EA Form R 1/2001

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: **STEVE KUHLMANN**
3052 THOUSAND OAKS
BILLINGS, MT 59102

1. *Type of action*: **APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 43C 30031212**

2. *Water source name*: **YELLOWSTONE RIVER**

3. *Location affected by project*: **SE¼ NE¼ NE¼ , SECTION 11, T1S, R26E, IN YELLOWSTONE COUNTY.**

4. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*:
This project is to divert surface water from the Yellowstone River to supply a stockwater distribution system consisting of seven cattle tanks and a 10,000 gallon storage tank. The application requests 20 gallons per minute (GPM) up to a total volume of 5.12 acre-feet (AF) to be diverted from March 15th to November 15th inclusive each year. The period of use is being requested due to cattle watering needs and calculated water availability in the Yellowstone River. The applicant presents measurements on the Yellowstone River from the United States Geological Survey (USGS) gaging station 06214500 near Billings, MT above the applicants' point of diversion. The diversion system consists of an infiltration gallery on the South bank of the Yellowstone River that will supply water to a three horsepower pump thereby feeding water to four cattle troughs as well as supply water to the 10,000 gallon storage tank. The 10,000 gallon storage tank will provide gravity fed water to the remaining three cattle troughs. The infiltration gallery is in the Northwest corner of the applicants' property located in Yellowstone County. The requested volume will provide water for a maximum of 400 cattle.

The DNRC will issue a provisional water use permit if all criteria for issuance under §§ 85-2-311, MCA are met.

5. *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: **No significant impact.**
The Yellowstone River is not on the Montana Fish Wildlife and Parks list of chronically or periodically dewatered streams. There will be minimal impacts on the source from this proposed use, but those impacts are not expected to be significant.

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: **No significant impact.**
The Yellowstone River is not on the Montana Department of Environmental Quality's list of water quality impaired or threatened streams. This proposed irrigation use is expected to have no significant impact on water quality issues in the area.

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: **No significant impact.**
This application is requesting the use of surface water; therefore, no significant impacts to groundwater quality or quantity are expected.

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: **No significant impact.**
The primary point of diversion for this application consists of a four inch perforated pipe that will supply water to an infiltration gallery on the South bank of the Yellowstone River in the NE¼ of Section 11. From the infiltration gallery a three horsepower pump will move water through two inch HDPE pipe to four cattle watering tanks and one 10,000 gallon storage tank. The four cattle tanks as well as the storage tank will be will be controlled by caged float valves. In addition to the four cattle tanks supplied directly by he pump there will be three more cattle tanks supplied solely by gravity from the 10,000 gallon storage tank. The three gravity fed tanks will also be controlled by caged float valves. The pump will supply water to the storage tank during better water availability in the spring. The pump will remain on-line to feed the nearest four cattle tanks and maintain the water level in the storage tank in order to supply the remaining three cattle tanks. The applicant has provided pictures of the pump and a plan-view drawing of the infiltration gallery and diversion means. A map of the area including all pipelines and locations of water use is also included. Moreover, the applicant has calculated an

average pumping volume of 9.8 GPM and states that a maximum of 20 GPM will most likely occur when filling the 10,000 gallon storage tank.

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: **No significant impact.**
The Montana Natural Heritage Program has identified some species of concern within this proposed project area:
Grasshopper Sparrow (*Ammodramus savannarum*)
Spiny Softshell (*Apalone spinifera*)
Loggerhead Shrike (*Lanius ludovicianus*)
Brewer's Sparrow (*Spizella breweri*)
Spotted Bat (*Euderma maculatum*)
Greater Short-horned Lizard (*Phrynosoma hernandesi*)
Western Hog-nosed Snake (*Heterodon nasicus*)
Peregrine Falcon (*Falco peregrinus*)
Common Sagebrush Lizard (*Sceloporus graciosus*)
Milk Snake (*Lampropeltis triangulumI*)
It is not expected that this proposed project will adversely impact any of these species.

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: **No significant impact.**
No wetlands are claimed within the project area.

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

Determination: **No significant impact.**
This project will increase the available water to wildlife in the area and is expected to have no effects on fish due to the volume of the remaining source.

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: **No significant impact.**
This project should not degrade soil quality or cause saline seep problems within the area.

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: **No significant impact.**

There will be some soil disturbance during construction of this proposed project and there is a possibility for spread or establishment of noxious weeds. The landowner is responsible for controlling any establishment of noxious weeds as a result of disturbance.

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

Determination: **No significant impact.**
No deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this project 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.*

Determination: **No significant impact.**
The State of Montana Historic Preservation Office (SHPO) identified site 24YL0001 the Pictograph Caves which are listed as a National Historic Landmark. SHPO feels this project could impact other sites within the area and recommends a cultural resource inventory for areas of the proposed project. SHPO suggests a study in this area could determine the existence and impacts on potential sites.

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

HUMAN ENVIRONMENT

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

Determination: **No significant impact.**
This proposed use is not inconsistent with any locally adopted environmental plans and goals for Yellowstone 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: **No significant impact.**
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: **No significant impact.**
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*.

Determination: **No significant 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:*

Secondary Impacts: **No significant impact.**

Cumulative Impacts: **No significant impact.**

3. *Describe any mitigation/stipulation measures:* **The applicant states they possess complete control over the entire stockwatering diversion system. The applicant explains there is a two-inch shutoff value between the water inlet and the infiltration gallery leading to the High Density Polyethylene (HDPE) pipe that carries water throughout the system. In the event of a call by a senior water user the pump will be turned off and the system will cease operation to satisfy the senior users' needs. The applicant acknowledges the diversion means are capable of exceeding the requested volume and will install a flow meter with a totalizer to efficiently monitor water use and volume as to not exceed the requested appropriation.**

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 applicant could drill wells or haul water in by truck to supply the amount of water needed for the proposed uses. However, either of these alternatives would be very costly and it is questionable whether the water would be available in the amount requested if wells were to be used.

The "no action" alternative would mean the Steve Kuhlmann could not have water for his 400 head of cattle and therefore not be able to persist by means of ranching.

PART III. Conclusion

1. *Preferred Alternative:* **The preferred alternative would be to allow use of water, from the Yellowstone River with the condition that there will be no adverse impacts to any senior water rights.**

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

3. *Finding:*
*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?* **No EIS is required.**

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

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

Name: **Mark V Corrao**
Title: **Water Resources Specialist**
Date: **October 20, 2008**