

Ident. No. 63-33401

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT
To appropriate the public waters of the State of Idaho

RECEIVED

JUL 12 2010

WATER RESOURCES
WESTERN REGION

AMENDED
§ 10/16/13

1. Name of Applicant Layne and/or Lori Thornton Phone 208-922-4658
Mailing address 3224 Swan Falls Rd, Kuna, ID 83634-1732 Email _____
Representative SPF Water Engineering LLC, 300 E. Mallard, Ste 350, Boise, ID 83706 208-383-4140
2. Source of water supply Ground Water which is a tributary of _____
3. Location of point of diversion is Township 2N Range 1E Sec. 34, in the _____ 1/4,
_____ SW 1/4, _____ SW 1/4, Govt. Lot _____, B.M., _____ Ada _____ County;
additional points of diversion if any: see attached Supplement sheet
§ 10/16/13
4. Water will be used for the following purposes:
Amount 0.84 cfs for Irrigation purposes from 3/1 to 11/15 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated is (a) 0.84 cfs and/or (b) _____
cubic feet per second acre feet per annum
6. Proposed diverting works:
 - a. Describe type and size of devices used to divert water from the source Existing well and pump
 - b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet;
total reservoir capacity _____ acre-feet
 - c. Proposed well diameter is 12 inches; proposed depth of well is 335 feet
 - d. Is ground water with a temperature of greater than 85°F being sought? No
 - e. If well is already drilled, when? 1963; Drilling firm Robert Smith;
Well was drilled for (well owner) Fred Wolske; Drilling Permit No. 098981
7. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
 - a. Hydropower; show total feet of head and proposed capacity in kW. _____
 - b. Stockwatering; list number and kind of livestock. _____
 - c. Municipal; show name of municipality. _____
 - d. Domestic; show number of households. _____
 - e. Other; describe fully. _____

SCANNED

MAR 10 2011

Ident. No. 63-33401

9. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example: *D* for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
2N	1E	34									24	12	30	40					106

Total number of acres to be irrigated 106

10. Describe any other water rights used for the same purposes as described above. Include water delivered by a municipality, canal company, or irrigation district. If this application is for domestic purposes, do you intend to use this water, water from another source, or both, to irrigate your lawn, garden, and/or landscaping?

Surface water: 12.4 shares from Boise- Kuna Irrigation District and a 25-acre portion of water right 63-3151B

Ground Water: 63-32112 and a 106-acre portion of 63-32110

- Who owns the property at the point of diversion? Applicants
- Who owns the land to be irrigated or place of use? Applicants
- If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: _____

12. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary. The place of use listed above currently has 1.28 cfs authorized for irrigation from ground water when rights 63-32110 and 63-32112 are combined. This application proposes irrigation of all 106 acres at 0.02 cfs/acre. A Notice of Change in Water Right Ownership for applicants' portions of rights 63-3151B and 63-32110 and all of right 63-32112 accompanies this application.

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

BE IT KNOWN that the undersigned hereby makes this application for permit to appropriate the public waters of the State of Idaho as herein set forth.


Signature of Applicant

Layne Thornton Lori Thornton
Print Name (and title, if applicable)

