MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
WATER RESOURCES DIVISION
WATER RIGHTS BUREAU

ENVIRONMENTAL ASSESSMENT

PART I. PROPOSED ACTION DESCRIPTION

1. Type of action: Water use permit application no. 41I-111710-00

2. Applicant/Contact name and address:
Carroll College
1601 N. Benton Ave
Helena, MT 59601-2826

3. Water source name: Groundwater well

4. Location affected by action: SWNWNW, Sec 30, Twp 10N, Rge 03W, Lewis and Clark County

5. Narrative summary of the proposed project and action to be taken: This application proposes to appropriate ground water using a 20 hp pump from a 305 foot deep, 8-inch cased well located in the SWNWNW, Sec 30, Twp 10N, Rge 03W, Lewis and Clark County, at a rate of 125 gpm up to 37.3 acre-feet per year. The well was drilled by a licensed well driller in September 1999. The water will be used yearly from April 1 through September 30 to sprinkler irrigate 15.5 acres of lawn and sports fields on the Carroll College campus. The place of use is located in the NWNWNW, Sec 30 and the SESWSW, Sec 19, both in Twp 10N, Rge 03W, Lewis and Clark County. The water will be discharged through a buried distribution line which is manifold into the existing sprinkler system.
The DNRC shall issue a water use permit to the applicant if the criteria in 85-2-311, MCA are met.

6. Agencies consulted during preparation of the environmental assessment:
DNRC- Karl Christians, Floodplain Manager
MNHP - Montana Natural Heritage Program

PART II. ENVIRONMENTAL REVIEW

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

Soils/Geologic Features:
Degradation of soil quality or alteration of soil stability, moisture content, geologic substructure, unique geologic features, archeological sites?

This project should increase the soil stability and moisture content of the irrigated grounds.

Erosion:
Alteration of erosion or siltation patterns which modify stream beds or lake shores?

No. This project is for an appropriation of groundwater.

Vegetation/Noxious weeds:
Change in or adverse affect on diversity and production of local plant species including any unique or endangered species (including trees, shrubs, grass, and aquatic plants)? Establishment or spread of noxious weeds?

A query with the Montana Natural Heritage Program identified three plant species of special concern (Astragalus convallarius var convallarius, Atriplex truncata, and Cypripedium parviflorum) within the Helena quad map area. Change in or adverse affect on diversity and production of local plant species including any unique or endangered species (including trees, shrubs, grass, and aquatic plants) or the establishment or spread of noxious weeds is not likely to occur.

Air:
Deterioration of air quality, or adverse effects on vegetation due to increased air pollutants.

No. This project should not deteriorate the air quality.

Water:
Alteration of surface water or groundwater quality including but not limited to temperature, dissolved oxygen or turbidity or quantity or distribution?

Yes. There will be an alteration of groundwater quantity and distribution when the irrigation system is running. However, the impact should be minimal. The applicant has provided evidence showing there is sufficient water at this aquifer depth to divert the amount of water requested on the application.

Floodplain:
Changes in drainage patterns, course or magnitude of flood flows, or exposure of people/property to hazards (flood)?

No. This project is not within a floodplain area.

Wildlife Habitat/Migration:
Deterioration of critical fish or wildlife habitat? Creation of a barrier to the migration or movement of fish or wildlife?

No. This project is for a groundwater well to be used at an established school and should not affect wildlife habitat or create a barrier to the migration of wildlife.

Endangered Species:
Adverse effects on any unique or endangered species?

No. There should be no adverse effects on any unique or endangered species.

HUMAN ENVIRONMENT

Existing Land Use:
Alteration of or interference with the productivity or profitability of the existing land use of an area?

This project will increase the productivity of the existing area. The irrigation system will service the new athletic fields and landscaping around the campus buildings.

Historical Significance:
Destruction or alteration of a natural area of scientific or educational value or prehistoric or paleontological importance?

No. Any destruction or alteration of a natural area of scientific or educational value or prehistoric or paleontological importance would have occurred when the school area was first developed.

Populace:
Alteration of the location, distribution, density, or growth rate of the human population of an area? Alteration of social structure of community?

No. This project should not alter the location, distribution, density, or growth rate of the human population of an area or the community social structure. The project is situated in a developed area.

Transportation:
Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?

No significant impact identified, although traffic may be increased temporarily during sporting events due to the building of the new sports fields.

Safety:
Creation of any health hazard or affect on existing emergency response or evacuation plans?

No. This project should not create any health hazard or affect existing emergency response or evacuation plans.

Public Services:
Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? Have an effect upon local or state tax base?

This project will probably increase the need for some public services since the development of the sports fields will increase the number of people attending events at this site.

Utilities:
Creates need for new or altered facilities for any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?

Yes, this project will create a need for additional electric power and possibly communication utilities. However, it should not have a significant environmental impact.

Aesthetics:
Alteration of any scenic vista or recreation opportunity or creation of an aesthetically offensive site to the public?

The aesthetics will be improved due to the school being able to irrigate more of the campus grounds and will provide more recreational opportunities to the students and staff of the school and to the public.

Other: None identified.

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2. Secondary and cumulative impacts: None identified.

3. Reasonable alternatives to the proposed action, including the no action alternative:

The water is needed to irrigate the new sports fields and landscaping around the college campus. The no action alternative would result in the school not having sufficient water for the irrigation needed. An alternative water source may be from the City of Helena, however, this might not be an economic alternative.

PART III. CONCLUSION

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 sufficient for this level of action. The possible impacts from this project are not significant enough to warrant an EIS.

PREPARED BY:

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DATE: [Automatic date code removed]