

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

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

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:* W. Edwin Stahl & Son, LLP
5905 Mullan Road
Missoula, MT 59808
2. *Type of action:* Application For Beneficial Water Use Permit 76M 30008993
3. *Water source name:* Groundwater
4. *Location affected by project:* S2 Section 13, T13N R20W, Missoula County
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The applicant proposes to excavate 10 groundwater pits for the purpose of creating fish ponds. The fish ponds will be operated as a commercial pay to fish business, where rod fees will be charged for access to the ponds. The applicant plans to obtain approval from the Montana Department of Fish, Wildlife and Parks to stock the ponds with trout upon completing the water use permit application process with DNRC. The ponds will all be excavated in an area with a high water table that will allow the ponds to fill naturally with groundwater. The applicant is not applying for a right to divert surface water into the ponds. Currently there are several gravel pits in the immediate vicinity of the proposed project that have filled with groundwater, indicating that groundwater is available for the proposed use. The combined surface area of the 10 groundwater pits is 18.81 acres, and the combined capacity will be 113.40 acre feet of water. The applicant is not proposing to use the ponds for irrigation or any other consumptive use. The only consumptive use of water will be what is lost to evaporation. Evaporation from the ponds was estimated to be 60.48 acre-feet each year. The total amount of water requested by the applicant is one filling for each pond and evaporative losses, which total 173.88 acre-feet.

If the applicant meets the criteria for issuance of a Beneficial Water Use Permit as outlined in MCA 85-2-302, DNRC will issue the permit.

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

Montana Bureau of Mines and Geology
Montana Natural Heritage Program
State Historical Preservation Office
Montana Department of Fish, Wildlife and Parks Website
Montana Department of Environmental Quality Website

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 impact.

The source of water is groundwater diverted from a shallow groundwater aquifer by means of excavated pits. The Missoula groundwater aquifer has not been identified as chronically or periodically dewatered. The shallow groundwater supplying these ponds is tributary to the Clark Fork River. The reach of the Clark Fork River near the proposed project site is not considered periodically or chronically dewatered by DFWP.

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 proposed ponds will be constructed by means of excavation. There are no dams or outlets planned for the ponds, and no surface water will be diverted into the ponds. Since there will be no direct connection between the ponds and any surface water, it is not anticipated that the proposed water use will affect surface water quality.

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.

The applicant proposes to excavate several small groundwater ponds in an area known to have a high water table and abundant groundwater. Immediately east of the project site is a gravel mining operation where excavations have filled naturally with groundwater, indicating groundwater availability. The ponds will be located approximately ¼ to ½ of a mile from the

Clark Fork River. Between the applicant's proposed ponds and the river well density is low, and suitable land for development is limited due to the Clark Fork River floodplain, thus limiting the future potential for groundwater development immediately adjacent to the project site. It has been shown that a large amount of recharge to the Missoula groundwater aquifer occurs in this area due to leakage from the Clark Fork River during runoff. Since the ponds will naturally fill with groundwater, and surface water is not needed to maintain pond levels, the only consumption of groundwater will be what is lost to surface evaporation. The applicant states that 60.48 acre-feet will be lost to evaporation annually. This equates to a flow rate of 37.50 gallons per minute over a period of one year. The withdrawal of 37.50 gpm should not impact groundwater supply at the proposed project site.

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 impact.

The means of diversion will consist of pits excavated in low-lying areas of an irrigated pasture. No excavation work will be conducted in any stream channel requiring a 310 permit from the County Conservation District. Since the project does not involve any active stream channels or surface water, there will be no impact to channels, flow modifications, dams, or create any barriers to fish migration. The project will create more wetland and/or riparian areas on the applicant's property than what currently exists. Due to the prolific nature of the groundwater aquifer in the project vicinity, and due to the close proximity to the Clark Fork River, it is not anticipated that this project will impact well construction in the area.

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 impact.

The Montana Natural Heritage (MNH) database was queried to determine if any threatened or endangered species, or species of special concern, are located in the project vicinity. According to MNH, the following sensitive species were identified as occurring in the same township and range as the proposed project site; Obscure Evening Primrose, Fringed Myotis, Zapada Cordillera, Westslope Cutthroat Trout and Bull Trout.

