

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

**Part I. Proposed Action Description**

Applicant/Contact name and address:

Sunlight Ranch Company  
431 Pass Creek Road  
Parkman, Wyoming, 82838

**Type of action:** Application to Change a Water Right No. 43O 30162567

**Water source name:** Little Bighorn River

**Location affected by the project:** The historic point of diversion in the NWSWNE Section 11 T09S R34E to the location where return flow accrues in the NWNESW Section 21, Township 9 South, Range 35 East, Big Horn County.

**Narrative summary of the proposed project, purpose, action to be taken, and benefits:**

The Applicant proposes changes to the point of diversion (POD) and place of use (POU) for Statement of Claim 43O 185505-00.

- The historical POD from the Bozeman Trail Ditch headgate in the NWSWNE Section 11, T9S, R34E will continue to be used. The Applicant proposes to add a second POD in the SENENE Section 32, T8S, R35E at the existing headgate on the Campbell-Belken Ditch.
- The total acres irrigated historically under this water right prior to this change are 348.24 AC. The Applicant proposes to retire 124.94 acres from the historical POU on the Bozeman Trail Ditch and continue to irrigate the remaining 223.3 AC at 12.1 CFS, up to 1,884.7 AF. The Applicant proposes to add 65.7 acres of irrigation outside of the historical footprint, which will be pivot irrigated by the Campbell-Belken Ditch at 1.1 CFS, up to 158.41 AF. A total of 289 AC is proposed for irrigation, at a total flow rate of 13.2 CFS, up to 2,043.11 AF, which is within the historical use of Statement of Claim 43O 185505-00.

The DNRC shall issue Change Authorization 43O 30162567 if the applicant proves the criteria in 85-2-402 MCA are met.

**Agencies consulted during the preparation of the Environmental Assessment:**  
(include agencies with overlapping jurisdiction)

Montana Department of Natural Resources and Conservation

Montana Department of Fish, Wildlife and Parks (FWP)  
Montana Department of Environmental Quality (DEQ)  
Montana Sage Grouse Habitat Conservation Program (SGHCP)  
Montana Natural Heritage Program (NHP)  
U.S. Fish and Wildlife Service (USFWS)  
U.S. Department of Agriculture, National Resource Conservation Service (USDA, NRCS)

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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#### **WATER QUANTITY, QUALITY AND DISTRIBUTION**

##### **Water quantity**

This application will distribute the total volume to two points of diversion from the same source. The historic flow rate will not increase. The total usage will remain under historical appropriation, and will not have any impact on water quantity.

*Determination:* No Significant Impact

##### **Water quality**

The Little Bighorn River was not located in the 2020 Water Quality Integrated Report or 303(d) List, provided by Montana DEQ. Since the project falls within the Crow Reservation, the State has no jurisdiction over the water quality of this portion of the river. However, this project will have no significant impact on water quality, regardless of data availability.

*Determination:* No Significant Impact

##### **Groundwater**

This project will have no significant impact on the groundwater quality or supply. The project will be appropriating surface water from the Little Bighorn River at a flow rate and volume below its historical allotments.

*Determination:* No Significant Impact

##### **Diversion works**

This project will utilize two points of diversion. The historical headgate for the Bozeman Trail Ditch located in the NWSWNE Section 11, T9S, R34E, will continue to be used. There have been no structural changes to the Bozeman Trail Ditch or its headgate. Water not utilized in the Bozeman Trail Ditch will return to the Little Bighorn River.

The Applicant proposes to add a second point of diversion in the SENENE Section 32, T8S, R35E at the existing headgate on the Campbell-Belkin Ditch. From the Campbell-Belkin Ditch

headgate, water will travel northeast approximately 1,750 feet to a vertical culvert, where a bubbler screen will screen incoming water. Screened water will enter an 8-inch diameter pipeline and travel approximately 1,475 feet to the center point. All the excess water from the screen leaves the culvert through an overflow outlet and returns to the Little Bighorn River.

The diversion works of this project will not hinder flow in the Little Bighorn River.

