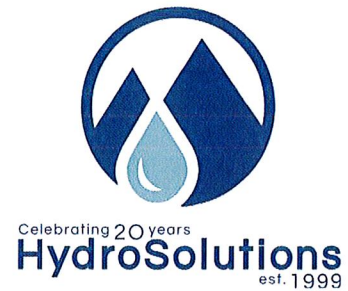


July 15, 2020

Woith Engineering  
Attention: Kody Swartz  
500 North Higgins, Suite 103  
Missoula, MT 59802



**Subject: Confirmation of Authorization for Water Rights Consulting Services, Riverfront Trails Subdivision, Missoula, Missoula County, MT**

**Via Email:** kody@woitheng.com

Dear Mr. Swartz:

HydroSolutions Inc (HydroSolutions) is pleased to provide you with this *Confirmation of Authorization (COA)* for water rights consulting services. You have requested a proposed scope of services, fees for services, and a schedule to prepare a water rights change application to water right 76H 105168 00 through the Montana Department of Natural Resources and Conservation (DNRC). After the change is authorized, all or a portion of the water right would be transferred to the City of Missoula (COM) in exchange for city water service to the proposed Riverview Trails subdivision in the southwest part of Missoula, Montana. Upon your authorization, this COA will become a contract for professional services.

## BACKGROUND

Based on our July 10 phone conversation and follow up correspondence, the following summarizes our understanding of the project:

- From the Montana Cadastral Property Card Record, the proposed Riverfront Trails Subdivision will be in Sections 2 and 11, T12N, R20W, C.O.S. 6449, Parcel Tract 1.
- From your April 2020 Preliminary Water Demand Calculations report, there will be 103 single family residences, a 100-unit assisted living facility, and 82 living units on multi-family lots. having a Maximum Daily Demand of 186,259 gpd. Annual volume needs are 140 acre-feet.
- Wastewater from the project will report to the COM sewer system.
- A DNRC change application needs to be prepared for water right 76H 105168 to change the purpose of use from irrigation to mitigation, to change the point of diversion to the City of Missoula (COM) Haugan Wells, and to change the place of use to the service area for the Haugan Wells.
- After DNRC authorization of the change application water right 76H 105168 will be transferred to COM to offset the annual volume used by the proposed development.

A DNRC application and authorization are needed to change a water right in Montana. Changes to water rights in Montana are administered by DNRC. Proposed changes cannot create an

adverse effect to other existing water rights that are either senior or junior to the priority date of the Applicant's water right. Per DNRC Application to Change an Existing Irrigation Water Right (Form 606 IR), *"A water right is valid if water was actually put to use historically. The water right is limited to the extent of that historical use. A water right cannot exist if it was never used, even if the water right is described on paper."*

Each water supply project is unique in its setting, the water supplies available, the historical water use on or near the property, and the regulatory framework specific to the locality. Therefore, there is no "one-size-fits-all" approach when it comes to obtaining or changing water rights for a new project. Due to the complexities of water right change applications, it is difficult to predict in advance all issues that will need to be addressed prior to application submittal and DNRC review. In our experience, identifying and understanding the critical issues unique to each project early in the process provides the most cost-effective method to change a water right. Identification of critical issues allows the Applicant to understand the risks and plan accordingly.

## SCOPE OF SERVICES

HydroSolutions proposes the following scope of services, which is for the preparation and submittal of one water right change application for water right 76H 105168 through correct and complete acceptance by DNRC. Tasks include:

1. Review DNRC claim file for water right 76H 105168.
2. Formal communication with the DNRC Missoula Regional Office and a preapplication meeting to discuss the proposed project to determine if potential issues exist and how they can be resolved.
3. Review DNRC change application files for other nearby water rights changed for mitigation purposes. This review will document whether similarities exist with the proposed change, if objections to previous changes were filed, and if filed, how those objections were resolved. We understand that Fish, Wildlife and Parks objected to a previous mitigation plan for Miller Creek. That objection was ultimately settled were event and those water rights now serve the same Haugan Wells proposed to supply the Riverfront Trails Subdivision.
4. Develop a mitigation plan that effectively offsets calculated net depletions to the Bitterroot River and offset adverse effects to existing downstream water rights. DNRC approval of the mitigation plan is imperative to issuance of a Preliminary Determination (PD) to Grant the proposed change. The mitigation plan and a PD to Grant from DNRC greatly reduce the probability of an objection to the change and provide support of the application if an objection is filed. The following tasks are important components of the mitigation plan.
  - a. Model depletions to the Clark Fork River to predict the monthly rate and timing of depletions to surface water from pumping the Haugan Wells for the subdivision's share of water from these wells.
  - b. Evaluate whether the proposed mitigation will effectively negate adverse effects to downstream Bitterroot River water rights resulting from changes in rate and timing



of return flow. Mitigation plans that change existing irrigation water rights must account for changes to return flow and show how surface water depletions are mitigated in the non-irrigation season.

