

TECHNICAL MEMORANDUM

DATE: 6/29/20 **TO**: IDWR

FROM: Mountain Waterworks

JOB NO.: 249.0020

SUBJECT: Mayfield Springs Water Right

INTRODUCTION

The purpose of this technical memorandum is to summarize and describe the water rights and proposed ground water well locations for the Mayfield Springs Planned Community. There are two water rights associated with the project. One is an irrigation water right license (63-32616) and the other is a municipal permit to appropriate water (63-32225). Gregory Johnson is owner of the irrigation water right and the Intermountain Sewer and Water Corporation is the owner of municipal permit. Gregory Johnson is the authorized agent of the Intermountain Sewer and Water Corporation. Mayfield Development, LLC, owns the Mayfield Springs project site and Gregory Johnson is the authorized agent of that company.

A water right transfer (No. 83875) was submitted to IDWR requesting additional points of diversion (PODs) and adding the Mayfield Springs site as an additional place of use for the irrigation water (63-32616). An application for amendment of permit was submitted to IDWR requesting additional PODs be added to the municipal permit (63-32225). The intent of the requested amendments is to optimize beneficial use and efficiency of the water system by allowing wells to be drilled on the Mayfield Springs property and locating the new wells away from adjacent properties with public and domestic supply wells.

A site plan showing the proposed PODs for permit 63-3225 is included in Figure 1, and a site plan for the proposed PODs and additional place of use for license 63-32616 is provided in Figure 2. One POD has been constructed under 63-3225 labeled as "Existing Well No. 1" in Figure 1.

WATER RIGHT SUMMARY AND LIMITATIONS

The municipal permit has a condition stating that "Common areas, parks, school grounds, golf courses, and other large parcels may only be irrigated under this water right with wastewater that has been previously beneficially used for potable or culinary purposes, has been treated in a wastewater treatment plant, and is delivered from the wastewater treatment plant to the parcel to be irrigated". There is also a condition that "Water may be used for direct irrigation of up to ½ acre per residential lot upon which a home has been constructed".

A summary of the current water rights is provided **Table 1**, with available diversion rates and volumes summarized in **Table 2**. See **Appendix A** for Water Right documentation.

Boise - Lewiston - McCall 208.780.3990 - office@mountainwtr.com www.mountainwtr.com Applicant Exhibit

EXHIBIT A Page 2 of 14

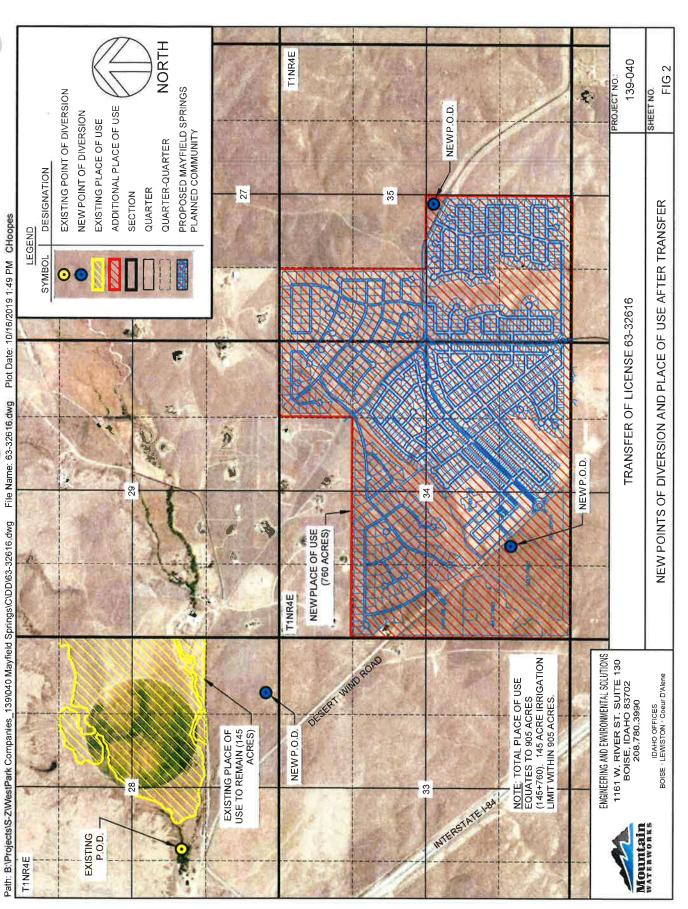


EXHIBIT A

Mountain

Table 1: Current Water Rights Summary

Identification No	Designation							
	Water Right License	Permit to Appropriat e	Water Supply Bank Lease	Source	Beneficial Use	Period of Use	Diversion Rate	Annual Volume
Intermountain Sewer & Water Corp. 63-32225		х		Ground Water	Municipal	1/01- 12/31	10.00 CFS	1,815 AFA
Johnson 63-32616	×			Ground Water	Irrigation	3/15- 11/15	2.37 CFS	651.3 AFA
			х	Ground Water	migation		0.67 CFS	184.2 AF