*Determination:* No Significant Impact

#### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

##### **Endangered and threatened species**

The Montana Natural Heritage Program (MT NHP) identified the following species as Species of Concern in the general project area:

Black-tailed Prairie Dog, Bobolink, Eastern Screech-Owl, Bald Eagle, Pallid Bat, Dickcissel, North American Porcupine, Dwarf Shrew, Plains Hog-nosed Snake, Danaus Plexippus, Northern Hoary Bat, Black-billed Cuckoo, Veery, Little Brown Myotis, Prairie Shrew, Townsend's Big-eared Bat, Townsend's Big-eared Bat, Eastern Red Bat, Ovenbird, Yellow-billed Cuckoo, Northern Leopard Frog, Western Milksnake, American White Pelican, Long-eared Myotis, American Bittern, Plumbeous Vireo, Barrow's Goldeneye, Western Spotted Skunk, Snapping Turtle, Cassin's Kingbird, Meadow Jumping Mouse, Long-legged Myotis, Merriam's Shrew, Pinyon Jay, Sharp-tailed Grouse, Great Plains Toad, Common Poorwill, Fringed Myotis, Silver-haired Bat, Spotted Bat, Golden Eagle, Brewer's Sparrow, Broad-tailed Hummingbird, Long-billed Curlew, Sage Thrasher, Red-headed Woodpecker, Long-billed Curlew, Sage Thrasher, Red-headed Woodpecker, Preble's Shrew, Eastern Bluebird, and Sprague's Pipit. Plants: *Stipa lettermanii*, *Carex crawei*, *Stellaria crassifolia*, *Carex grvida*, *Potentilla plattensis*, and *Eupatorium maculatum*.

While there is an abundance of species present, this project is not expected to have an adverse effect on the wildlife community.

*Determination:* No Significant Impact

##### **Wetlands**

No wetlands were claimed or proposed in this project or identified in the general area of the project were reported on the Montana Natural Heritage Program (MT NHP) report.

*Determination:* No Significant Impact

##### **Ponds**

No ponds were claimed or proposed in this project or identified in the general area of the project via the Montana Natural Heritage Program (MT NHP) report.

*Determination:* No Significant Impact

## **GEOLOGY/SOIL QUALITY, STABILITY, AND MOISTURE**

USDA Web Soil Survey gives the following soil types in the general project area:

Alluvial land, wet; Danvers silty clay loam, 0 to 1 percent slopes; Danvers silty clay loam, undulating; Farnum loam, 4 to 8 percent slopes; Frazer silty clay loam; Frazer silty clay loam, saline; Frazer silty clay; Korchea loam, 0 to 2 percent slopes; Korchea silt loam, 0 to 2 percent slopes; Korchea silt loam, frequently flooded; Korchea silty clay loam, 0 to 2 percent slopes; Korchea silty clay loam, 2 to 4 percent slopes; Korchea and Frazer soils, water table; Lennep loam, 2 to 4 percent slopes; Marias clay, 0 to 2 percent slopes; Wyola silty clay loam, 0 to 2 percent slopes; Wyola silty clay loam, 2 to 4 percent slopes; Wyola silty clay loam, 4 to 8 percent slopes; Wyola silty clay loam, undulating; Wyola silty clay loam, rolling; Shaak clay loam, 4 to 8 percent slopes; Shaak silty clay loam, 0 to 2 percent slopes; Shaak silty clay loam, gently undulating; Shaak silty clay loam, undulating; Shaak silty clay loam, rolling, and Windham-Wayden complex, 15 to 35 percent slopes.

*Determination:* No Significant Impact

## **VEGETATION COVER, QUANTITY, AND QUALITY/NOXIOUS WEEDS**

The Montana Natural Heritage Program (MT NHP) identified the following land cover in the general project area as the primary land cover types:

Cultivated Crops, Great Plains Mixed grass Prairie, Pasture/Hay, Great Plains Floodplain, Great Plains Riparian, Big Sagebrush Steppe, & Great Plains Wooded Draw and Ravine.

