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

**Applicant/Contact name and address: ANDERSON, PEHR & GAIL**
**RTE. 85 BOX 4251**
**LIVINGSTON, MT 59047**

1. **Type of action:** CREATE A PERMIT FOR A RESERVOIR ALREADY IN PLACE**.**

**2. Water source name:** WILLOW CREEK

3. **Location affected by action: NENWSE, SEC 2.TWP 1S. R 9S**.

**4. Narrative summary of the proposed project, purpose, action to be taken, and benefits: A** RESERVOIR HAS BEEN BUILT IN THE EARLY 1980'S TO IRRIGATE CROPLAND.

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

State Historic Preservation Office
MT Dept. of Fish, Wildlife & Parks
Montana Natural Heritage Program
Montana Rivers Information System
MT DNRC Water Operations Bureau

Part II. Environmental Review

**1. Environmental Impact Checklist:**

| **PHYSICAL ENVIRONMENT** |
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**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: WILLOW CREEK HAS BEEN LISTED AS A CHRONICALLY DEWATERED STREAM BY MT DFWP. THE ANDERSON RESERVOIR WAS CONSTRUCTED IN 1981 AND MAY HAVE CONTRIBUTED TO THE CAUSE FOR LISTING WILLOW CREEK.

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: WILLOW CREEK IS NOT LISTED ON DEQ 303 (D). THERE IS NO ABILITY TO ASSES WATER QUALITY CHANGES BECAUSE THE PROJECT HAS BEEN IN PLACE FOR YEARS

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: BY CHANGING FROM FLOOD TO SPRINKLER IRRIGATION GROUNDWATER RECHARGE COULD HAVE BEEN IMPACTED.

**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 DIVERSION WORKS IS DESIGNED TO RETAIN SPRING FLOW. THEORETICALLY THE DIVERSION WORKS COULD HELP REDUCE EROSION OF THE STREAM BANKS, ALTHOUGH THIS COULD CHANGE MORPHOLOGY AND ORRIGINAL STREAM VELOCITIES. NO RIPARIAN AREAS HAVE BEEN IDENTIFIED

**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: THIS DAM DOES CREATE A BARRIER TO THE MIGRATION OR MOVEMENT OF AQUATIC LIFE. NO ENDANGERED OR THREATENED SPECIES WERE IDENTIFIED.

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: THE DAM HAS CREATED A MAN-MADE WETLAND.

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

Determination: THE ANDERSON DAM IS NOW A SOURCE FOR WATERFOWL AND INCREASED WILDLIFE.

**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: UPON FIELD INSPECTION OF THIS RESERVOIR THERE APPEARS TO BE NO SALINE SEEP. A SOIL SURVEY MAP OF THIS AREA WAS NOT AVAILABLE DURING INVESTIGATION.

**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: CONSTRUCTION HAS ALREADY BEEN COMPLETED. VEGETATION DISRUPTION HAS TAKEN PLACE MANY YEARS AGO.

**Air quality**

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

Determination: NO DIMINISHED AIR QUALITY WILL OCCUR.

**Historical and archeological sites**

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

Determination: HISTORICAL AND ARCHEOLOGICAL SITES HAVE BEEN RECORDED. BASED ON TERRENCE GODIN'S FINDINGS OF THE MONTNA HISTORICAL SOCIETY. HE BELIEVES THAT CULTURAL PROPERTIES WILL LIKELY NOT BE IMPACTED.

**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

No potentially significant impacts to environmental resources of land, water, and energy have been identified that have not already been addressed.

## 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

**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

**Human health**

Assess whether the proposed project impacts on human health.

Determination: NO SIGNIFICANT IMPACT

**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
NO GOVERNMENT REGULATORY IMPACTS ON PRIVATE PROPERTY HAVE 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 ? POTENTIAL IMPACT.
THIS RESERVOIR IS NOT LISTED WITH THE DAM SAFETY PROGRAM OF THE DNRC. AN APPLICATION WILL BE SENT OUT TO THE OWNER IF THEY WANT TO COMPLY.

(k) Other appropriate social and economic circumstances ? NONE

**2. Secondary and cumulative impacts on the physical environment and human population:** THE BREACH OF THIS RESERVOIR COULD CAUSE PROPERTY LOSS, INJURY OR DEATH. IT IS POSSIBLE THAT FISH COULD NOT MIGRATE UP TO THE HEAD OF THE STREAM CAUSING DECREASED FISH HABITAT. HISTORICAL AND ARCHEOLOGICAL SITES HAVE BEEN RECORDED. BASED ON TERRENCE GODIN'S FINDINGS OF THE MONTNA HISTORICAL SOCIETY. HE BELIEVES THAT CULTURAL PROPERTIES WILL LIKELY NOT BE IMPACTED

**3. Describe any mitigation/stipulation measures:** THE PERMIT COULD BE CONDITIONED TO KEEP LATE SUMMER DIVERSIONS TO A MINIMUM, THUS REDUCING THE PROBABILITY OF ADVERSE AFFECTS WITH SENIOR WATER RIGHTS.

**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:**

ALTERNATIVE #1 – NO ACTION: IF A PERMIT WAS NOT ISSUED THEN NO RIGHT WOULD EXIST TO PROTECT AGAINST OTHER JUNIOR APPROPRIATOR'S

## 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 THERE WILL BE NO SIGNIFICANT ENVIRONMENTAL IMPACTS; THEREFORE AN EIS IS NOT REQUIRED.

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

Name: PORTER DASSENKO
Title: WATER RESOURCES SPECIALIST
Date: 12/08/00