- c. The use of an on-site infiltration gallery should be considered for mitigating out of season depletions to the Bitterroot River.
5. Historical use analysis of flow rate and volume for water right 76H 105168.
- DNRC requires a comparison of historically irrigated acres claimed to the DNRC Water Resource Survey for Missoula County and to 1979 USDA historical photographs. Information in the file and a discussion with DNRC indicates that proof of historical use of the claimed 92.0 acres will not be an issue. However, based on the DNRC standard and communication with the DNRC Missoula Regional Office, 92.0 acres of historical irrigation will provide only 1.13 acre-feet per acre or 104 acre-feet available to change for mitigation. This volume is 36 acre-feet less than the 140 acre-feet needed for planned subdivision usage. Although DNRC will allow a credit for unconsumed wastewater return, this credit is only available in non-summer months (November through April) when the City's land application system is not operating.
- Consumptive use in the proposed subdivision can be reduced through a reduction in the single-family lawn area allowed and by reducing or eliminating irrigated landscaping at the other facilities (i.e. xeriscape).
6. Prepare DNRC Form 606 IR (R 07-2020) – Application to Change an Existing Irrigation Water Right, including the following.
- a. Provide a narrative describing the change.
  - b. Prepare maps of historical use and the proposed change.
  - c. Describe how the system historically operated from the point of diversion through the place of use and describe wastewater collection and treatment, if any.
  - d. Describe whether water usage is measured, and the type of measuring device used.
  - e. Explain how all points of diversion will be operated to not exceed the historical diverted flow rate and volume of the changed right.
  - f. Provide design plans and specifications for the new conveyance facilities and the equipment used to put the water to beneficial use.

#### ASSUMPTIONS:

- Travel to Missoula or the project site will not be needed.
- All data necessary for the submittal of the change application is available from public sources or from you. No site-specific data will be collected.
- The preapplication meeting with DNRC will be held via conference call.
- Time needed to respond if objections are filed, and other follow up work after the application is submitted to DNRC is excluded from this scope of services and will be billed on a time and material basis.

## EXPECTED CHALLENGES

The following are known challenges to completing a change application to water right 76H 105168 for use at Riverfront Trails Subdivision.

- Development of a mitigation plan to account for loss of return flow to the Bitterroot River. Loss of return flow can be a cause of adverse effect. Because the Haugan wells are located considerably further from the Bitterroot River than the historical irrigation, the timing of depletions may extend to all months of the year. However, if the consumptive use of the historical irrigation is considered mitigation and left in the river, it can only be applied to offset depletions occurring during the historical irrigation season.
- Lack of sufficient volume under the water right being changed to provide the needed volume for the subdivision.
- Potential for objection from FWP even if DNRC proposes to authorize the change.

## SCHEDULE

The to complete and submit a change application is expected to be approximately two months depending upon availability and responsiveness of DNRC and other parties. A typical change application to authorization by DNRC takes about one year, assuming no objections are received.

## NOT TO EXCEED COST:

HydroSolutions proposes to complete the above described scope of services for a not to exceed cost of . HydroSolutions works on a time and materials basis, so you will be billed only for work performed and actual expenses incurred. Because of the uncertainties described above, this is an estimated cost that we believe is higher that will be needed. However, until the uncertainties are resolved, we cannot provide an accurate cost estimate.

## TERMS OF PAYMENT

## ACCEPTANCE AND SCHEDULE

We appreciate the opportunity to present this proposal to you. If it is acceptable, please sign the Signature Page and return the original to us as written authorization to proceed. Our work on

this project can begin following receipt of your written authorization. The Signature Page can be faxed (443-6385) or scanned and returned via email, but we request that you also return the signed original via USPS mail.

If you have questions regarding this proposal, please call me at (406) 431-7760, or email at [dbaldwin@hydrosi.com](mailto:dbaldwin@hydrosi.com). We look forward to assisting you with this project.

Respectfully Submitted,

**HydroSolutions Inc**



David Baldwin, M.S., P.G.

Sr. Hydrogeologist, Sr. Water Rights Specialist

Attachments: Signature Page  
General Conditions

SIGNATURE PAGE

**Subject: Confirmation of Authorization for Water Rights Consulting Services, Riverfront Trails Subdivision, Missoula, MT**

Please proceed with the services described herein in accordance the terms of this Confirmation of Authorization and attached General Conditions.

KODY SWARZE  
Authorized Party (Name -- Please Print)

MISSOULA OPERATIONS MANAGER  
Title

WOITH ENGINEERING, INC.  
Representing

Kody Swarze  
Signature

2/11/21  
Date