

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:

Applicants:

Norton Properties LLC
63020 Lower Meadow Dr.
Bend, OR 97701

Norton Ranch Homes LLC
63278 Powell Butte Hwy
Bend, OR 97701-9429

J&D Family LP
270 Automotive Ave
Bozeman, MT 59718

Consultant:

DMS Natural Resources LLC
602 S Ferguson Ave, Suite 2
Bozeman, MT 59718-6483

2. Type of action: Application to Change an Existing Irrigation Water Right No. 41H 30103245. The Applicant proposes to change three surface water rights and four groundwater rights.

3. Water source name:

- Surface water – West Gallatin River, tributary to the Gallatin River
- Groundwater – Groundwater, Unnamed Tributary of Baxter Creek; Waste and Seepage, Unnamed Tributary of Baxter Creek

4. Locations affected by project:

- Retirement of acreage: Section 9, T02 S, R05 E, Gallatin County
- New irrigation: Section 3, T02 S, R05 E, Gallatin County

See the map on the next page for an overview map.

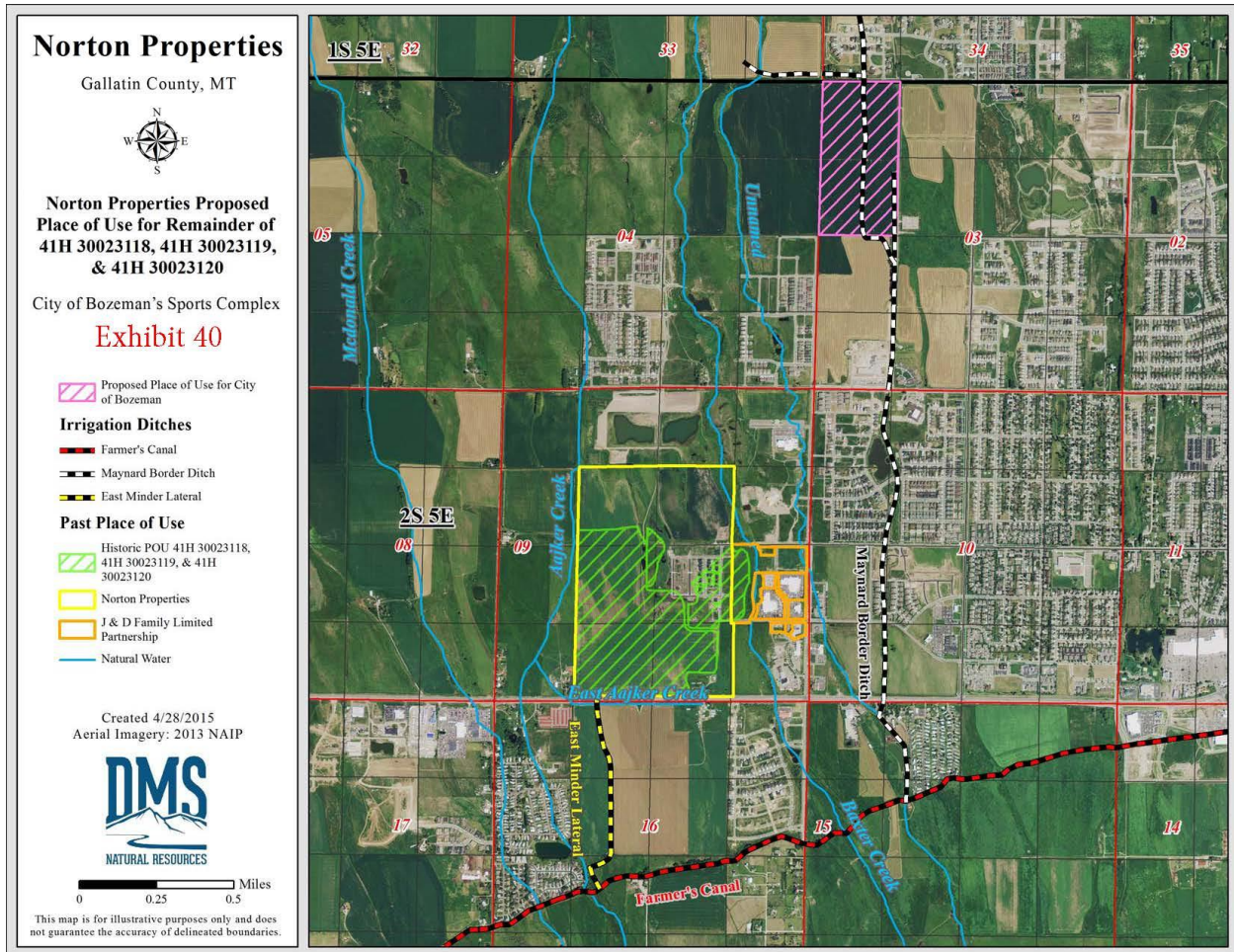


Figure 1: Map showing the current place of use in approximately the middle of the frame (green cross-hatching) and the proposed new place of use in the upper right of the frame (purple cross-hatching). Application Exhibit 40.

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

The applicant proposes to change 1.83 CFS up to 297.92 AF of water under three surface water rights, 41H 30023118, 41H 30023119, and 41H 30023120. The applicant proposes to retire permanently 103.55 acres that were historically irrigated on the Norton Ranch in Section 9, T02 S, R05 E, Gallatin County. Water was historically diverted from the West Gallatin River into the Farmer's Canal and then into the E. Minder Lateral. Water will continue to be diverted into the Farmer's Canal, but will now be diverted into the Maynard Border Ditch, located approximately 1 mile farther down ditch relative to the E. Minder Lateral, and then to a new place of use on the City of Bozeman Sports Complex off Flanders Mill Road in the W½NW of Section 3, T02 S, R05 E, Gallatin County. Water will be used to irrigate 58.86 acres. The primary point of diversion will remain the Farmer's Canal headgate in the SWNWNW of Section 11, T03 S, R04 E. This application also proposes to add a place of storage – an irrigation reservoir with a capacity of 14.3 AF and a surface area of 2 acres – which will be located on the Sports Complex. The application proposes to expand the period of use of the water to May 1 – November 30.