SCANNED

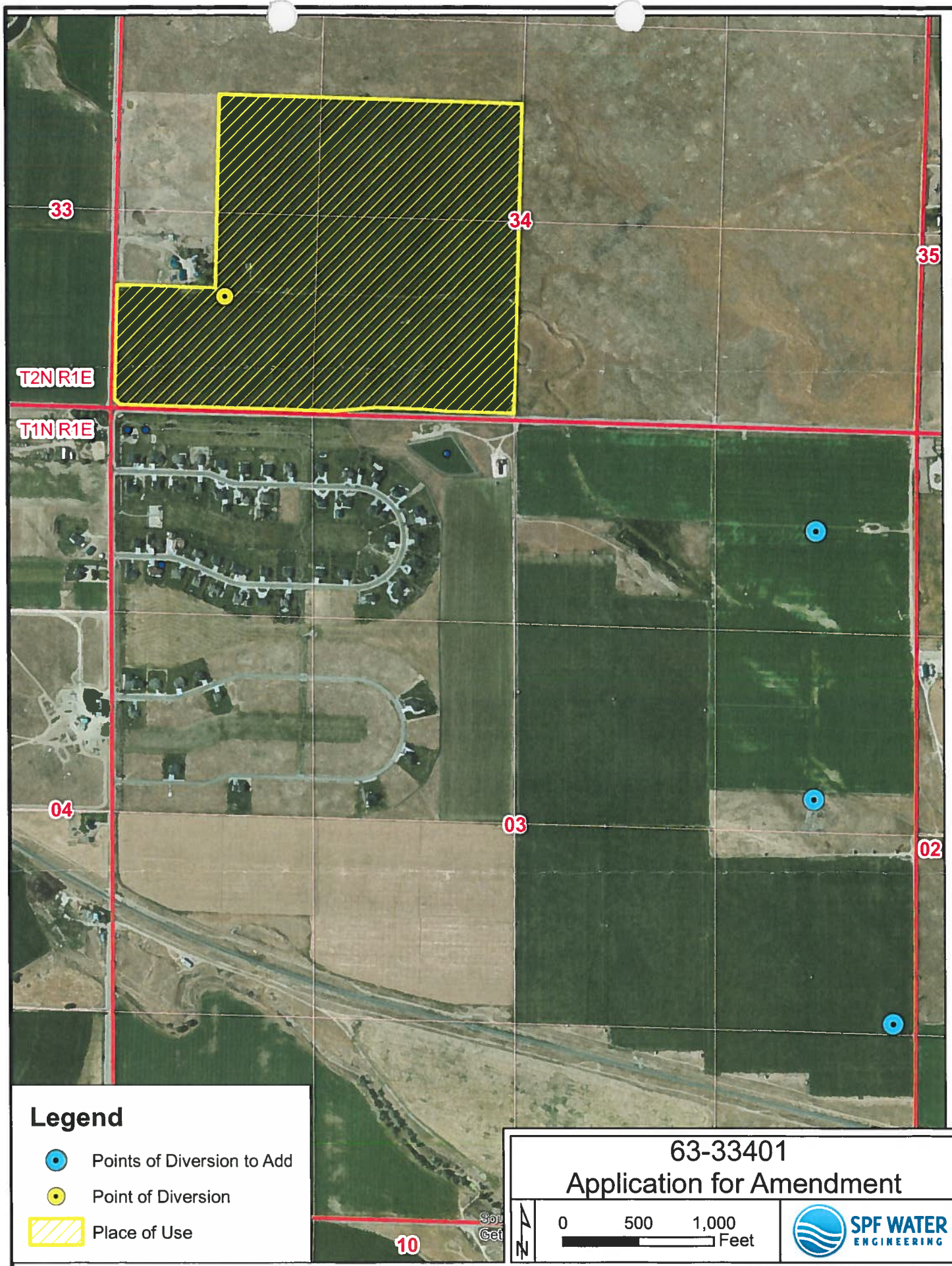
For Department Use:

Received by gmk Date 7-12-10 Time 1:42 Preliminary check by AG
Fee \$ 250.00 Received by gmk Receipt No. W038552 Date 7-12-10

Publication prepared by DB Date 3/10/2011 Published in IDAHO STATESMAN
Publication approved DB Date 4-8-2011 Dates Published MARCH 17 & 24, 2011

\$150.00 RE-ADV FEE PD 10/7/2013 W041556

MAR 10 2011



RECEIVED
JUL 19 1963

WELL LOG AND REPORT OF THE

STATE RECLAMATION ENGINEER OF IDAHO

Department of Reclamation

098981

Permit No. 27844 Well No. _____ County Ada

Owner Fred Wolske

Address Route 2 Kuna

Driller Robert D. Smith

Address Box 72 Mountain Home, Idaho

Well location SW 1/4, SW 1/4, Sec. 34, T. 2 N. 1/4, R. 1 E. 1/4

Size of drilled hole 12 in

Locate well in section

NW 1/4	NE 1/4
SW 1/4	SE 1/4

Total depth of well 335

Give depth to standing water from the ground 100 ft Water temp. _____ °Fahr.

On "Pumping Test" delivery was _____ g.p.m. or _____ c.f.s. Drawdown was _____ feet.

Size of pump and motor used to make test _____

Length of time of test _____ hours _____ minutes.

If flowing well, give flow _____ c.f.s. or _____ g.p.m. and of shut off pressure _____

If flowing well, described control works _____ (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for irrigation Weight of casing per lineal foot _____

Thickness of casing _____ Casing material _____ (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing _____ (CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER; CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.
				This was a deeping job, and the pump will have to be set deeper to tell if can pump more water, because the water below don't have any pressure

Number and size of perforations _____ located _____ feet to _____ feet from ground

Date of commencement of well 26 June 1963 Date of completion of well 6 July 1963

SWSW S. 34 2N1E

SCANNED

MAR 10 2011

WELL LOG

From Feet	To Feet	Type of Material	Water-bearing Formation Ann. Yes or No	Casing Perforated Ann. Yes or No
203	205	grey lava	no	none
205	210	" "	"	"
210	213	" "	"	"
213	215	conglomerate	"	"
215	220	"	"	"
220	225	"	"	"
225	229	"	"	"
229	230	grey lava	"	"
230	235	" "	"	"
235	238	" "	"	"
238	240	brown lava	"	"
240	244	" "	"	"
244	245	clay & gravel	"	"
245	249	" "	"	"
249	250	brown lava	"	"
250	255	" "	"	"
255	260	" "	"	"
If more space is required use Sheet No. 2				

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is true and correct to the best of my knowledge and belief.