Table 2: Available Diversion Rates and Volume

Water Right	Diversion Rate		Diversion Volume	
water Right	(cfs)	(gpm)	(AFA)	(MG/year)
Intermountain Sewer & Water Corp. Permit to Appropriate ¹	10.00	4,488	1,815	591
Johnson Water Right License	2.37	1,063	651.3	212
Johnson Water Supply Bank Lease ²	0.67	300	184.2	60

^{1.□} Currently available to appropriate to Mayfield Springs.

AMENDMENT OF PERMIT NO 63-32225

The permit amendment requests adding two new PODs to the existing permit. The current permit allows five PODs that are located northwest of the current project site. One production well and one monitoring well have been constructed. The new PODs would allow new municipal wells to be located on the Mayfield Springs property, resulting in new municipal wells being constructed and operated within the boundaries of the planned community. The new PODs would also provide greater separation distance from existing wells (see Figure 3). The intent of the amendment is to optimize water availability in the local area and efficiently use the available water on the project site. The allowable diversion rate, volume, and period of use will not change from the existing permit.

TRANSFER OF WATER RIGHT LICENSE 63-32616

Water Right No. 63-32616 has a beneficial use designation of "Irrigation" and is being used as such. The water right allows for irrigation of up to 145 acres. Currently, 104 acres are being irrigated with the licensed water and 41 acres are leased to the Water Supply Bank. This water right is planned to be used to supplement/supply irrigation needs within the new planned community. Wastewater reuse is intended to be utilized to irrigate common areas as the community grows.

^{2.} The water supply bank lease is a portion of the Water Right License, which expires on 12/31/22.

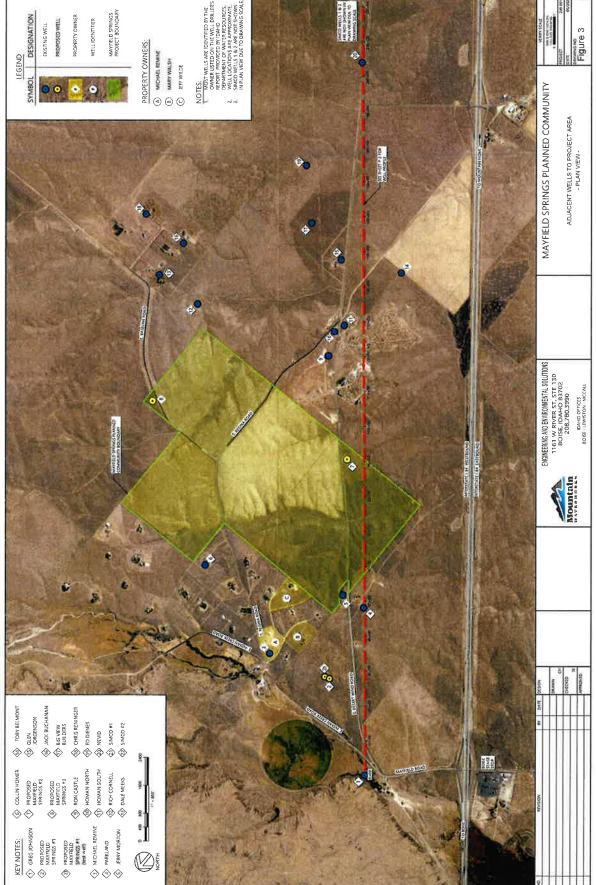


EXHIBIT A

Mountain

The requested transfer includes adding three PODs and the Mayfield Springs project site as an additional place of use. The existing POD is located northwest of the Mayfield site. One proposed POD is the existing well that was constructed under permit 63-3225, and the two additional PODs are the proposed new on-site wells to be constructed under permit 63-3225. The existing and proposed PODs and place of use are included in Figure 2. The transfer would allow irrigation water to be supplied from the Mayfield Springs existing and planned municipal wells and used on the project site. The total allowable irrigation area of up to 145 acres, diversion rate, volume, and period of use will not change from the existing license.

PROTESTS TO THE TRANSFER AND AMENDMENT

There were three protests submitted in response to the water right transfer and one protest submitted in response to the amendment of permit. The protests are based on the following general concerns:

- 63-32616 Irrigation License Transferring irrigation water from the existing irrigation well to the new proposed PODs located on the Mayfield Springs site will negatively impact the Mountain Home Ground Water Management Area.
- •□ **63-32616 Irrigation License** Transferring irrigation water to be used on the Mayfield Springs site for landscape irrigation will increase water use and the period of use will change compared to the existing irrigation water use.
- G3-32225 Municipal Permit Adding two PODs to the permit will negatively impact the Mountain Home Ground Water Management Area and ground water levels in the area will decline.

