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

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Revised 11-00

Note: Instructions to DNRC staff for preparing this EA can be found at: http://www.dnrc.state.mt.us/eis_ea.html

Part I. Proposed Action Description

1. **Applicant/Contact name and address:** DAVID E. SCHUETT
2955 CARRIGAN LN
DILLON, MT 59725-8542

2. **Type of action:** APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41B-110277

3. **Water source name:** GROUNDWATER WELL

4. **Location affected by action:** SWSWSE SEC. 13, T08S R09W, BEAVERHEAD COUNTY

5. **Narrative summary of the proposed project, purpose, action to be taken, and benefits:**
THIS PROJECT IS TO PUMP WATER FROM A WELL TO BE USED FOR STOCKWATER. MORE SPECIFICALLY, IT WILL BE USED IN A PRIVATE FEEDLOT TO WATER 2000 FEEDER CALVES FROM FOUR (4) STOCK TANKS. THIS APPLICATION IS FOR 20 GPM UP TO 32.2 ACRE-FEET OF WATER PER YEAR. THE LOCATION OF THE WELL IS IN THE SWSWSE, SEC. 13, T08S, R09W, AND THE FEEDLOT AND THE STOCK TANKS ARE LOCATED IN THE S2SE SEC. 13, T08S, R09W, BEAVERHEAD COUNTY. THIS PROJECT HAS BEEN COMPLETED.

THE DNRC SHALL ISSUE A WATER USE PERMIT IF AN APPLICANT PROVES THE CRITERIA IN 85-2-311, MCA ARE MET.

6. **Agencies consulted during preparation of the Environmental Assessment:**
(include agencies with overlapping jurisdiction)
STATE HISTORIC PRESERVATION OFFICE
MONTANA NATURAL HERITAGE PROGRAM
NATURAL RESOURCES & CONSERVATION SERVICE AT DILLON (PAT McKAIN)
TOM REID, DEPT. OF ENVIRONMENTAL QUALITY
DEPT. OF FISH, WILDLIFE & PARKS
DAVID E. SCHUETT, APPLICANT

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: THIS APPLICATION WILL UTILIZE GROUNDWATER AT A RATE OF 20 GPM. THEREFORE, IT IS UNLIKELY THAT IT WILL IMPACT ANY CHRONICALLY OR DEWATERED STREAM.

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 APPLICATION WILL BE UTILIZING GROUNDWATER AT A RATE OF 20 GPM AND WILL BE USED FOR A PRIVATE FEEDLOT. THE APPLICANT INTENDS TO SPREAD THE ANIMAL WASTE OVER HIS FIELDS. TOM REID OF THE DEPT. OF ENVIRONMENTAL QUALITY (DEQ) INDICATED THAT A PERMIT FROM DEQ IS REQUIRD FOR CONCENTRATED ANIMAL FEEDING OPERATIONS OF OVER 1000 ANIMALS. THERE ARE SOME EXCEPTIONS, WHICH ARE EVALUATED ON A CASE-BY-CASE BASIS. I EXPLAINED THAT THE APPLICANT HAD CONTACTED HIS ATTORNEY TO SEE IF A PERMIT FROM DEQ WAS NECESSARY FOR THIS PROJECT. HIS ATTORNEY HAD ADVISED HIM THAT NO ADDITIONAL PERMITS, OTHER THAN THE WATER RIGHT, WERE NECESSARY. THEREFORE, THE APPLICANT HAS NOT SUBMITTED A PERMIT APPLICATION TO DEQ. MR. REID INDICATED THAT ANOTHER DEQ EMPLOYEE MAY HAVE ALREADY EVALUATED THIS PROJECT AND MADE THE ASSESSMENT THAT A PERMIT WAS UNNECESSARY. IF A PERMIT WERE NECESSARY, THE APPLICANT WOULD BE REQUIRED TO DEVELOP A WASTE MANAGEMENT PLAN AND DEMONSTRATE THAT IT COULD CONTAIN ALL ANIMAL WASTE, EVEN DURING A SEVERE STORM EVENT.