Signed Robert D. Smith

By Self

Dated 17 July, 1963

License No. 164

Sommer, Rachel

From: Sommer, Rachel
Sent: Wednesday, November 27, 2013 9:48 AM
To: 'LEGALS@IDAHOSTATESMAN.COM'
Subject: Ada Legal Ad
Attachments: Ada Cover Letter.docx; Ada Legal Ad.docx

Good Morning Janice Hildreth,

Please see the attached ad for publication on 12/8/2013 & 12/12/2013.

Please confirm these are okay to publish as shown.

Thank you very much,

Rachel Sommer

Administrative Assistant
IDWR, Western Region
Office: 208-334-2190
Fax: 208-334-2348
rachel.sommer@idwr.idaho.gov

November 27, 2013

LEGAL NOTICE DEPARTMENT
IDAHO STATESMAN
PO BOX 40
BOISE, ID 83707

RE: Application for Permit No. 63-33401

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. **Please send the affidavit and bill to this office before 12/23/2013.** Your cooperation is appreciated.

Sincerely,

Rachel Sommer
Administrative Assistant

Enclosures

The following application has been filed to appropriate the public waters of the State of Idaho:

63-33401

LAYNE THORNTON

LORI THORNTON

3224 SWAN FALLS RD

KUNA, ID 83634

Points of Diversion L1(NENE) NESE SENE S3 T01N R01E ADA County Source GROUND WATER

Point of Diversion SWSW S34 T02N R01E ADA County Source GROUND WATER

Use: IRRIGATION 03/01 to 11/15 0.84 CFS

Total Diversion: 0.84 CFS

Date Filed: 7/12/2010

Place of Use: IRRIGATION3

2

T02N R01E S34 SW (ALL)

Total Acres: 106

Water bearing zone to be appropriated is from 100 to 400 feet.

Permits will be subject to all prior water rights. For additional information concerning the property location, contact Western Region office at (208) 334-2190; or for a full description of the right(s), please see www.idwr.idaho.gov/apps/ExtSearch/WRFiling.asp. Protests may be submitted based on the criteria of Idaho Code § 42-203A. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Way, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before 12/23/2013. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published on 12/5/2013 and 12/12/2013

Sommer, Rachel

From: Sommer, Rachel
Sent: Wednesday, November 27, 2013 9:34 AM
To: Marston, Sascha
Subject: Refund Thornton

TO: Sascha Marston

FROM: Rachel Sommer

DATE: November 27, 2013

RE: Refund: Application for Permit No. 63-33401 – Thornton

Please refund \$50. This application was received in 2010 and advertised correctly. It has since then been amended and is being re-advertised. The required payment for the re-advertisement is \$50 and the applicants paid \$100 on 10/07/2013.

NAME: Layne and Lori Thornton

ADDRESS: 3224 SWAN FALLS RD
KUNA ID 83634-1732

RECEIPT #: W041556

Thank you,

Rachel

Grimm, Angie

From: Lori Graves [LGraves@spfwater.com]
Sent: Friday, November 22, 2013 9:50 AM
To: Grimm, Angie
Subject: RE: 63-33401 Amended Application for Permit Additional Information Needed

Angie,

New water bearing zone is 100 to 400 feet. Also Layne Thornton is Lavar Thornton's son. They are partners in the Thornton farming operations. Have a great weekend.

From: Grimm, Angie [<mailto:Angie.Grimm@idwr.idaho.gov>]
Sent: Thursday, November 21, 2013 3:32 PM
To: Lori Graves
Subject: 63-33401 Amended Application for Permit Additional Information Needed

Lori,

Good afternoon! I'm working on getting Layne and Lori Thornton's application for permit 63-33401 re-advertised due to the recent amendment adding three wells as proposed points of diversion. For the previous advertisement, a water bearing zone of 100 ft to 335 ft was published based on the log available for the existing well in the SW SW Section 34 T2N R1E. Due to the fact that three additional wells are proposed as points of diversion (at least one of which is a proposed well yet to be drilled), an amendment to the water bearing zone information is necessary prior to re-advertizing. Please provide information indicated the water bearing zone now proposed for appropriation.

Additionally, it appears not all of the additional points of diversion are on property owned by the applicant. Please provide information confirming the applicants have an agreement with the other property owner(s) enabling them to make the filing.

Thank you in advance for your attention to this matter. Please call me at 208-334-2190 or reply to this email if you have any questions. I look forward to your response.

