

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:

Applicant:

4 Diamond Ranch at Wallrock LLC
31 St James Ave #740
Boston, MA 02116-4186

Consultant:

DMS Natural Resources LLC
2233 W Kagy Blvd, Suite 1
Bozeman, MT 59718-5938

2. Type of action: Application to Change an Existing Irrigation Water Right No. 43A 30104827.
3. Water source name: Unnamed Tributary of Wallrock Basin Creek. Wallrock Basin Creek is tributary to Cottonwood Creek, located in the Upper Shields River Basin.
4. Location affected by project: Sections 23 and 24, T04 N, R07 E, Gallatin County.

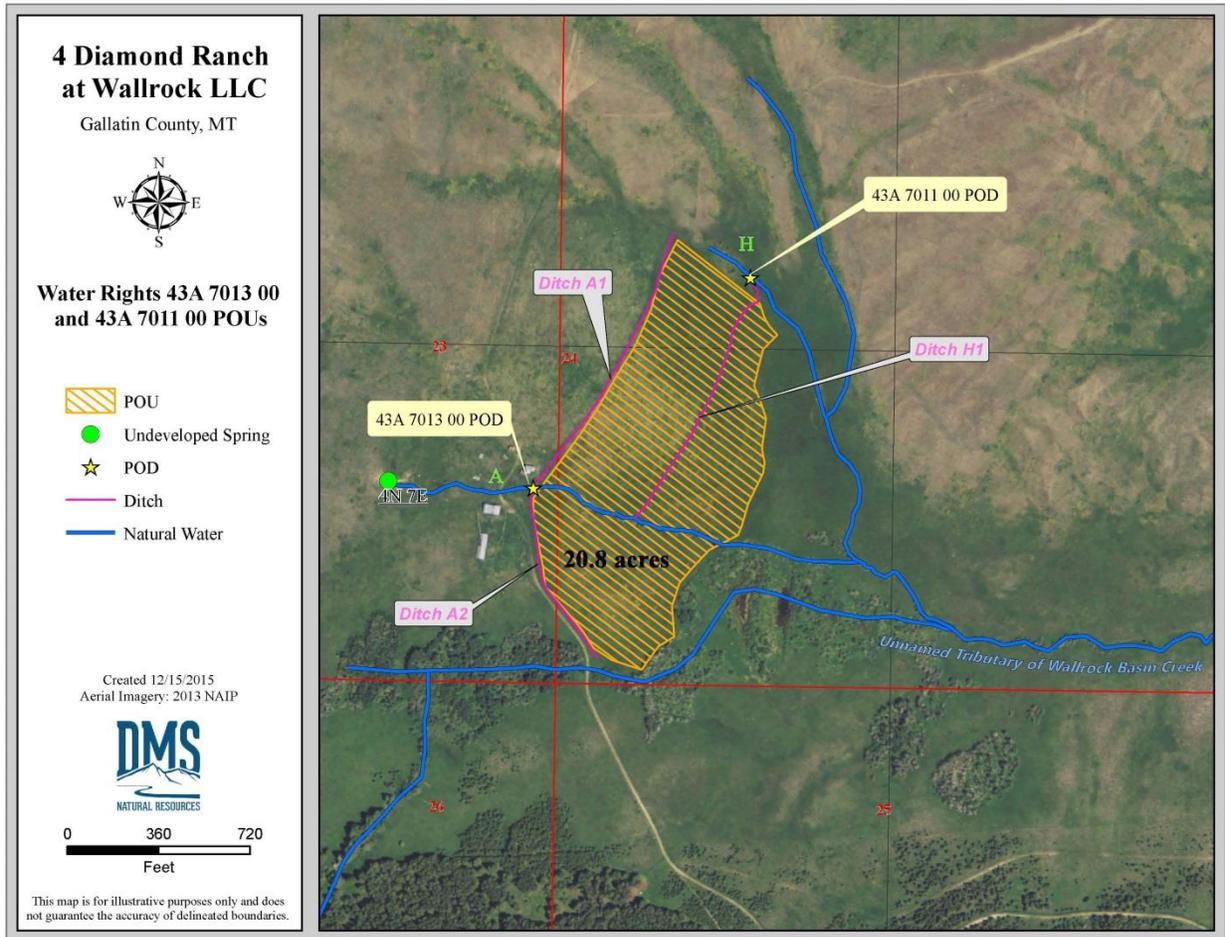


Figure 1: Map of location affected by project.

