

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: Pugsley Ranches Inc.  
PO Box 460  
Chester, MT 59522

1. Type of action: Application to Change a Water Right No. 41P 30065890
2. Water source name: Marias River

3. Location affected by project:

Project located approximately 17 miles south of Chester, Montana; more specifically the SE of Section 18 Township 29 North, Range 6 East, Liberty County.

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

Applicant proposes to add a point of diversion and change the place of use when converting 66.6 acres of historically flood-irrigated land to center pivot sprinkler irrigation and retaining 46.9 acres of historically flood-irrigated land. The water rights being changed are two Statements of Claim Nos. 41P 49833 00 and 41P 49834 00 the source being the Marias River. The proposal includes conversion to center pivot sprinkler irrigation on 66.6 acres lying within the historically flood irrigated 132.9 acre field. The proposed remaining 46.9 acres will be maintained as flood irrigation at the same historical place of use. The location of the new proposed point of diversion, for the center pivot irrigation, is located in the NESESE Section 18, T29N, R06E, Liberty County. In this proposal a partial conversion from flood to sprinkler irrigation will occur. A center pivot sprinkler system with a high water use efficiency rate will replace a portion of a lower efficiency flood irrigation operation.

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

Montana Natural Heritage Program  
USDA Natural Resources Conservation Service (NRCS) Soils Data Website  
Montana Dept. of Environmental Quality Website (TMDL 303d listing)  
Montana Dept. of Fish, Wildlife & Parks Website (Montana Rivers Information System)  
USDI National Wetlands Inventory Website  
Montana Natural Resource Information System

## **Part II. Environmental Review**

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

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

**Water quantity** - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

*Determination:* Marias River is not identified as a chronically dewatered stream by DFWP. The new consumptive use of water will not exceed the historic consumptive use.

**Water quality** - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

*Determination:* According to Montana Department of Environmental Quality (DEQ), all uses are assessed and fully supported on Marias River.

**Groundwater** - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination:* Minimal impacts to groundwater quality or supply are anticipated by the proposed change of surface flows found in Marias River.

**DIVERSION WORKS** - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

*Determination:* Water diverted from Marias River for the center pivot irrigation system will be diverted from Marias River to the place of use via approximately 1,281 feet of shallow buried 6” PVC pipe. Water diverted from Marias River for the flood irrigation will continue to be diverted from Marias River to the historical place use as has been historically diverted and conveyed. The

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new project development (center pivot irrigation) will create minimal if any impacts to stream channels, flow modifications, barriers, riparian areas and/or dams.

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

***Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”***

**Determination:** According to the information provided by the Montana Natural Heritage program, there is one mammal (Mammalia), five bird (Aves), and three fish (Actinopterygii) species of concern in the vicinity of the proposed project. The mammal species identified are: the Black-tailed Prairie Dog. The bird species are: Great Blue Heron, Chestnut-collared Longspur, Greater Sage-Grouse, Loggerhead Shrike and Long-billed Curlew. The fish species are Blue Sucker, Paddlefish and Sauger. The following charts contain specific information about the identified species:

Species of Concern										
9 Species										
Filtered by the following criteria:										
Township = 29 N Range = 6 E										
MAMMALS (MAMMALIA)										1 SPECIES
										FILTERED BY THE FOLLOWING CRITERIA:
										TOWNSHIP = 29 N RANGE = 6 E
SCIENTIFIC NAME	FAMILY (SCIENTIFIC)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
COMMON NAME	FAMILY (COMMON)									
TAXA SORT										
<a href="#">Cynomys ludovicianus</a>	<a href="#">Sciuridae</a>	G4	S3		SENSITIVE	SENSITIVE	1	19%	71%	Grasslands
Black-tailed Prairie Dog	Squirrels									
Species verified in these Counties: Big Horn, Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Fallon, Fergus, Garfield, Golden Valley, Hill, Jefferson, Judith Basin, Lewis and Clark, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Rosebud, Stillwater, Sweet Grass, Toole, Treasure, Valley, Wheatland, Yellowstone										
BIRDS (AVES)										5 SPECIES
										FILTERED BY THE FOLLOWING CRITERIA:
										TOWNSHIP = 29 N RANGE = 6 E
SCIENTIFIC NAME	FAMILY (SCIENTIFIC)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
COMMON NAME	FAMILY (COMMON)									
TAXA SORT										
<a href="#">Ardea herodias</a>	<a href="#">Ardeidae</a>	G5	S3				3	3%	100%	Riparian forest
Great Blue Heron	Bitterns / Egrets / Herons / Night-Herons									
Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Glacier, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, McCone, Meagher, Mineral, Missoula, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Treasure, Valley, Wheatland, Wibaux, Yellowstone										
State Rank Reason: Small breeding population size, evidence of recent declines, and declining regeneration of riparian cottonwood forests due to altered hydrology and grazing.										
<a href="#">Calcarius ornatus</a>	<a href="#">Calcariidae</a>	G5	S2B				3	32%	67%	Grasslands
Chestnut-collared Longspur	Longspurs and Snow Buntings									
Species verified in these Counties: Big Horn, Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Glacier, Golden Valley, Hill, Lewis and Clark, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone										
State Rank Reason: Species has a negative short-term population trend and faces threats from loss of native prairie grassland habitats and altered frequency, intensity, and spatial distribution of grazing and fire regimes it is dependent on.										
<a href="#">Centrocercus urophasianus</a>	<a href="#">Phasianidae</a>	G3G4	S2		SENSITIVE	SENSITIVE	1	17%	75%	Sagebrush
Greater Sage-Grouse	Upland Game Birds									
Species verified in these Counties: Beaverhead, Big Horn, Blaine, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Garfield, Golden Valley, Hill, Liberty, Madison, McCone, Meagher, Musselshell, Park, Petroleum, Phillips, Powder River, Prairie, Roosevelt, Rosebud, Silver Bow, Stillwater, Sweet Grass, Treasure, Valley, Wheatland, Wibaux, Yellowstone										
<a href="#">Lanius ludovicianus</a>	<a href="#">Laniidae</a>	G4	S3B				2	4%	100%	Shrubland
Loggerhead Shrike	Shrikes									
Species verified in these Counties: Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Fallon, Fergus, Garfield, Golden Valley, Hill, Jefferson, Liberty, McCone, Meagher, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone										
<a href="#">Numenius americanus</a>	<a href="#">Scolopacidae</a>	G5	S3B				1	19%	100%	Grasslands
Long-billed Curlew	Sandpipers									
Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, McCone, Meagher, Missoula, Musselshell, Petroleum, Phillips, Powder River, Powell, Prairie, Ravalli, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone										
FISH (ACTINOPTERYGII)										3 SPECIES
										FILTERED BY THE FOLLOWING CRITERIA:
										TOWNSHIP = 29 N RANGE = 6 E
SCIENTIFIC NAME	FAMILY (SCIENTIFIC)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
COMMON NAME	FAMILY (COMMON)									
TAXA SORT										
<a href="#">Cyclopterus elongatus</a>	<a href="#">Catostomidae</a>	G3G4	S2S3				1	1%	7%	Large prairie rivers
Blue Sucker	Suckers									
Species verified in these Counties: Blaine, Cascade, Chouteau, Custer, Dawson, Fergus, Garfield, Hill, Liberty, McCone, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Treasure, Valley, Wibaux										
<a href="#">Polyodon spathula</a>	<a href="#">Polyodontidae</a>	G4	S2				1	1%	5%	Large prairie rivers
Paddlefish	Paddlefishes									
Species verified in these Counties: Blaine, Chouteau, Custer, Dawson, Fergus, Garfield, Hill, Liberty, McCone, Petroleum, Phillips, Prairie, Richland, Roosevelt, Rosebud, Valley, Wibaux										
<a href="#">Sander canadensis</a>	<a href="#">Percidae</a>	G5	S2				1	1%	15%	Large prairie rivers
Sauger	Perches									
Species verified in these Counties: Big Horn, Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Fallon, Fergus, Garfield, Hill, Liberty, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Stillwater, Teton, Treasure, Valley, Wibaux, Yellowstone										

The proposed project is located in a sparsely populated area primarily composed of primarily grassland/agricultural land, it is not anticipated that the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or the species of special concern

identified. It is also not anticipated that the proposed project will create a barrier to the migration or movement of fish or wildlife.

**Wetlands** - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

*Determination:* There are no wetlands identified from GIS mapping of the proposed project utilizing NWI data. Because there are no wetlands identified within the proposed project area, there are no impacts anticipated.

**Ponds** - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

*Determination:* No ponds or reservoirs are associated with the proposed project therefore the assessment is not applicable.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

*Determination:* Data from the NRCS soils website indicate one soil type within the proposed project area. The soil type is identified as Havre clay loam, 0 to 1 percent slopes. Degradation of soil quality, alteration of soil stability or moisture content is expected to be minimal to non-existent. Saline seepage in the area does not appear to be problematic nor does the proposed project appear to worsen any saline seepage problems.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

*Determination:* Minimal impacts to the existing vegetative cover are anticipated. It is the applicant's responsibility to control noxious weeds on their property.

**AIR QUALITY** - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

*Determination:* No deterioration of air quality or adverse effects on vegetation due to an increase in air pollutants is expected.

**HISTORICAL AND ARCHEOLOGICAL SITES** - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

*Determination:* NA-project is not located on State or Federal Lands.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - Assess any other impacts on environmental resources of land, water and energy not already addressed.

*Determination:* No additional impacts on other environmental resources were identified.

## **HUMAN ENVIRONMENT**

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:* There are no known environmental plans or goals in this area.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination:* The project should have no significant or harmful impact on recreational or wilderness activities.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

*Determination:* The development should have no impact on human health.

**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 adverse effect on private property rights is anticipated from this development.

**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?

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

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

**3. *Describe any mitigation/stipulation measures:*** None

**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:***

No action alternative:

The applicant would not be able to develop their project as proposed.

Alternative 1:

Approve the application if the applicant proves the statutory criterion has been met.

**PART III. Conclusion**

**1. *Preferred Alternative:*** Alternative 1.

**2. *Comments and Responses:*** None to date.

**3. *Finding:*** Yes \_\_\_ No x *Based on the significance criteria evaluated in this EA, is an EIS required?*

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* An EA is the appropriate level of assessment for the proposed action as no significant impacts were identified.

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

*Name:* /s/ Kraig Van Voast

*Title:* Deputy Regional Manager

*Date:* August 8, 2013