Sincerely,

Angela M. Grimm, P.G.
Water Resources Agent, Sr.
IDWR - Western Region
2735 Airport Way
Boise, ID 83705-5082
(208) 334-2190 phone
(208) 334-2348 fax



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082

PHONE: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C.L. "BUTCH" OTTER, Governor
GARY SPACKMAN, Director

October 9, 2013

LAVAR THORNTON
C/O LORI GRAVES
SPF WATER ENGINEERING LLC
300 E MALLARD DR STE 350
BOISE ID 83706

Re: Amending Application for Permit No. 63-33401

Dear Lori:

We received the "application for amendment of permit application" the other day. Although the intent is clear, this is a homemade version of amending an application for permit. Water right filings should be on department forms. This does not include an "application for amendment of permit application" form.

An application for permit can be amended one of two ways to be acceptable by the department. One, changes can be made and endorsed on the original application for permit form. Two, a completed replacement application for permit form, labeled as amended, can be filed.

The "amendment of permit" fee of \$100 does not apply in this scenario. A re-advertising fee of \$50 would apply, I. C. §42-221F.

The filing is therefore returned. A \$50 refund will be issued when the correct filing is made. Please let me know if you need more information. Thank you for your attention to these matters.

Sincerely,

A handwritten signature in black ink, appearing to read 'Steve Lester'.

Steve Lester
Water Rights Supervisor

Enclosure



October 3, 2013

John Westra
IDWR Western Region Office
2735 Airport Way
Boise, ID 83705

RECEIVED

OCT 07 2013

WATER RESOURCES
WESTERN REGION

Subject: Amended Application for Permit 63-33401

Dear John,

Enclosed on behalf of Layne and Lori Thornton is an *Amended Application for Permit* seeking to include three additional wells. Two of these three wells are authorized points of diversion for decreed water rights 63-2986, 63-31951, 63-31953 and permit 63-33074 with the third well currently under construction as authorized by permit 63-33074. Also included is a signed response form indicating the applicant's acceptance of IDWR's proposed measurement and monitoring conditions per your letter dated July 12, 2013 with minor modifications as suggested below.

Based on our telephone conversation last Friday, it is our understanding that the Department will accept static water level measurements from one of the four proposed wells, as opposed to requiring level measurements of each well. We expect this will improve water level measurement results as the well currently under construction can be fitted with a sounding tube. Also, rather than requiring installation of flow meters on each of the four wells, it is our understanding that the intent of the conditions to measure all of the water diverted to the place of use described by application 63-33401, which can be accomplished with installation of two flowmeters. One meter will be located on the Section 34 well and a second meter on the pipeline supplying the place of use from the three wells located in Section 3. These allowances will lessen the financial burden to the applicant while adequately satisfying the Department's measurement and monitoring requirements as specified in your letter referenced above.

Check No. 10649 for \$100 is enclosed for the re-advertising fee. Thank you very much for your consideration and assistance in this matter. Please call me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lori Graves", is written over a horizontal line.

Lori Graves
Water Rights Specialist

Cc: Layne and Lori Thornton
Lavar Thornton

Enclosures

SPF file number: 851.0010

S. Ada Ground Water

RESPONSE FORM

Applicant Name: LAYNE AND LORI THORNTON
3224 SWAN FALLS RD
KUNA ID 83634

Application No: 63-33401

(Please read carefully and mark one)

☒ **YES**—I am willing to comply with the additional measurement/
monitoring conditions as part of an approval of my
application for permit. *(as specified in the attached cover
letter dated 10/3/2013)*

OR

☐ **NO**—I am not willing to accept the additional measurement/
monitoring conditions as part of an approval of my
application for permit. I request my application continued
to be held by the Department--up to 1 year.

OR

☐ **WITHDRAW**--I request my application for permit be withdrawn.

Signed this 1st day of October 2013

Applicant Signature _____

Printed Applicant Name _____

Return Form on or before September 1, 2013

Untimely responses will result in the application ordered void.

Submit the Form to: **Attn: J. Westra**
Idaho Department of Water Resources
2735 Airport Way
Boise ID 83705

MEMORANDUM

Type: In Office Conversation

Telephone

Meeting Notes

Follow-up

Log of Events

Other _____

To: File 63-3340

From: J. Westra, Western Reg.

Date: 10/1/13

RE: Notice of Intent to Void Letter 10/1/13 Deadline

10/1/13 Lori Graves, SPF Engineering

Applicant wants to move forward with conditions - "Yes"

Needs to amend application to add additional wells

(Will readvertise). Make sure response form is included
with amended application.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 11, 2013

Layne and Lori Thornton
3224 Swan Falls RD
Kuna ID 83634

RE: NOTICE OF INTENT TO VOID

New Ground Water Appropriation Application No. 63-33401

Dear Applicants:

On July 12, 2013, the Department sent you a letter that provided information on the ground water aquifer at the location of the above described new appropriation application. The letter outlined conditions of approval that likely would be placed on new water appropriation approval (permit). You were asked to respond on your willingness to comply with the additional conditions or withdraw your application on the form enclosed. To date, we have not received a response from you.

