

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:* Frank & Denise Cavanaugh
6808 12 Oaks Blvd
Tampa, FL 33634
2. *Type of action:* Provisional Permit to Appropriate Water 76LJ-30018912
3. *Water source name:* UT Pleasant Valley Fisher River
4. *Location affected by action:* NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 28, Township 27N, Range 28W, Lincoln Co.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311, MCA are met. The applicant is seeking a water use permit from an unnamed tributary of the Pleasant Valley Fisher River for the purpose of irrigation on 28.74 acres and two fish ponds connected by a pipe located off stream. The ponds will be 12 feet deep and will have an overall storage capacity of 5.60 acre-feet. Field irrigation will be accomplished from a secondary point of diversion located at the second pond site. A centrifugal pump will lift water to a series of contour ditches constructed in an area where rolling, hilly topography is in the 8% to 10% range. The applicant will benefit from the increased plant growth as a result of the irrigation and the recreation provided by the fishponds will facilitate amusement and exercise.
6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Montana Historical Society
Montana Department of Fish, Wildlife & Parks

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: The unnamed tributary is not listed 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: This project is not on a water quality impaired or threatened stream. Initial project construction disturbances to the stream will create sediment. The applicant may be required to obtain a 310 permit from the Lincoln County Conservation District, which will address the streambed and banks stabilization to minimize soil erosion and sedimentation. There will most likely be some impact to water temperature from storage in the fishpond. The impact is limited because the maximum amount of water stored and then returned to the stream is 4.5% of the measured flow.

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 not a groundwater appropriation. Water emerges from what is colloquially known as Crystal Springs. The discharge creates a surface water stream that provides the source of water for this appropriation.

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: There will be short-term impact to the stability of the stream channel within the area where the diversion mechanism is installed. There will be no long-term negative impacts after construction is completed and no structural change in the stream channel is proposed.

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 project area was not identified as having endangered or threatened species or "species of special concern". With the project located in a rural portion of northwestern Montana it is likely wildlife traverse the property on occasion. Some of the wildlife may be considered endangered or threatened but this development will not have an impact to their migration or movement.

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: Disturbance of a wetland requires a 404 permit from the Army Corps of Engineers. No wetlands were found within the project site during an April 20, 2006 site visit.

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

Determination: No existing ponds are involved with this development. The new proposed ponds will be used for irrigation storage and recreation.

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: Saline seep isn't a problem in this 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: A distressed stream-bank condition is not likely to occur from depletion of 4.5% of the stream flow. As a result of removing large amounts of water from a stream the channel throughout the project area can lose streamside vegetation. Loss of streamside vegetation creates a situation where insulation and cover for aquatic life are lost. Increased summer water temperatures may also occur from dewatered conditions. The amount requested in this application, (4.5%) is not significant.

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

Determination: There may be a short-term effect to air quality during construction but it is anticipated to be a minimal amount of dust and engine exhaust.

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 project is on private property and no previous cultural resource inventories cover the project location. It is recommended that a cultural resource inventory be conducted in order to determine whether or not such sites exist and if they will be impacted by this development. The decision to carry out a cultural resource inventory would be at the discretion of the landowner since it is private property.

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: None

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 locally adopted environmental plans that address water uses for fishponds. Irrigation has been practiced in many countries on this earth for centuries. Ancient irrigation works can be found in Egypt, Iran, China, Turkey, India, Spain and England. In the western hemisphere, the inhabitants of Peru, Mexico, and the southwestern United States practiced irrigation thousands of years ago. Irrigation water is one of the essential elements required to produce enough food for a rapidly growing world population. It goes without saying this project is consistent with environmental plans and goals.

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 will be no impact to the quality of recreation or wilderness activities nor will access be denied to any established recreation areas.

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

Determination: No impact is anticipated.

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 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
- (b) Local and state tax base and tax revenues? Increased local taxes from increased property value.
- (c) Existing land uses? No
- (d) Quantity and distribution of employment? No
- (e) Distribution and density of population and housing? One new home will be built.
- (f) Demands for government services? Regulatory during construction.

(g) Industrial and commercial activity? Sales of equipment and material for the project.

(h) Utilities? No

(i) Transportation? No

(j) Safety? No

(k) Other appropriate social and economic circumstances? No

2. **Secondary and cumulative impacts on the physical environment and human population:** More rural development impacts country life and cumulatively may develop into urban sprawl.
3. **Describe any mitigation/stipulation measures:** If impacts are identified mitigation measures will become part of the permit.
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 would mean the project would not be developed as it is proposed. No reasonable alternatives exist.

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: Limited impacts to the current condition of the property and stream will occur, however no significant impacts have been identified; therefore, no EIS is necessary.

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

Name: Rich Russell

Title: Water Resources Specialist

Date: May 10, 2006