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

The Applicant proposes to permanently retire 20.8 acres that were historically irrigated in the Wallrock Basin Area, located in the SE of Section 23 and the SW of Section 24, T04 N, R07 E, Gallatin County. The volume of water that was historically used for irrigation will now be used to fill two ponds, located within the footprint of the historic irrigation. The purpose and place of use will be changed for 43A 7013-00. The purpose, place of use, and point of diversion will be changed for 43A 7011-00. A place of storage (the two ponds) will be added to both rights. The ponds will be supplemented with groundwater from wells under Notices of Completion Nos. 43A 30104821 and 43A 30104822.

The Department shall issue a change authorization if the Applicant proves the criteria in §85-2-402, MCA, are met.

6. Agencies consulted during preparation of the Environmental Assessment:
- Montana Department of Fish, Wildlife & Parks (FWP) – Montana Fisheries Information System (MFISH)
 - <http://fwp.mt.gov/fishing/mFish>
 - Montana Department of Environmental Quality (DEQ) – Clean Water Act Information Center (CWAIC)
 - <http://deq.mt.gov/wqinfo/CWAIC/default.mcpX>
 - Montana National Heritage Program (MTNHP) – Species of Concern:
 - <http://mtnhp.org/SpeciesOfConcern>
 - U.S. Fish & Wildlife Service (USFWS) – National Wetlands Inventory Wetlands Mapper
 - <http://www.fws.gov/wetlands/Data/Mapper.html>
 - Natural Resource Conservation Service (NRCS) – Web Soil Survey (WSS)
 - <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
 - Montana Bureau of Mines and Geology (MBMG) – Ground Water Information Center (GWIC)
 - <http://mbmggwic.mtech.edu>

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 significant impact identified. As determined by a search of MFISH conducted on October 7, 2016, neither Wallrock Basin Creek nor Cottonwood Creek is listed as chronically or periodically dewatered by DFWP. This change will not significantly impact water quantity conditions because the volume of water that was historically consumed by crops will now be impounded in two ponds. The water that was historically diverted but not consumed will now be allowed to flow instream, so this change may increase the quantity of water instream in the affected sources.

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 identified. According to a search of the DEQ CWAIC website conducted on October 7, 2016, neither Wallrock Basin Creek nor Cottonwood Creek has been evaluated by the DEQ. This change will not significantly affect water quality conditions. In fact, the additional water left instream and the cessation of irrigation may be beneficial for water quality concerns.

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 identified. The rights being changed are from surface water. Instead of being used consumptively to grow crops, water will now be stored in two lined ponds, so any alteration to groundwater supply or quality will not be significant.

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 significant impact identified. The means of diversion is a historical ditch, which will be used to convey water to the two ponds. Using the ditch to divert water into the ponds instead of onto an irrigated field will not cause significant channel impacts or flow modifications.

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 significant impact identified. The Montana National Heritage Program’s website was queried on October 7, 2016. Results are summarized below.

- Animal Species of Concern: Wolverine, Green-tailed Towhee, and Yellowstone Cutthroat Trout. Three total species.
- Animal Potential Species of Concern: None.
- Animal Special Status Species: None.

The MTNHP website identified the following plant species

- Plant Species of Concern: Many-ribbed Sedge. One total species.
- Plant Potential Species of Concern: None.
- Plant Special Status Species: None.