BEAVERHEAD RIVER, WHICH IS 4 TO 5 MILES TO THE WEST OF THE GROUNDWATER SOURCE, IS ON DEQ'S 303(d) LIST. HOWEVER, DUE TO THE DISTANCE BETWEEN THE SOURCES, IT IS UNLIKELY THAT THE SMALL GROUNDWATER PROJECT WOULD HAVE ANY IMPACT TO THE QUALITY OF THE SURFACE SOURCE.

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 IS A SMALL 20 GPM GROUNDWATER PROJECT. THIS IS A 121' DEEP WELL IN A CONFINED AQUIFER. THE WELL LOG FILED WITH THIS APPLICATION SHOWS A CLAY LAYER AT ABOUT 40'. A REVIEW OF THE WELLS IN THE AREA SHOW THE DEPTHS RANGE FROM 60' TO 715'. IT IS UNLIKELY THAT THIS PROJECT WILL HAVE A SIGNIFICANT IMPACT TO GROUNDWATER QUALITY OR SUPPLY.

THE CLOSEST PERENNIAL SOURCE IS BLACKTAIL CREEK, WHICH IS ABOUT 2 MILES TO THE EAST OF THE GROUNDWATER WELL. THE NEXT CLOSEST IS BEAVERHEAD RIVER, WHICH IS 4 TO 5 MILES TO THE WEST OF THE WELL. DUE TO THE DISTANCE BETWEEN THE PROJECT AND THE SURFACE SOURCES, IT IS UNLIKELY THAT IT WILL IMPACT SURFACE WATER FLOWS.

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: THE GROUNDWATER WELL WAS COMPLETED IN NOVEMBER, 1999, BY LINDSAY & SON DRILLING, A LICENSED WELL DRILLER. A 1 HP PUMP IS BEING USED TO DIVERT THE WATER FROM THE WELL, WITH A PIPELINE RUNNING TO 4 STOCK TANKS. EACH STOCK TANK HAS A FLOW CONTROL NOZZLE, SET AT 4 GPM EACH.
THE WELL AND DISTRIBUTION SYSTEM HAVE BEEN USED SINCE THE COMPLETION OF THE WELL. SINCE THIS PROJECT IS UTILIZING GROUNDWATER, THERE WILL BE NO CHANNEL IMPACTS, FLOW MODIFICATIONS, BARRIERS OR IMPACTS TO RIPARIAN AREAS.

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 MONTANA NATURAL HERITAGE PROGRAM, THERE ARE NO KNOWN THREATENED OR ENDANGERED, OR SPECIES OF SPECIAL CONCERN, WITHIN THE PROJECT AREA.

THIS PROJECT WILL INVOLVE SEVERAL FENCES AND PENS THROUGHOUT THE 100 ACRE FEEDLOT AREA. THE DEPT. OF FISH, WILDLIFE & PARKS WAS CONTACTED REGARDING IMPACTS AS A RESULT OF THIS PROJECT. THE PRIMARY WILDLIFE EXPECTED TO BE IMPACTED IN THIS AREA IS DEER. THEIR OPINION IS THAT THE DEER WOULD CONTINUE TO TRAVEL NEAR THEIR NORMAL PATTEN THROUGH THE AREA, AVOIDING THE SITE BY SKIRTING ITS BOUNDARIES. THIS WOULD INCREASE THEIR TRAVEL TO A SLIGHT DEGREE, HOWEVER, IT IS NOT LIKELY THAT THIS WILL RESULT IN A SIGNIFICANT IMPACT TO THE MIGRATION OF 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 KNOWN WETLANDS WITHIN THE PROJECT AREA. THE TOPOGRAPHY IN THIS AREA IS FAIRLY LEVEL AND THERE ARE NO KNOWN WETLANDS WITHIN THE VICINITY.