MT NHP identified the following as Invasive and Pest Species:

*Nymphaea odorata*, *Nymphoides peltata*, *Centaurea solstitialis*, *Isatis tinctoria*, *Taeniatherum caput-medusae*, *Lythrum salicaria*, *Echium vulgare*, *Polygonum cuspidatum*, *Polygonum x bohemicum*, *Ventenata dubia*, *Rhamnus cathartica*, *Hieracium piloselloides*, *Lepidium latifolium*, *Ranunculus acris*, *Hieracium praealtum*, *Lepidium draba*, *Convolvulus arvensis*, *Cynoglossum officinale*, *Centaurea stoebe*, *Tanacetum vulgare*, *Tamarix ramosissima*, *Cirsium arvense*, *Euphorbia virgata*, *Berteroa incana*, *Acroptilon repens*, *Centaurea diffusa*, *Potentilla recta*, *Leucanthemum vulgare*, *Linaria vulgaris*, *Elaeagnus angustifolia*, and *Bromus tectorum*.

It will be the responsibility of the landowner to prevent the establishment and spread of noxious weeds.

*Determination:* No Significant Impact

## **AIR QUALITY**

No impact on air quality is expected due to this project proposing a second point of diversion.

*Determination:* No Impact

#### **HISTORICAL AND ARCHEOLOGICAL SITES**

Not applicable; the project is not located on State or Federal Lands. The Montana State Historic Preservation Office was not consulted regarding this project. As the project is located on private property, any cultural resource inventory conducted would be at the property owner's discretion.

*Determination:* Not Applicable

#### **DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY**

No additional impact on other environmental resources is expected due to this project.

*Determination:* No Impact

### **HUMAN ENVIRONMENT**

#### **LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS**

There are no known locally adopted environmental plans or goals.

*Determination:* Not Applicable

#### **ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES**

This project will have no significant impact on recreational and wilderness activities.

*Determination:* No Significant Impact

#### **HUMAN HEALTH**

This project will have no significant impact on human health.

*Determination:* No Significant Impact

**PRIVATE PROPERTY** - *Assess whether there are any government regulatory impacts on private property rights.*

Yes\_\_\_ No X *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

*Determination:* No Impact

**OTHER HUMAN-ENVIRONMENTAL ISSUES** - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

#### **Impacts on:**

(a) Cultural uniqueness and diversity? No Significant Impact

(b) Local and state tax base and tax revenues? No Significant Impact

- (c) Existing land uses? No Significant Impact
- (d) Quantity and distribution of employment? No Significant Impact
- (e) Distribution and density of population and housing? No Significant Impact
- (f) Demands for government services? No Significant Impact
- (g) Industrial and commercial activity? No Significant Impact
- (h) Utilities? No Significant Impact
- (i) Transportation? No Significant Impact
- (j) Safety? No Significant Impact
- (k) Other appropriate social and economic circumstances? No Significant Impact

**2. Secondary and cumulative impacts on the physical environment and human population:**

- (a) Secondary Impacts: No secondary impacts are identified
- (b) Cumulative Impacts: No cumulative impacts are identified

**3. Describe any mitigation/stipulation measures:** None at this time

**4. Description and analysis of reasonable alternatives to the proposed action, including the no-action alternative, if an alternative is reasonably available and prudent to consider:**  
The alternative to the proposed project is the no-action alternative. The no-action alternative prevents the property owner from improving the operation of their irrigation system. The no-action alternative does not prevent or mitigate any significant environmental impacts.

*PART III. Conclusion*

**1. Preferred Alternative:** Issue the change authorization if the applicant proves the criteria in 85-2-402 MCA are met.

**2. Comments and Responses:** None

**3. Finding:**

Yes\_\_\_ No\_X\_ Based on the significance criteria evaluated in this EA, is an EIS required?

No significant environmental impacts were identified; therefore, an EIS is not required.

*Name of person(s) responsible for preparation of EA:*

*Name:* Cassey Strebeck  
*Title:* Water Resource Specialist  
*Date:* May 6, 2025