Notice of Intent to Void

Please carefully read the previous sent letter and information enclosed. Fill out the attached "Response Form" and submit it to this office. *If we do not receive a response from you on or before **October 1, 2013**, your application will be ordered void.*

Should you have questions, please contact me at the Western Regional Office, phone 208-334-2190.

Sincerely,

A handwritten signature in cursive script that reads "John Westra".

John Westra, Manager

Enclosure: 07/12/13 letter, response form

RESPONSE FORM

Applicant Name: LAYNE AND LORI THORNTON
3224 SWAN FALLS RD
KUNA ID 83634

Application No: 63-33401

(Please read carefully and mark one)

☐ **YES**—I am willing to comply with the additional measurement/
monitoring conditions as part of an approval of my
application for permit.

OR

☐ **NO**—I am not willing to accept the additional measurement/
monitoring conditions as part of an approval of my
application for permit. I request my application continued
to be held by the Department--up to 1 year.

OR

☐ **WITHDRAW**--I request my application for permit be withdrawn.

Signed this _____ day of _____ 2013

Applicant Signature _____

Printed Applicant Name _____

Return Form on or before **September 1, 2013**

Untimely responses will result in the application ordered void.

Submit the Form to: **Attn: J. Westra**
Idaho Department of Water Resources
2735 Airport Way
Boise ID 83705



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082

PHONE: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C.L. "BUTCH" OTTER, Governor
GARY SPACKMAN, Director

July 12, 2013

Layne and Lori Thornton
3224 Swan Falls Rd
Kuna Id 83634

RE: South Ada County Ground Water Area
Ground Water Application for Permit 63-33401—Thornton

Dear Mr. and Mrs. Thornton

Background

As you aware, the processing of the above ground water application has been delayed by the Department due to concerns regarding the cold water aquifer in the area. The cold water aquifer has been steadily declining since the 1960's when ground water diversions were approximately only 100 cfs. Today, the diversion rate has grown to approximately 600 cfs. Low temperature ground water (greater than 85 degrees F) is now being encountered in some areas at depths near 400 feet. Our water statutes prohibit the use of low temperature geothermal water for irrigation unless the heat value is primarily utilized first. At present, the Department has very limited data and knowledge regarding the area hydrology and aquifer characteristics. To obtain a true picture of the area, additional monitoring data and study is needed.

New Appropriations

Our water statutes require the Department to evaluate certain criteria in the processing of new appropriation applications. *Injury to existing water rights and sufficiency of water supply* are two priority criteria. The Department director is also charged with the promotion of full economic and multiple use development of the water resources of the state. Given these dual responsibilities which must be balanced, the Department will consider authorizing some new water appropriations contingent on the permit holder's willingness to comply with certain measurement and aquifer monitoring activities. As data and information is compiled by the permit holders, a better picture of the area aquifer hydrology and source sufficiency will materialize. Please consider the following measurement and monitoring conditions that could likely be placed on a new water appropriation approval:

Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.

The right holder shall install or construct a straight length of conduit or ditch suitable for installation of a device for measuring the entire flow of water being diverted in connection with this right. If the right holder uses conduit, the straight length of conduit shall be at least fifteen times the diameter of the conduit and shall be above ground or otherwise easily accessible.

The right holder shall install a measuring device acceptable to the Department at the point of diversion authorized under this right. The measuring device shall be capable of displaying diversion flow rate and totalized volume measurement. The right holder shall record the flow rate and volume measurements monthly for any calendar year in which water is diverted and used in connection with this right until proof of beneficial use is filed. The records shall be made available to the Department upon request.

The point of diversion (well) authorized for this right shall include a measuring device or other suitable method to allow measurement of the static water level in the well. Water level measurements shall be made monthly throughout the year from the beginning of the diversion and use of water in connection with this right until proof of beneficial use is filed. The records shall be made available to the Department upon request.

*Proof of application of water to beneficial use shall be submitted no sooner than **January 1, 2017, and no later than January 1, 2018.** A report with no less than 4 years of diversion measurement and aquifer level water monitoring data shall be submitted in connection with filing proof of beneficial use. Submittal of a proof of beneficial use statement without the required report will not be accepted by the Department and may result in cancellation of the permit.*

Prior to submitting proof of beneficial use, the right holder shall not assign ownership of the permit to another individual, corporation, partnership, or association without prior approval of the Department

Diversion and use of water with a temperature greater than 85 degrees Fahrenheit is not authorized under this right.

Failure of the right holder to comply with any condition of approval is cause for the Director to cancel this permit.

If the Department determines based on credible evidence, measurement reports, area data or otherwise that diversion and use of groundwater under this right is causing material injury to any senior water right(s), the Department may order the diversion reduced, the diversion curtailed, or the right holder provide adequate mitigation to remedy the injury.