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

Determination: THIS IS A GROUNDWATER PROJECT. THERE IS NO POND OR STORAGE STRUCTURE RELATED TO THIS PROJECT.

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: THE AREA WHERE THE FEEDLOTS ARE LOCATED IS RANGELAND WITH NATIVE GRASSES AND PLANTED RYE GRASS. THE NRCS WAS CONTACTED AND NO SIGNIFICANT IMPACT WAS IDENTIFIED. ACCORDING TO THE NRCS, SOILS IN THE AREA ARE PRIMARILY LOAM AND GRAVELLY-SANDY LOAM. THEY ARE DEEP AND WELL DRAINED. IT IS EXPECTED THAT THE NITROGEN FROM THE ANIMAL WASTE WILL IMPROVE THE QUALITY OF THE SOILS IN THE FIELDS WHERE THE WASTE WILL BE DEPOSITED. THE MOISTURE CONTENT WILL NOT BE IMPACTED AS A RESULT OF THIS PROJECT BECAUSE THIS SOIL TYPE DRAINS WELL.

THERE WAS SOME SOIL DISTURBANCE DURING THE CONSTRUCTION OF THE WELL AND PIPELINE BUT GENERALLY THE SOIL STABILITY WILL REMAIN UNCHANGED. REGROWTH OF THE VEGETATION, SPECIFICALLY THE RYE GRASS, HAS ALREADY OCCURRED. THIS SOIL TYPE IS NOT HEAVY IN SALT AND SHOULD NOT CAUSE ANY SALINE SEEP. IN ADDITION, THE APPLICANT HAS NOT OBSERVED ANY SALINE PROBLEMS IN THE PROJECT 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: THE CURRENT VEGETATION IN THE AREA IS NATIVE GRASS AND PLANTED RYE GRASS. THE GROUND WAS TEMPORARILY DISTURBED DURING THE CONSTRUCTION OF THE WELL AND PIPELINE, HOWEVER, THE IMPACT TO THE VEGETATIVE COVER WAS MINIMAL AND REGROWTH HAS ALREADY OCCURRED. THIS PROJECT SHOULD HAVE NO FURTHER SIGNIFICANT IMPACT TO THE AREA.

ACCORDING TO THE APPLICANT, THERE ARE NO NOXIOUS WEEDS IN THE AREA. THE FEEDLOT SHOULD HAVE NO IMPACT ON THE ESTABLISHMENT OR SPREAD OF NOXIOUS WEEDS. IF NOXIOUS WEEDS ARE OBSERVED LATER, THE APPLICANT IS AWARE THAT IT IS HIS RESPONSIBILITY TO CONTROL THE NOXIOUS WEEDS ON HIS PROPERTY.

ACCORDING TO THE MONTANA NATURAL HERITAGE PROGRAM, THERE ARE NO KNOWN THREATENED OR ENDANGERED, OR SPECIES OF SPECIAL CONCERN WITHIN THE AREA.

Air quality

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

Determination: THE 2000 WEANED CALVES WILL BE CONCENTRATED IN A SMALLER AREA THAN BEFORE, HOWEVER, DETERIORIATION OF AIR QUALITY IS NOT EXPECTED TO BE SIGNIFICANT. FROM THE WATER RIGHT RECORDS, IT APPEARS THE CLOSEST DOMESTIC HOUSEHOLD IS OVER ½ MILE FROM THE FEEDLOT SO MUCH OF THE ODOR SHOULD HAVE DISSIPATED BY THEN. IN ADDITION, MANURE FROM THE FEEDLOT WILL BE SPREAD OVER THE APPLICANT'S FIELDS, WHICH WILL HELP CONTROL THE ODOR

Historical and archeological sites

Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: ACCORDING TO THE MONTANA STATE HISTORIC PRESERVATION OFFICE (SHPO), THERE ARE NO PREVIOUSLY RECORDED HISTORIC OR ARCHAEOLOGICAL SITES WITHIN THE PROJECT AREA. DUE TO THE LACK OF A PREVIOUS INVENTORY OF THE AREA, SHPO RECOMMENDED THAT A RECONNAISSANCE SURVEY BE CONDUCTED. BECAUSE THE PROJECT IS LOCATED ON PRIVATE LAND, THE DECISION TO CONDUCT THIS SURVEY IS AT THE DISCRETION OF THE LANDOWNER.