The proposed project is to impound water that was historically consumed for irrigation in two ponds, so the proposed changes should not have a significant impact on any wildlife in the area and in fact may benefit the ecosystem by providing additional aquatic habitat.

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 significant impact identified. According to an October 7, 2016, search of the USFWS Wetlands Mapper, there are some freshwater emergent wetlands located within the project area. However, some wetlands are mapped on acreage that was historically irrigated, so those wetlands may exist only because of artificial irrigation water. An October 7, 2016, search of the Montana Bureau of Mines and Geology’s Ground Water Information Center revealed only

one nearby well log, GWIC ID No. 280903. The static water level for this log was 12 feet below ground surface – and the source of surface water for the water rights to be changed is springs – indicating that groundwater in the vicinity is relatively shallow and may help sustain water-loving plants.

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

Determination: No significant impact identified. The applicant proposes to install two ponds and fill them with water that was historically consumed by irrigated agriculture. The ponds would be located off stream. The addition of ponds may be beneficial to existing wildlife, waterfowl, and fisheries resources located on the applicant's private property.

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 significant impact identified. Impounding historically consumed water in the two ponds should not affect soil characteristics significantly. An October 7, 2016, search of the NRCS WSS site did not identify any saline seeps in the 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: No significant impact identified. Impounding historically consumed water will not significantly impact vegetative cover. Irrigated agriculture will be discontinued under these rights. The ponds may be beneficial for vegetative characteristics and provide a riparian corridor.

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 identified. This project will not impact air quality.

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: Not applicable. The project is not located on State or Federal Lands. Furthermore, the Applicant made no mention of significant historical or archeological sites on the 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: No impact identified. No other demands on environmental resources of land, water, and energy have been 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: No significant impact identified. The Applicant's goals are to continue using water they have historically used, but for a different purpose. Fish and wildlife and recreation are recognized beneficial uses in the State of Montana.

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 impact identified. This change is located on private property and will not affect access to recreational activities or the quality of recreational and wilderness activities.

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

Determination: No impact identified. Impounding water that was historically consumed by irrigated agriculture in ponds will not impact 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: No impact identified. The project does not impact government regulations on private property rights.

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 impacts identified.
- (b) Local and state tax base and tax revenues? No significant impacts identified.
- (c) Existing land uses? No significant impacts identified.
- (d) Quantity and distribution of employment? No impacts identified.
- (e) Distribution and density of population and housing? No significant impacts identified.
- (f) Demands for government services? No significant impacts identified.

(g) Industrial and commercial activity? No impacts identified.

(h) Utilities? No impacts identified.

(i) Transportation? No impacts identified.

(j) Safety? No impacts identified.

(k) Other appropriate social and economic circumstances? No impacts identified.

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

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

3. ***Describe any mitigation/stipulation measures:*** Pursuant to §85-2-402(8), MCA, if this change application is approved, it may be subject to any terms, conditions, restrictions, and limitations that the Department considers necessary to meet the criteria for authorization.

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 reasonable alternatives have been identified to accomplish the applicant's goals. The volume of water required for these ponds exceeds the 10 acre-foot limit on exempt groundwater developments. While not a closed basin, water is generally legally available in the Upper Shields River Basin only during periods of high spring flows, precluding a new surface water right with the full irrigation-season period possessed by these existing rights. The no-action alternative would be for the applicant not to construct any ponds.

PART III. Conclusion

1. ***Preferred Alternative:*** The preferred alternative is to grant the change application if the Applicant can prove that the criteria in §85-2-402, MCA, are met.

2. ***Comments and Responses:*** None.

4. ***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: The EA is the appropriate level of analysis because the proposed project is to change the purpose of existing water rights. None of the identified impacts for any of the alternatives is significant as defined in ARM 36.2.524. No significant adverse effects are anticipated.

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

Name: Brent Zundel

Title: Hydrologist/Water Resource Specialist

Date: November 9, 2016