Costs-Factors

Bear in mind, there are significant costs associated with these conditions-- flow/volume meters, well modifications, and equipment installations. These costs would be in addition to the project investment and would be shouldered by the permit holder. The factors of the diversion possibly being reduced/curtailed, project investment, and actual water benefit should all be weighed carefully.

Intent

The purpose of this letter is to request your intent and willingness to comply with the above additional monitoring conditions as part of a potential approval of your application. The Department asks you to convey your intent by marking your choice on the attached response form:

YES—I am willing to comply with the additional measurement/monitoring conditions contingent on the approval of my application for permit.

OR

NO—I am not willing to accept the additional measurement/monitoring conditions as part of an approval of my application for permit. I request my application continued to be held by the Department—an applicant may request an application be held up to 1 year.

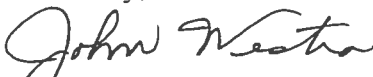
OR

WITHDRAW—I request my application for permit be withdrawn.

Please sign, date, and return the response form to the Department on or before **September 1, 2013**. An untimely or no response will result in the application being ordered void.

Should you have questions, please contact me or Rachel Sommer at the Western Regional Office, phone 208-334-2190.

Sincerely,



John Westra, Manager

Enclosure: response form, flow meter standards and listing

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES (IDWR)

**MINIMUM ACCEPTABLE STANDARDS
FOR OPEN CHANNEL AND CLOSED CONDUIT
MEASURING DEVICES**

The source and means of diversion of water, whether surface or ground water, generally affects the selection of a measuring device. Surface water sources such as streams, springs and waste channels are normally diverted into open channels (ditches or canals), but closed conduits (pipes or culverts) are also used. Ground water is usually diverted into pipes (which may also discharge into open channels).

Measuring devices when required by IDWR are to be installed at or near the point of diversion from the public water source.

I. MEASUREMENTS IN OPEN CHANNELS

The following discussion is applicable only to diversions from surface water sources. Measurement of a ground water diversion with an open channel measuring device must be pre-approved by the IDWR.

A. Standard Open Channel Measuring Devices

All open channel surface water diversions should be measured using one of the following standard open channel flow measuring devices commonly used in Idaho:

- | | |
|---|---|
| • Weirs: contracted or suppressed rectangular weirs, Cipolletti weir, 90 degree V-notch weir | • Flumes: Parshall flume, trapezoidal flume, ramped flume (ramped, broad-crested weir) |
| • Submerged Orifices: submerged rectangular orifice, constant head orifice | • Acoustic: acoustic Doppler flow meter (ADFM), acoustic Doppler current profiler |

The installed flow rate accuracy of open channel measurement devices must be +/- 10.0% as compared to an acceptable open channel current meter or other standard portable measuring devices such as an acoustic Doppler flow meter or acoustic Doppler current profiler.

Construction, installation and operation of these devices should follow published guidelines, such as those published by the United States Bureau of Reclamation¹

B. Non-standard open channel devices: Rated Structures or Rated Sections

Any weir, flume, or other measuring device that has not been constructed, installed, or maintained correctly and therefore does not measure flow in the standard manner consistent with standard rating tables or curves is considered to be a non-standard device. IDWR may authorize the use of non-standard devices and rated sections provided the device or section is rated or calibrated against a set of flow measurements using an acceptable open channel current meter or standard portable open channel measuring device. Examples of standard portable open channel measuring devices include the acoustic Doppler flow meter, the acoustic Doppler current profiler, or a portable flume. These devices are acceptable provided they are installed and operated according to all relevant manufacturer recommendations.

Further information and requirements are available from IDWR upon request.

¹ The Bureau of Reclamation measurement guidelines can be found at;
http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/BoR_WMM_%202001revision.pdf

II. CLOSED CONDUIT MEASURING DEVICES

The following discussion is applicable to measurement of diversions from any water source that diverts via a full-flowing, closed conduit.

A. Standard Closed Conduit Measuring Devices

A certified meter is required on new installations of measuring devices for closed conduit or pipe line diversions. A certified meter is a model of flow meter that has participated in independent third party testing and has been approved by IDWR for use. IDWR has published a list of meters that have participated in independent third party testing² and have been certified for use where the installation configuration and application meet manufacturer's requirements. Tests were conducted for both accuracy and repeatability on all submitted models, and a pass/fail rating awarded. A list of these meters may be found at:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/Approved_flow_meter_list.pdf.

Owners or operators who install a certified meter without the minimum manufacturer spacing requirements, or otherwise inconsistent with manufacturer's specifications, may need to provide an adequate testing section of straight pipe located somewhere on the diversion system either upstream or downstream of the installed flow meter. This testing section can be excavated pipeline as long as the section of pipe carries all water being measured through the installed flow meter. Water users choosing to expose pipe will be required to excavate the pipe at their expense at the request of the district hydrographer, watermaster and/or IDWR staff.

