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:
   SRI River Holdings LLC
   % Jaime Wood
   PO Box 447
   Twin Bridges, MT 59754-0447

   Consultant:
   Kyle Mace
   WGM Group Inc.
   1111 E Broadway St
   Missoula, MT 59802

2. Type of action: Application to Change an Existing Irrigation Water Right Nos. 41D 30113222 and 41D 30115264

3. Water source name:

   41D 30113222: Big Hole River
   41D 30115264: Groundwater

4. Location affected by project: Sections 20 and 29, T03 S, R06 W, Madison County. See Figure 1, on the next page, for an overview map.

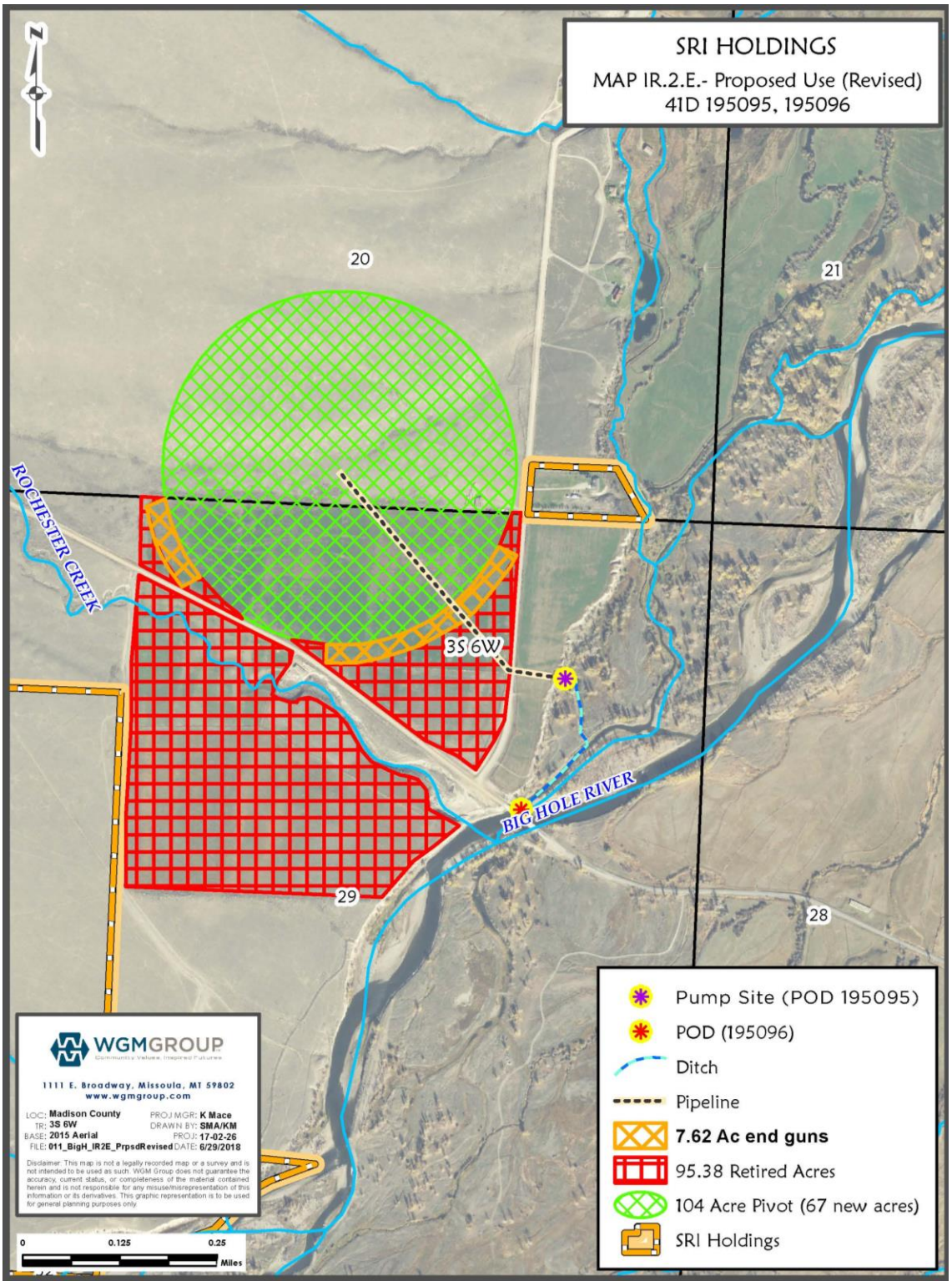

Figure 1: Map of location affected by project. June 29, 2018, Response to Technical Report.

