

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

**Part I. Proposed Action Description**

1. *Applicant/Contact name and address:* Vermillion Ranch, LTD  
3020 Shady Lane  
Billings, MT. 59102
2. *Type of action:* Application for an Authorization to Change No. 43BV-30011611
3. *Water source name:* Sweet Grass Creek
4. *Location affected by action:* Section 31, Township 1 North, Range 16 East, and Section 5, Township 1S, Range 16E, Sweet Grass County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*  
Applicant is seeking an Authorization to Change four existing water rights, 43BV-143439-00, 43BV-143441-00, 43BV-143442-00 and 43BV-6888-00. The requested use is to change a portion of these rights to maintain a two cfs in-stream flow in Sweet Grass Creek at the mouth for 109 days, from June 15<sup>th</sup> to September 30<sup>th</sup>. The DNRC will issue this Authorization for Change if all the criteria under MCA 85-2-402 are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*  
*(include agencies with overlapping jurisdiction)*  
Montana Natural Heritage Program  
Montana Historic Preservation Office  
Montana Department of Fish Wildlife & Parks (MFWP)  
Montana Department of Environmental Quality (MDEQ)

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

**PHYSICAL ENVIRONMENT**

**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:* Water historically used for irrigation will stay in Sweet Grass Creek to benefit fisheries. There are no other diversions below this project to the Yellowstone River. This source is on DFWP's chronic dewatered list.

**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:* This project will not impair the water quality of the source. Water historically used for irrigation will stay in Sweet Grass Creek to benefit fisheries. This project will reduce the amount of irrigation by 46.6 acres and keep an additional two cfs in the source. This source does not appear on the TMDL list.

**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:* This proposed use is from a surface water source and should have no significant impact on groundwater quality or quantity in the area.

**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:* This project should not have any significant impact with flow modifications, barriers, riparian areas, dams, or the channel of the stream. Application is keep additional water in the source for in-stream purposes.

#### **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:* The Montana Natural Heritage Program did identify that this part of the Yellowstone and tributaries is a probable habitat for Yellowstone Cutthroat trout. This application is trying to support this fishery in the lower Sweet Grass.

**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:* This should have no significant impact to any wetlands in the area.

**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:* This use will not degrade soil quality or cause saline seep problems in the area. It has had a positive effect.

**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:* This use will not adversely impact vegetative cover and assumed the landowner will continue to prevent the spread of noxious weeds.

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

*Determination:* There should be no significant deterioration of air quality or adverse effects on vegetation.

**HISTORICAL AND ARCHEOLOGICAL SITES** - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

*Determination:* The Montana Historic Preservation Office did not identify any recorded cultural sites in the project area. The project will not develop more irrigation, but will reduce their farm irrigation by 46.6 acres and keep those historic diversions in the source.

**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:* There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

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

*Determination:* This proposed use is not inconsistent with any locally adopted environmental plans and goals for Sweet Grass County.

**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:* There should be no significant impacts on recreational or wilderness activities from this proposed use.

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

*Determination:* There should be no significant impact on human health from this proposed use.

**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.*

**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:*** The secondary and cumulative impacts are not expected to be significant.
3. ***Describe any mitigation/stipulation measures:*** The applicant would be required to maintain his historical irrigation on the 46.6 acres, he is presently giving up to leave the water in the stream.
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 water will be diverted from the source as it has been historically for irrigation. This application is to leave some of their irrigation water in the source for an added fishery resource.

### **PART III. Conclusion**

*Based on the significance criteria evaluated in this EA, is an EIS required? No*

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* No significant adverse environmental impacts were identified. No EIS is required.

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

*Name:* Keith Kerbel

*Title:* Regional Manager

*Date:* March 31, 2006