B. Non-standard Closed Conduit Measuring Devices: Requests for Variance

In some cases, site conditions preclude use of a certified meter, and another meter or method of measurement will produce similarly accurate results. In cases where the user can show that a proposed alternative meter or method would be as accurate as, or otherwise is better suited to an application than any of the meters on the approved list, a user can propose using an alternative meter or method by submitting a Request for Variance Form, available from IDWR. If a request is submitted and granted, the water user bears the risk that the alternative meter or method will perform as expected.

The following alternate measurement methods may be considered:

- Development of a Power Consumption Coefficient (PCC), which is a ratio of power usage to water withdrawal. Acceptance of the PCC method may be provided *for qualifying irrigation diversions only*;
- Use of an hour meter (time clock) *for qualifying diversions only*;
- Use of an acceptable flow meter that was installed *prior to the date of the measurement order*;
- *For irrigation diversions only*, use of an acceptable non-certified flow meter where it can be shown that installation of a certified flow meter would be burdensome or ineffective.

If a meter is already installed, that meter may be used if the meter is field-tested by IDWR staff, the water district watermaster, or a district hydrographer using a portable standard flow meter and upon a determination that the meter is installed properly and accurate to within $\pm 10\%$ of actual rate of flow and volume. If a non-certified meter is approved and installed but does not pass a field check, IDWR may require the water user to replace the meter with a certified meter at the water user's expense.

If an alternative method is approved and that method is later found to be insufficient, the variance will be withdrawn and a certified meter will be required to be installed. The suitability of any pumping station for an hour meter or the PCC method of measurement will be based on criteria found in this document and in the document entitled *IDWR ESPA Water Measurement and Reporting Guidelines*³.

² Testing was conducted at the Utah Water Research Laboratory (UWRL), a National Institute of Standards and Technology (NIST) traceable lab in Logan, Utah.

³ This document can be found at:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/IDWRESPA_WaterMeasurement_ReportingGuidlines.pdf

Idaho Department of Water Resources List of Approved Closed Conduit Flow meters

The table below lists flow meters that have been tested and approved by IDWR for use in closed conduit measurement applications where the installation configuration and application meet manufacturer's requirements for the selected model. These approved flow meters were subject to testing requirements outlined by IDWR and conducted by staff from Utah State's NIST¹ traceable lab in Logan Utah and performed at or above IDWR minimum acceptable standards for accuracy when installed in piping distances that met or exceeded minimum straight run piping requirements specified by IDWR. The approved list is current as of this printing, but may change as additional models and manufacturers undergo testing and approval. The current version of these standards, including this list, is posted on the IDWR Internet site at the following URL:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/Approved_flow_meter_list.pdf

Note that not all models are appropriate for every application. Pipe size, available straight pipe lengths, water chemistry, pressure, velocity, environmental exposure, and power requirements are among the factors affecting whether a given meter will perform for a given application. Prior to selecting a meter, consult the manufacturer's installation requirements to assure they can be met.

Manufacturer	Model/Specifications	Type	IDWR-accepted Pipe Applications (Nominal Pipe Size)
Siemens	CLAMP-ON ULTRASONIC -SITRANS FUS 1010 w/ HIGH PRECISION TRANSDUCERS	Clamp-On Ultrasonic	>12"
Siemens	SITRANS F M MAGFLO MAG 5100W w/ 5000 converter	Full profile Electro-Magnetic	1" to 78"
Siemens	SITRANS FM, MAGFLO 8000, model 7ME6880	Full profile Electro-Magnetic	1" to 48"
Fuji	Time Delta C w/ 1MHz transducers	Clamp-On Ultrasonic	>12"
Seametrics	AG 2000	Full profile Electro-Magnetic	4" to 10"
GE Panametrics	AT868 w/ 1MHz transducers	Clamp-On Ultrasonic or Wetted Transducer	>12"
McCrometer	Ultra Mag w/ M-Series Converter	Full profile Electro-Magnetic	2" to 48"

¹ NIST - National Institute of Standards and Technology.

Manufacturer	Model/Specifications	Type	IDWR-accepted Pipe Applications (Nominal Pipe Size)
Badger	M2000 Amplifier w/ M2000 Detector	Full profile Electro-Magnetic	1/4" to 54"
Khrone	Enviromag 2000 w/ Optiflux 2000 F/G	Full profile Electro-Magnetic	3/8" to 80"
Rosemount	8705 w/ 8732E transmitter	Full profile Electro-Magnetic	1/2" to 36"
Burkert	8054/8055 w/ Magflow transmitter	Full profile Electro-Magnetic	1" to 80"
Sparling	Tiger Mag W/FM6561051110 Converter	Full profile Electro-Magnetic	3/8" to 48"
Sensus	IPerl	Full profile Electro-Magnetic	5/8"-1"
Master Meter	Octave	Full Profile Ultrasonic	2"-10"

RESPONSE FORM

Applicant Name: LAYNE AND LORI THORNTON
3224 SWAN FALLS RD
KUNA ID 83634

Application No: 63-33401

(Please read carefully and mark one)

____ **YES**—I am willing to comply with the additional measurement/
monitoring conditions as part of an approval of my
application for permit.