The requested transfer of license 63-32616 does not change the allowable diversion rate, annual volume, or period of use from the existing license. The existing license permits irrigating up to 145 acres. Therefore, the total irrigable area including the existing place of use and the Mayfield Springs site cannot exceed 145 acres. Water utilized on the Mayfield Springs site for irrigation will be measured and reported on an annual basis. IDWR will require these measures be incorporated into an approved transfer, with associated annual reporting of place of use and volume. Therefore, concerns related to increasing the irrigation diversion rate and changing the period of use through the transfer are not valid.

The other primary issue raised by the protests is related to available ground water and potential to negatively impact local ground water levels. In 2012, the IDWR completed a sufficiency of water supply study along the I-84 corridor in response to a significant amount of water supply requests in the area. The study defined an area boundary, presented data and information within the boundary, and evaluated the sufficiency of the water supply within the boundary for existing and new uses.

In 1982, the IDWR established the Mountain Home Ground Water Management Area. The 2012 I-84 corridor study evaluated an 11-mile area, including areas within and outside the Mountain

Mountain WATERWORKS

Home Ground Water Management Area. The existing and proposed places of use and PODs for the irrigation license and municipal permit are within the 2012 IDWR study boundary area. The sufficiency study included the existing consumptive uses, including water rights that were not fully developed, and concluded that there is a net positive recharge rate for the study area. Irrigation license 63-32616 has a priority date of 1974 and the municipal permit has a priority date of 2005. These water uses were considered existing consumptive uses in the study. A final order of water sufficiency was prepared by the IDWR in 2013 resulting in additional water right applications received in 2006 and 2007 to be processed up to the estimated net recharge rate from the study, above the existing consumptive uses and water rights. Therefore, based on the work that IDWR has completed, the State has determined there is adequate water availability and has set limitations on the allowable annual diversion within the study area that will protect local and regional ground water users.

Permit 63-32225 contains conditions for monitoring ground water levels in the vicinity of the place of use. A ground water monitoring plan has been prepared and approved by the IDWR. As part of that plan, a monitoring well was constructed with the existing POD adjacent to the proposed project site. The monitoring well was completed with screens near the same depth as the adjacent domestic wells. The system owner is required to conduct ground water monitoring, report the monitoring data to IDWR on an annual basis, along with measuring and reporting water diversion on an annual basis. If the system owner fails to comply with the conditions included in the IDWR approved monitoring plan, the water right can be revoked. A site plan showing the existing wells in the area including the proposed Mayfield Springs well is included in Figure 3 and a profile view is provided in Figure 4.

In summary, the requested amendment to permit and transfer application do not change the allowable diversion rate, volume, or period of use from the existing approved permit and license. The IDWR has concluded that there is available water in the area for these existing approved uses. Locating the municipal wells on the Mayfield Springs site, further away from existing ground water users compared to the currently approved locations, will allow more efficient water use for the Mayfield Springs planned community and reduce the potential for new well interference to existing wells. Lastly, ground water monitoring and data reporting to the IDWR is required. If negative ground water impacts are observed, IDWR will take corrective actions.



Appendix A

Water Rights Documentation

IDAHO DEPARTMENT OF WATER RESOURCES APPLICATION FOR TRANSFER OF WATER RIGHT PART 2A

Current Water Right No.: 63-32616

Current Owner:

GREGORY B JOHNSON

Priority Date:

10/17/1974

Origin:

Water Right

Status:

Water Supply Bank

Active

Basis:

Decreed

Source

<u>Tributary</u>

GROUND WATER

Beneficial Use

From To

Diversion Rate

Annual Volume

IRRIGATION

03/15 to 11/15

2.37 CFS

651.3 AF

Total Diversion

2.37 CFS

651.3 AF

Location of Point(s) of Diversion

GROUND WATER

NE1/4SW1/4

Sec. 28, Twp 01N, Rge 04E B.M.

ADA County

Place of Use

IRRIGATION Within ADA County

T01N R04E \$28 T01N R04E \$28

SWNE NESW

27.00 9.00

T01N R04E \$28 T01N R04E \$28 SENE

39.00

32.00

NESE

T01N R04E S28 NWSE 38.00

Total Acres: 145

Page 10 of 14

Water Right Report Page 1 of 3

Close

IDAHO DEPARTMENT OF WATER RESOURCES Water Permit Report

11/20/2013

WATER RIGHT NO. 63-32225

Owner Type	Name and Address
Current Owner	INTERMOUNTAIN SEWER & WATER CORP
	C/O GREG JOHNSON
	1710 S WELLS AVE STE 110
	MERIDIAN, ID 83680
	(208)888-9946
Representative	SPF WATER ENGINEERING LLC
	C/O LORI GRAVES
	300 E MALLARD DR STE 350
	BOISE, ID 83706
	(208)383-4140

