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

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Leonard and Katheryn Deines
   1006 Sparrow Lane
   Glendive, MT 59330

2. Type of action: Application for Beneficial Water Use Permit #42M 30067539

3. Water source name: Dry Creek

4. Location affected by project: SENWNW Sec 34 T16N R55E, Dawson County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

   This project is to pump water out of Dry Creek for lawn & garden use. This application is to use 35 GPM up to 0.65 acre-feet of water annually from April 1st to September 30th. The point of diversion and place of use are located in the SENWNW, Section 34, T16N, R55E.

   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)

   Montana Natural Heritage Program
   Montana Department of Fish, Wildlife & Parks
   National Wetlands Inventory
   Montana Department of Environmental Quality Website (TMDL 303d Listing)

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 Montana Department of Fish, Wildlife & Parks does not identify Dry Creek as chronically or periodically dewatered.

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: Dry Creek is not listed on the 2012 Montana 303d list. This is a small appropriation for Lawn and Garden purpose, no significant impact should occur.

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 surface water appropriation from Dry Creek should have no significant impact on groundwater supply or quality in the area.

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 means consists of a 1 hp pump that will pump water out of the creek through a 1.25" PVC pipe. The 1.25" pipe will be attached to a dual shut off located approximately 110 feet from the point of diversion. The shut off valve will be reduced to a 5/8 garden hose and then attached to a Nelson Rainscape Lawn Sprinkler model 50182. The DNRC approves of this type of diversion and it is commonly used around the lake and in the river.

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 website, the Bureau of Land Management (BLM) lists the Spiny Softshell Turtle, Blue Sucker, Sturgeon Chub, Paddlefish and Sauger as Sensitive. The Pallid Sturgeon is listed by BLM as Special Status, and the US Forest Service (USFS) and USFWS as Endangered. There are no federally listed plants species within the project area.

Spiny Softshell Turtle
They occupy larger rivers and tributaries. Both sexes have been observed basking together on partially submerged logs in backwater sites of slow-moving water, and on sandy or muddy riverbanks (Hendricks and Reichel 1996).

Generally, the Spiny Softshell is primarily a riverine species, occupying large rivers and river impoundments, but also occurs in lakes, ponds along rivers, pools along intermittent streams, bayous, irrigation canals, and oxbows. It usually is found in areas with open sandy or mud banks, a soft bottom, and submerged brush and other debris. Spiny Softshells bask on shores or on partially submerged logs. They burrow into the bottoms of permanent water bodies, either shallow or relatively deep (0.5 to 7.0 meters), where they spend winter. Eggs are laid in nests dug in open areas in sand, gravel, or soft soil near water. No specific information is available for Montana, but data from other locations indicate that eggs are laid mostly in the second half of May and in June (most areas). Hatchlings emerge in 55 to 125 days in late August to early October (mainly September). Nesting sites need to be identified and protected from disturbance by human activities.

Blue Sucker
The blue sucker is a species of concern in Montana. It inhabits larger rivers and the lower reaches of major tributaries, and is usually found in channels and flowing pools with moderate current, and in some impoundments. Adults probably winter in deep pools. Young are present in shallower and less swift water than adults. The blue suckers spawn in deep riffles (1-2 meters) with cobble and bedrock substrate (NatureServe 2009).

Sturgeon Chub
The sturgeon chub prefers large turbid sandy rivers over substrate of small gravel and coarse sand. It is often found in areas swept by currents especially at the head of islands or exposed sandbars.

Paddlefish
Paddlefish occur in the Yellowstone River in Montana. This fish inhabits slow moving water of large rivers or reservoirs, usually in water deeper than four feet (130 cm). Paddlefish require large volumes of slow flowing water in order to reproduce. Construction through streams during spawning periods could result in disruption of spawning and loss of eggs and young. Additionally, construction methods that lead to increased siltation and turbidity could cause temporarily displacement, although construction conservation measures to reduce fine sediment would minimize this impact.

Sauger
Sauger inhabits the larger turbid rivers and the muddy shallows of lakes and reservoirs. They spawn in gravelly or rocky areas in shallow water and seem to prefer turbid water.

Pallid Sturgeon
Pallid sturgeon use large, turbid rivers over sand and gravel bottoms, usually in strong current; also impoundments of these rivers (FWP). In Montana, pallid sturgeon use large turbid streams including the Missouri and Yellowstone Rivers (Brown 1971). They use all channel types, primarily straight reaches with islands (Bramblett 1996). They primarily use areas with substrates containing sand (especially bottom sand dune formations) and fines (93% of observations) (Bramblett 1996).

The point of diversion is on a small tributary that runs through a subdivision. This is not a preferred habitat of any of the listed species. Also, due to the small size of the appropriation it is

unlikely that any of the above listed wildlife and plant would be impacted. Therefore, the Project will likely have no effect on the species listed above.

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 known wetlands exist in the project area.

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

Determination: Not applicable.

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 soil will be temporarily disturbed when the supply line is installed. No permanent degradation to soil quality, stability or moisture content is anticipated.

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 project is located within a subdivision containing numerous homes. After the water line is installed, lawn will be re-seeded on that portion of the line that is above the high water mark. The control of noxious weeds is the responsibility of the land owner.

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

Determination: The pump will be electric and there will be no deterioration of air quality as a result of this appropriation.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: This project is not located on Federal or State Trust Lands therefore this section is not applicable.

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 additional 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 local environmental plans or 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 will have no impact on recreational or wilderness activities.

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

Determination: This project will have no impact on human health.

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: There are no additional government regulatory impacts on private property rights associated with this application.

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 significant impact.

(b) *Local and state tax base and tax revenues?* No significant impact.

(c) *Existing land uses?* No significant impact.

(d) *Quantity and distribution of employment?* No significant impact.

(e) *Distribution and density of population and housing?* No significant impact.

(f) *Demands for government services?* No significant impact.

(g) *Industrial and commercial activity?* No significant impact.

(h) *Utilities?* No significant impact.

(i) *Transportation?* No significant impact.

(j) *Safety?* No significant impact.

(k) *Other appropriate social and economic circumstances?* No significant impact.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts No significant impact identified.

Cumulative Impacts No significant impact identified.

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:*** Under the no action alternative, the applicant would not have the benefit of water for their lawn and garden use.

PART III. Conclusion

1. ***Preferred Alternative:*** Issue a water use permit if the applicant proves the criteria in 85-2-311, MCA are met.

2 ***Comments and Responses***

3. ***Finding:***
*Yes___ No_**X**_ 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: No significant impacts have been identified, therefore and EIS is not necessary.

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

Name: Heather Harris
Title: Water Resource Specialist
Date: 12/16/2013

Bramblett, R.G. 1996. Habitats and Movements of Pallid and Shovelnose Sturgeon in the Yellowstone and Missouri Rivers, Montana and North Dakota. Ph. D. Dissertation, Montana State University, Bozeman, MT.

Brown, C.J.D. 1971. Fishes of Montana. Montana State University, Bozeman, MT.

Hendricks, P., and J. D. Reichel. 1996. Preliminary amphibian and reptile survey of the Ashland District, Custer National Forest: 1995. Montana Natural Heritage Program. Helena, MT. 79 pp.

NatureServe Explorer: An online encyclopedia of life [web application]. 2009. Version 7.1. Arlington, Virginia, USA: NatureServe. Available: http://www.natureserve.org/explorer/. (Accessed: September 24, 2013).