unique quality of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The Project will benefit the Common School Trust in terms of production revenue on lease no. 2144, see **Section 15** above.

Any future development in the area will likely be restricted to agricultural and grazing types of land uses as well as utility development, with minimal impacts to the surface. Future development projects are not expected to have negative cumulative impacts.

EA Checklist Prepared By:	Name: Michaela Hanson	Date: 3/29/2022
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative A (Proposed Action): Grant Lessee permission to break and convert 155.60 CRP acres to agricultural land for small grain production.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:


The proposed break acres on this state land are adjacent to productive cropland. The Lessee is a proven "good farmer" and reports yields and revenues consistent with the region. All proposed break acres meet the current DNRC breaking policy, which indicates that soils are suitable for small grain production under No-Till farming practices. Small scale impacts are expected to occur on wildlife habitats which have the potential to result in cumulative impacts on wildlife populations and recreation hunting opportunities. The Project is expected to have a significant positive impact on crop production for the tract which will result in higher long-term revenue. The Lessee must work with FSA and NRCS and obtain a Conservation Plan and comply with all sod-busting regulations. Breaking these acres will help meet the DNRC, TLMD objectives by increasing revenue to the Common School Trust while maintaining land sustainability goals. Other significant negative impacts are not expected with this land break.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis





EA Checklist Approved By:	Name: Erik Eneboe Title: Conrad Unit Manager, CLO, DNRC
Signature: 	Date: 4/5/2022

Attachment A
Project Location Map

CRP Break Request - Lease 2144



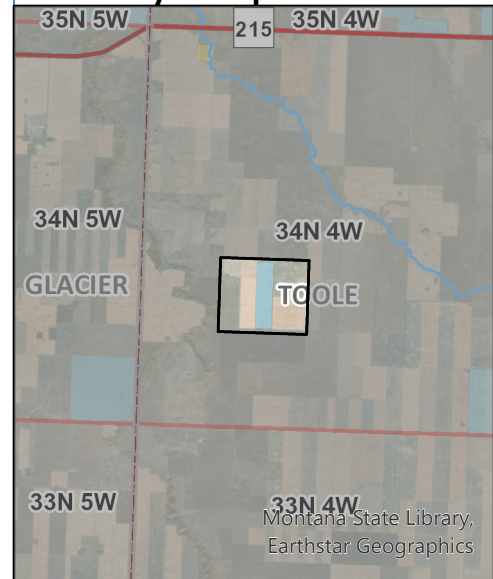
Legend

-  CRP for Break
-  Agreement Tracts
-  FSA Fields
-  Surface Tracts

Lease 2144:

Section 20 in T34N., R4W (FSA Fld. 1)
Section 29 in T34N., R4W (FSA Fld. 2)

Vicinity Map



Attachment A - Project Location Map



Author:
Michaela Hanson

3/14/2022

Attachment B
Soil Characteristic Comparisons

Soil Characteristic Comparisons

Soil Type ⁱ	2144 ¹	2806 ²	2144	2806	2144	2806	2144	2806	2144	2806	2144	2806
	Land Capability Class		T-Factor (tons/ac/yr)		WEG		Estimated Barley Yield (bu/ac)		Estimated WW Yield (bu/ac)		Estimated SW Yield (bu/ac)	
28A	3.00		5.00		6.00		0.00		0.00		0.00	
386B	3.00		5.00		6.00		57.50		35.00		39.00	
421C	3.50		5.00		6.00		55.00		33.50		37.00	
Sk		3.00		5.00		6.00		62.50		43.00		38.00
Sm		4.00		5.00		6.00		49.00		32.50		29.50
SO		4.50		5.00		6.00		30.50		21.00		18.50
ZA		5.00		5.00		4.00		29.00		20.00		18.00
Average	3.17	4.13	5.00	5.00	6.00	5.50	37.50	42.75	22.83	29.13	25.33	26.00

28A – Nishon clay loam, 0 to 1 percent slopes

386B – Ethridge – Evanston clay loams, 0 to 4 percent slopes

421C – Joplin – Hillon loams, 2 to 8 percent slopes

Sk – Scobey – Kevin loams, undulating

Sm – Hillon – Joplin loams, 4 to 15 percent slopes

SO – Scobey – Zahl complex, hilly

ZA – Zahl complex, hilly

ⁱ See soil types at <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

¹ Lease no. 2144 is located in T34N., R4W., Sections 20 & 29 in Toole County, MT.

² Lease no. 2806 is located in T33N., R5W., Section 36 in Glacier County, MT (approximately 17 miles south of the Project).

Attachment C
Wetland Map



March 16, 2022

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

End of Documentation