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 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 AND 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: THIS PROJECT IS ALL ON PRIVATE LAND AND THERE ARE NO ACCESS ROADS TO RECREATIONAL OR WILDERNESS AREAS IN THE PROJECT AREA. THEREFORE, NO IMPACT IS EXPECTED FROM THIS PROJECT.

Human health

Assess whether the proposed project impacts human health.

Determination: THIS PROJECT SHOULD NOT HAVE AN IMPACT ON HUMAN HEALTH.

Private property

Assess whether there are any government regulatory impacts on private property rights. Yes ___ No ___. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: THE REQUIREMENT OF A DEQ DISCHARGE PERMIT IS THE ONLY REGULATORY IMPACT ANTICIPATED BY THIS PROJECT. SINCE DEQ WAS CONTACTED AND NO PERMIT HAS BEEN REQUIRED AT THIS TIME, THEN NO GOVERNMENT REGULATORY IMPACT HAS BEEN IDENTIFIED.

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 IMPACT

(b) Local and state tax base and tax revenues ? NO IMPACT

(c) Existing land uses ? NO IMPACT

(d) Quantity and distribution of employment ? NO IMPACT

(e) Distribution and density of population and housing ? NO IMPACT

(f) Demands for government services ? NO IMPACT

(g) Industrial and commercial activity ? NO IMPACT

(h) Utilities ? NO IMPACT

(i) Transportation ? NO IMPACT

(j) Safety ? NO IMPACT

(k) Other appropriate social and economic circumstances ? NO IMPACT

2. Secondary and cumulative impacts on the physical environment and human population: THERE IS POTENTIAL FOR SURFACE WATER CONTAMINATION AND SOIL QUALITY CONTAMINATION AS A RESULT OF THE FEEDLOT. IN ADDITION, THERE MAY ALSO BE AIR QUALITY DETERIORATION AS A RESULT OF THE ODOR FROM THE FEEDLOT, PARTICULARLY IF SOMEONE MOVES CLOSER TO THE PROJECT AREA. THE DEQ AND NRCS WERE BOTH NOTIFED AND DID NOT IDENTIFY ANY SIGNIFICANT IMPACTS AS A RESULT OF THIS PROJECT. THEREFORE, NO SIGNIFICANT SECONDARY AND CUMULATIVE IMPACTS HAVE BEEN IDENTIFIED AT THIS TIME.

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: SINCE THERE DOES NOT APPEAR TO BE ANOTHER ADEQUATE WATER SOURCE IN THE AREA, THE NO ACTION ALTERNATIVE WOULD REQUIRE THE APPLICANT TO HAUL HIS STOCK WATER.
ALTERNATIVE: SINCE THIS PROJECT IS ALREADY CONSRUCTED AND BEING USED, THE APPLICANT COULD REDUCE THE NUMBER OF CATTLE USING THE WELL SO THAT THE USE IS LESS THAN 10 AF. THIS WOULD ALLOW THE APPLICANT TO FILE A FORM 602, WHICH WOULD NOT REQUIRE PERMIT ISSUANCE.

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: AN EA IS ADEQUATE FOR THIS ACTION BECAUSE NO SIGNIFICANT IMPACTS HAVE BEEN IDENTIFIED.

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

Name: DIXIE BROUGH
Title: WATER RESOURCES SPECIALIST, HAVRE REGIONAL OFFICE
Date: OCTOBER 30, 2000