The location of the Obscure Evening Primrose observed is several miles east of the project site in the foothills that surround the Missoula Valley. It is not known whether it exists at the project site. The project site is irrigated pasture historically grazed by livestock. This would greatly reduce the likelihood of the plant species existing on the applicant's property.

Fringed Myotis was also identified as occurring in Southeast Missoula. This small bat like mammal is considered rare, and threatened. It is not known whether Fringed Myotis use the applicant's property. The proposed water use will not change the rural nature of the applicant's property or reduce the quality of the habitat found there, therefore, the likelihood of impact to this species is considered low.

Sensitive species found occurring in streams in the Missoula Valley, such as Zapada Cordillera, Westslope Cutthroat Trout and Bull Trout should not be impacted by the applicant's proposed use of groundwater. The ponds will not affect surface water flows in the Clark Fork River, and there will be no outlets from the ponds that will allow water to leave the ponds, or that could allow fish to migrate to and from the ponds. The Montana Department of Fish, Wildlife and Parks will inspect the ponds prior to issuing a fish pond stocking license.

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 impact.

The applicant is not proposing to alter any existing wetlands located at the project site. The proposed project should create approximately 18 acres of new open water wetland habitat.

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

Determination: No impact.

The applicant's proposed ponds should provide additional habitat for wildlife and waterfowl on the applicant's property. Fisheries resources should not be impacted since the groundwater pits will not affect surface water flowing in the Clark Fork River. The ponds will be constructed so stocked trout cannot interact with wild trout. The ponds will not have outlets or be connected to a source of surface water that will allow stocked fish to escape the ponds or allow wild fish to enter the ponds.

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 impact.

The soils present at the applicant's project site consist of Grantsdale loam, Moiese Gravelly loam and Xerofluvents. None of these soil types are susceptible to saline seep. The proposed project will have no impact on soil quality. The project site is level (0-2% slope), thus soil stability will not be affected by excavating the groundwater pits. Moisture content is already high in these soils as evidenced by the high groundwater table. Xerofluvents are soils that are developed in areas that experience seasonal flooding.

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 impacts.

Existing vegetative cover consists of irrigated pasture. Approximately 18 acres of land now covered by vegetation will be converted to open water (ponds). Noxious weeds can become established in areas where soil disturbance occurs. Reseeding and irrigation can control the spread of noxious weeds. The applicant has the ability to irrigate areas surrounding the ponds where soil disturbance occurs. The project site is located on private property, and the control of noxious weeds is the landowner's responsibility.

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

Determination: No impact.

No source of air pollutants was identified.

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 impacts.

The only recorded historic site within Section 13, T13N, R20W, is the Chicago, Milwaukee, St. Paul & Pacific Railroad bed. This site will not be altered as a result of issuance of the Beneficial Water Use Permit.

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.

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 impact.

There are no locally adopted environmental plans or goals. The proposed project will maintain the rural appearance of the applicant's property.

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 impacts.

The project site is private property with limited recreational opportunities for the public. The proposed project will create a recreational opportunity for those willing to pay to fish. No wilderness areas will be impacted by the proposed water use.

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

Determination: No significant impact.

The ponds may contribute habitat suitable for mosquito reproduction. West Nile Virus may be a concern, however, due to occasional flooding and high groundwater, mosquito habitat already exists on the applicant's property.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes ___ No XX If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No 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? The proposed project will maintain the rural nature of the applicant's property, which is located in an area that has seen considerable development.
- (b) Local and state tax base and tax revenues? No impact.
- (c) Existing land uses? No impact. The proposed project will not result in a significant change in current land use practices on the applicant's property, or adjacent parcels.
- (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:

Secondary Impacts None identified.

Cumulative Impacts None identified.

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

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: None identified.

PART III. Conclusion

1. Preferred Alternative None identified.

2. Comments and Responses

3. Finding:

Yes ___ No XX 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 ANALYSIS FOR THE PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS WERE IDENTIFIED.

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

Name: Jim Nave

Title: Water Resource Specialist

Date: February 25, 2004