The applicant proposes to leave 56.60 GPM up to 38.25 AF of water under the four groundwater claims in the subsurface for mitigation purposes. The applicant proposes to change the purpose of these four groundwater claims to mitigation to offset any adverse effect caused by the loss of return flows from the surface water rights. Their purpose, point of diversion, and place of use would be changed. The new point of diversion and place of use for these rights will be the same; they will be two points, one on Aajker Creek and one on Baxter Creek, at the downstream end of Norton Properties, at a likely point of connection between groundwater and surface water. These points are located in the NWSNW and NESWNE of Section 9, T02 S, R05 E, for Aajker and Baxter Creeks, respectively. Instead of being diverted for irrigation, water from the groundwater claims will be left undiverted in the ground and available to downstream users.

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.mcp>
 - 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>

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 January 14, 2016, the West Gallatin River is not listed as chronically or periodically dewatered by DFWP. This change will not significantly impact conditions because the same amount of water that was historically diverted from the West Gallatin will continue to be diverted.

As determined by a search of MFISH conducted on January 20, 2016, neither Aajker nor Baxter Creek is listed as chronically or periodically dewatered by DFWP. The retirement of 103.55 acres of historically irrigated land should not significantly affect these conditions. In order to prevent any adverse effect from the loss of return flows to Aajker and Baxter Creeks, the Applicant has proposed to change four groundwater claims that were historically used for irrigation on the Norton Ranch to mitigation.

The irrigation of new acreage at the Sports Complex will not affect the current water quantity conditions because the same amount of water that was historically consumed will continue to be consumed. The proposed project will not significantly affect the flow conditions in the West Gallatin River or Aajker and Baxter Creeks.