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

The applicant proposes to change the place of use for Statements of Claim Nos. 41D 195095-00 and 41D 195096-00. The current place of use is 140 acres. The proposed new place of use is 111.62 acres, of which 104 acres will be irrigated under a center pivot and

7.62 acres will be irrigated by an end-gun. Of this acreage, 67 acres comprise a new place of use under the center pivot and 44.62 acres are within the historical place of use. In order to offset the increased consumption from the center pivot, 95.38 acres of historical sprinkler irrigation will be removed from irrigation.

Both change applications are addressed in this Environmental Assessment because the water rights are used on the exact same acreage, are comingled, and have historically been operated as part of the same irrigation system.

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) – FishMT
     - http://fwp.mt.gov/fish/
   - 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 FWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: No significant impact identified.

According to an October 16, 2018, search of FishMT, FWP lists the Big Hole River as chronically dewatered. These changes should not significantly affect this condition because the same amount of water that was historically diverted from the river will continue to be diverted.

Groundwater is not listed as chronically or periodically dewatered by FWP.

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.

The 2018 water quality assessment is still in draft format, so finalized data from the 2016 cycle were used in this EA. According to an October 16, 2018, search of the CWAIC website, DEQ lists the Big Hole River as not fully supporting aquatic life, drinking water, or recreational uses. DEQ lists the river as fully supporting agricultural use. Impairment causes are cadmium, lead, zinc, low flow alterations, physical substrate habitat alterations, and water temperature. The sources of these impairments are acid mine drainage, dam construction, grazing in riparian or shoreline zones, habitat modification, highway/road/bridge runoff, new construction of highways/roads/bridges, impacts from abandoned mine lands, irrigated crop production, and streambank modifications/destabilization.

Groundwater was not assessed by DEQ.

These changes should not significantly affect water quality conditions because the same quantity of water that was historically diverted from the Big Hole River and from groundwater will continue to be diverted, and it will continue to be used for irrigated agriculture.

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.

One water right being changed is from groundwater, and the other is from surface water. The same amount of groundwater that was historically diverted will continue to be diverted, so these changes should not significantly affect groundwater quality or supply or affect adjacent surface water flows as compared to historical conditions.

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 applicant proposes to continue using the same diversion works as they have historically, so these changes will not significantly affect channel impacts, flow modifications, barriers, or riparian areas

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.

An October 16, 2018, query of the Montana National Heritage Program's website produced the following results:

Animal Species
- Seven (7) Species of Concern: Townsend's Big-eared Bat, Great Blue Heron, Mountain Plover, Bobolink Blackbird, McCown's Longspur, Brewer's Sparrow, Arctic Grayling.
- Zero (0) Potential Species of Concern.
- One (1) Special Status Species: Bald Eagle.

Plant Species
- Two (2) Species of Concern: Annual Indian Paintbrush, Slender Indian Paintbrush.
- Zero (0) Potential Species of Concern.
- Zero (0) Special Status Species.

The proposed project will continue to irrigate the same area and will divert the same amount of water from the Big Hole River as under historical conditions, so these changes will not significantly impact any endangered or threatened species.

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.

An October 16, 2018, search of the USFWS Wetlands Mapper did not identify any wetlands within the project area.

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

Determination: No significant impact identified.

This project does not involve ponds. The groundwater right includes a sump dug to groundwater with an open pit exposed to the atmosphere, but no changes are proposed for this method of diversion.

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.

The applicant intends to continue irrigating the place of use. The continued irrigation of the project area will not significantly change geological/soil conditions as compared to present conditions. An October 16, 2018, 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 applicant intends to continue irrigating the place of use, so continued irrigation of the project area should not significantly change vegetative cover conditions as compared to present conditions.

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 for irrigation and to upgrade the efficiency of their irrigation system from wheelines to a center pivot. Irrigation is a commonly accepted practice within the semi-arid state of Montana, and the proposed project is consistent with local goals of irrigating cropland.

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 project 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.

Continued irrigation of the place of use should 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:*** No mitigation or stipulation measures are anticipated at this time.

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 that would allow the applicant to upgrade the efficiency of their irrigation system from wheelines to a center pivot.

The no-action alternative would be for the applicant to continue to use their existing irrigation system and not upgrade to a center pivot or to cease irrigation entirely.

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 place of use of two 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: October 16, 2018