Priority Date: 09/16/2005

Status: Active

Source Tributary
GROUND WATER

Beneficial Use	From	To	Diversion Rate	<u>Volume</u>
MUNICIPAL				1815 AFA
Total Diversion			10 CFS	

Location of Point(s) of Diversion:

GROUND WATER NENE | Sec. 28 Township 01N Range 04E ADA County GROUND WATER SENW | Sec. 28 Township 01N Range 04E ADA County

Water Right Report Page 2 of 3

GROUND WATER NWSE Sec. 28 Township 01N Range 04E ADA County GROUND WATER SESE Sec. 28 Township 01N Range 04E ADA County GROUND WATER NENW Sec. 33 Township 01N Range 04E ADA County

Place(s) of use: Large POU Info

Conditions of Approval:

1. 2.	046	Right holder shall comply with the drilling permit reuirements of Section 42-235, Idaho Code and applicale Well Construction Rules of the Department. Water earing one to e appropriated is from 300 to 1000 feet.
	121	The Director retains urisdiction to reuire the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snae River flows if needed for salmon migration purposes. The amount of water reuired to e released into the Snae
4.		River or a triutary, if needed for this purpose, will e determined y the Director ased upon the reduction in flow caused y the use of water pursuant to this permit. Prior to the diversion of water in connection with this right, the right holder shall provide the department with a plan for monitoring ground water levels in the vicinity of the place of use for this water right. The monitoring should occur in parallel with development and production and should include indentification of non-productions wells and timelines for measuring and reporting, the right holder shall not divert water in connection with this right until the monitoring plan is approved y the Department. Failure to comply with the monitoring plan once it is accepted shall e cause for the Department to cancel or revoe this
5.	134	right. Prior to or in connection with the proof of eneficial use statement to e sumitted for municipal water use under this right, the right holder shall provide the department with documentation showing that the water supply system is eing regulated y the Idaho Department of Environmental uality as a pulic water supply and that it has een issued a pulic water supply numer.
6.	01 M	After specific notification y the Department, the right holder shall install a suitale measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
7:	128	Place of use is within the area served y the pulic water supply system of Intermountain Sewer & Water, Corp. The place of use is generally located within Township 1N, Range 4E, Sections 28, 29, 32 and 33.
8.		Common areas, pars, school grounds, golf courses, and any other large parcels may only e irrigated under this water right with wastewater that has een previously eneficially used for potale or culinary purposes, has een treated in a wastewater treatment plant, and is delivered from the wastewater treatment plant to the parcel to e irrigated.
9.		Water diverted under this right may e used for direct irrigation of up to 1/2 acre per residential lot upon which a home has een constructed.
	100	A map depicting the place of use oundary for this water right at the time of this approval is attached to this document for illustration purposes.
11.	26A	Proect construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can e shown to the satisfaction of the

Water Right Report Page 3 of 3

Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.

Dates:

Proof Due Date: 02/01/2017

Proof Made Date:

Approved Date: 02/16/2007 Moratorium Epiration Date: Enlargement Use Priority Date: Enlargement Statute Priority Date: Application Received Date: 09/16/2005 Protest Deadline Date: 01/23/2006

Numer of Protests: 0 Field Eam Date:: Date Sent to State Off: Date Received at State Off:

Other Information:

State or Federal:

Owner Name Connector:

Water District Numer:

Generic Ma Rate per Acre:

Generic Ma Volume per Acre:

Swan Falls Trust or Nontrust:

Swan Falls Dismissed:

DLE Act Numer:

Cary Act Numer:

Mitigation Plan: False

Close

Conditions of Approval:

- 1. S39 THE USE OF WATER FOR IRRIGATION UNDER THIS RIGHT MAY BEGIN
 AS EARLY AS MARCH 1, PROVIDED OTHER ELEMENTS OF THE RIGHT
 ARE NOT EXCEEDED. THE USE OF WATER BEFORE MARCH 15
 UNDER THIS REMARK IS SUBORDINATE TO ALL WATER RIGHTS
 HAVING NO SUBORDINATED EARLY OR LATE IRRIGATION USE AND A
 PRIORITY DATE EARLIER THAN THE DATE A PARTIAL DECREE IS
 ENTERED FOR THIS RIGHT.
- C18 This partial decree is subject to such general provisions necessary for the
 definition of the rights or for the efficient administration of the water rights as
 may be ultimately determined by the Court at a point in time no later than the
 entry of a final unified decree. Section 42-1412(6), Idaho Code.
- 3. This right is a split from former right 63-8051.

Decreed Date: 1/14/2009