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 January 14, 2016, the West Gallatin River is listed as fully supporting agricultural and drinking water uses. It is listed as not supporting primary contact recreation or aquatic life due to concerns about chlorophyll-a, sedimentation/siltation, nitrate/nitrite (nitrite + nitrate as N), total nitrogen, and total phosphorous from site clearance, on-site treatment systems, and silviculture activities. This change will not have a significant impact on the water quality because the same amount of water that was historically diverted from the West Gallatin will continue to be diverted.

According to a search of the DEQ CWAIC website conducted on January 20, 2016, neither Aajker nor Baxter Creek has been evaluated by DEQ.

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. The place of use is being changed, but this will not have a significant impact on surface water flows because the same amount of water that was historically diverted from the West Gallatin will continue to be diverted and the same amount of water that was historically consumed will continue to be consumed.

The retirement of 103.55 acres of historically irrigated land should not significantly affect groundwater quality or supply. In order to prevent any adverse effect from the loss of return flows, the Applicant has proposed to change four groundwater claims that were historically used for irrigation on the Norton Ranch to mitigation. This water will continue to interact with the underlying alluvial aquifers and area groundwater.

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.

Water will continue to be diverted from the West Gallatin River at the Farmer's Canal headgate, so conditions on the source will remain unchanged. Instead of being diverted into the E. Minder Lateral, water will then be diverted into the Maynard Border Ditch. Both of these are existing ditches serving other water rights, so no significant changes in conditions are anticipated.

Water will be diverted and conveyed in an amount that does not exceed historical practices and in an operation pattern that is similar to the historical one, so no significant impacts to channels, flows, barriers, or riparian areas are anticipated. Dams and wells are not involved in this project.

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 January 14, 2016, for species in Township 2 South, Range 5 East (the location of both the acreage to be retired and the acreage proposed for new irrigation).

The MTNHP website identified the following animal species:

- Seven (7) Animal Species of Concern: Hoary Bat, Little Brown Myotis, Great Blue Heron, Evening Grosbeak, Bobolink, Cassin's Finch, and Hooked Snowfly.
- Zero (0) Animal Potential Species of Concern.
- Zero (0) Animal Special Status Species.

The MTNHP website identified the following plant species:

- Two (2) Plant Species of Concern: Rocky Mountain Twinpod, Small Dropseed.
- One (1) Plant Potential Species of Concern: Slender Wedgegrass.
- Zero (0) Plant Special Status Species.

The proposed project is to change the place of use of irrigation water. According to the application materials, the historical place of use is being subdivided and developed and will never again be irrigated. The area is private property in a semi-rural/agricultural area near the city of Bozeman, which is the largest urban area in the Gallatin Valley.

The new place of use is the City of Bozeman Sports Complex, which is likewise being developed and will be irrigated.

Any effects to endangered or threatened species will occur as a result of the development and ongoing land-use changes. The water rights change will not have a significant impact on any of the species listed here.

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.

According to a January 14, 2016, search of the USFWS Wetlands Mapper, there are some freshwater emergent wetlands located within the historically irrigated acreage. However, some wetlands are mapped on acreage that was historically irrigated, so those wetlands may exist only because of artificial irrigation water. Furthermore, some wetlands are mapped on areas that are currently being subdivided and developed – these areas will never be irrigated again, per the application materials. The effects of no longer irrigating 103.55 acres that were historically irrigated will not be significant.

This application also proposes to irrigate 58.86 new acres at the Sports Complex and add a pond. A July 11, 2016, search of the USFWS Wetlands Mapper did not indicate any wetlands on the acreage proposed for irrigation. This parcel is being developed by the City for use as a sports complex. The effects of irrigating the 58.86 acres on the Sports Complex will not be significant.

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

Determination: No significant impact.

This application proposes to add a new pond to be used as an irrigation place of storage for the 58.86 acres to be irrigated at the Sports Complex. According to the November 1, 2016, modification letter, the pond will be 2 acres in surface area with an estimated capacity of 14.3 AF. The pond is off-stream. The pond may create additional opportunities for wildlife, waterfowl, and fisheries habitat along the northwestern boundary of the City of Bozeman, which is currently undergoing rapid development. The impact of the new pond on these existing resources will not be significant.

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.

The same amount of water that was historically diverted from the West Gallatin River will continue to be diverted and conveyed through the Farmer's Canal. Then it will be conveyed through the Maynard Border Ditch to a new place of use. The diversion operation pattern will be similar to the historical one, so this project should not affect soil characteristics significantly. A January 14, 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.

The same amount of water that was historically diverted from the West Gallatin River will continue to be diverted and conveyed to a new place of use. The diversion operation pattern will be similar to the historical one, so this project should not affect vegetative characteristics along the riparian corridor significantly. The 103.55 acres that are proposed for retirement are being developed for housing and will never again be irrigated farmland. Lawns and gardens may be irrigated in the future. The new 58.86 acres that are proposed for irrigation on the Sports Complex will be watered to support turf grass. Neither of these proposals would have significant impacts on existing vegetative cover nor would they allow the establishment of noxious weeds. Under Montana law, owners are responsible for noxious weed control on their property.

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 goal is to change the place of use of their existing water right and to sell those rights to the City of Bozeman. The City plans to exercise these rights to irrigate a new place of use. The Applicant is developing and subdividing the historical place of use, so these irrigation rights can no longer be used there. The City of Bozeman is located within a basin closed to new appropriations of water, so the City of Bozeman is seeking an existing right to irrigate the new place of use. This proposal is consistent with the goal of efficiently making use of existing water supplies within a closed basin.

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 identified.

The acreage to be retired from irrigation is change is located on private property and will not affect access to recreational activities or the quality of recreational and wilderness activities. The Sports Complex is being developed by the City of Bozeman and, once completed, should increase access to recreational opportunities for residents and tourists in the Gallatin Valley. The complex will be located in the northwest part of Bozeman, an area undergoing rapid growth and development, so this change will not significantly impact any existing wilderness activities.

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

Determination: No significant impact identified.

Changing the place of use of an irrigation right will not significantly impact human health. Additional recreational opportunities in the City of Bozeman may help promote both physical health and mental well-being among the population.

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. The conversion of historically agricultural land to housing developments is an increasing trend across the rapidly developing Gallatin Valley.
- (d) Quantity and distribution of employment? No significant impacts identified.
- (e) Distribution and density of population and housing? No significant impacts identified. Housing developments are being built on the acreage to be retired.
- (f) Demands for government services? No significant impacts identified.
- (g) Industrial and commercial activity? No significant impacts identified.
- (h) Utilities? No significant 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:* 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:* Instead of changing the place of use of the rights involved in this project, the City of Bozeman could use water from existing Sourdough Creek or Middle Creek Reservoir supplies to irrigate the Sports Complex. However, the City estimates that current supplies may fall short of projected demand by 2025 – 2030, so they are actively seeking new sources and attempting to acquire additional rights. Additionally, the City's water from Sourdough and Middle Creek is treated to drinking water standards, which requires considerable expense and energy and is not necessary for irrigation use.

The historical place of use is being developed and subdivided and so will no longer be irrigated for agricultural purposes, thus making water that was historically consumed from the source available.

The City could also consider xeriscaping or planting native species that require little to no supplemental watering, that type of vegetation may not support the traditional recreational pursuits planned for the Complex.

The no-action alternative would be to not irrigate the proposed Sports Complex or not to develop it if doing so cannot be done without irrigation. The no-action alternative could include the installation of artificial turf grass, but it is unknown how aesthetics, cost, and maintenance factor into any consideration of artificial turf.

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.
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: The EA is the appropriate level of analysis because the proposed project is to change the place of use of irrigation 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: May 8, 2018