OR

____ **NO**—I am not willing to accept the additional measurement/
monitoring conditions as part of an approval of my
application for permit. I request my application continued
to be held by the Department--up to 1 year.

OR

____ **WITHDRAW**--I request my application for permit be withdrawn.

Signed this _____ day of _____ 2013

Applicant Signature _____

Printed Applicant Name _____

Return Form on or before **September 1, 2013**

Untimely responses will result in the application ordered void.

Submit the Form to: **Attn: J. Westra**
Idaho Department of Water Resources
2735 Airport Way
Boise ID 83705



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082

PHONE: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C.L. "BUTCH" OTTER, Governor
GARY SPACKMAN, Director

July 12, 2013

Layne and Lori Thornton
3224 Swan Falls Rd
Kuna Id 83634

RE: South Ada County Ground Water Area
Ground Water Application for Permit 63-33401—Thornton

Dear Mr. and Mrs. Thornton

Background

As you aware, the processing of the above ground water application has been delayed by the Department due to concerns regarding the cold water aquifer in the area. The cold water aquifer has been steadily declining since the 1960's when ground water diversions were approximately only 100 cfs. Today, the diversion rate has grown to approximately 600 cfs. Low temperature ground water (greater than 85 degrees F) is now being encountered in some areas at depths near 400 feet. Our water statutes prohibit the use of low temperature geothermal water for irrigation unless the heat value is primarily utilized first. At present, the Department has very limited data and knowledge regarding the area hydrology and aquifer characteristics. To obtain a true picture of the area, additional monitoring data and study is needed.

New Appropriations

Our water statutes require the Department to evaluate certain criteria in the processing of new appropriation applications. *Injury to existing water rights and sufficiency of water supply* are two priority criteria. The Department director is also charged with the promotion of full economic and multiple use development of the water resources of the state. Given these dual responsibilities which must be balanced, the Department will consider authorizing some new water appropriations contingent on the permit holder's willingness to comply with certain measurement and aquifer monitoring activities. As data and information is compiled by the permit holders, a better picture of the area aquifer hydrology and source sufficiency will materialize. Please consider the following measurement and monitoring conditions that could likely be placed on a new water appropriation approval:

Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.

The right holder shall install or construct a straight length of conduit or ditch suitable for installation of a device for measuring the entire flow of water being diverted in connection with this right. If the right holder uses conduit, the straight length of conduit shall be at least fifteen times the diameter of the conduit and shall be above ground or otherwise easily accessible.

The right holder shall install a measuring device acceptable to the Department at the point of diversion authorized under this right. The measuring device shall be capable of displaying diversion flow rate and totalized volume measurement. The right holder shall record the flow rate and volume measurements monthly for any calendar year in which water is diverted and used in connection with this right until proof of beneficial use is filed. The records shall be made available to the Department upon request.

The point of diversion (well) authorized for this right shall include a measuring device or other suitable method to allow measurement of the static water level in the well. Water level measurements shall be made monthly throughout the year from the beginning of the diversion and use of water in connection with this right until proof of beneficial use is filed. The records shall be made available to the Department upon request.

*Proof of application of water to beneficial use shall be submitted no sooner than **January 1, 2017, and no later than January 1, 2018.** A report with no less than 4 years of diversion measurement and aquifer level water monitoring data shall be submitted in connection with filing proof of beneficial use. Submittal of a proof of beneficial use statement without the required report will not be accepted by the Department and may result in cancellation of the permit.*

Prior to submitting proof of beneficial use, the right holder shall not assign ownership of the permit to another individual, corporation, partnership, or association without prior approval of the Department

Diversion and use of water with a temperature greater than 85 degrees Fahrenheit is not authorized under this right.

Failure of the right holder to comply with any condition of approval is cause for the Director to cancel this permit.

If the Department determines based on credible evidence, measurement reports, area data or otherwise that diversion and use of groundwater under this right is causing material injury to any senior water right(s), the Department may order the diversion reduced, the diversion curtailed, or the right holder provide adequate mitigation to remedy the injury.

Costs-Factors

Bear in mind, there are significant costs associated with these conditions-- flow/volume meters, well modifications, and equipment installations. These costs would be in addition to the project investment and would be shouldered by the permit holder. The factors of the diversion possibly being reduced/curtailed, project investment, and actual water benefit should all be weighed carefully.

Intent

The purpose of this letter is to request your intent and willingness to comply with the above additional monitoring conditions as part of a potential approval of your application. The Department asks you to convey your intent by marking your choice on the attached response form:

YES—I am willing to comply with the additional measurement/monitoring conditions contingent on the approval of my application for permit.

OR

NO—I am not willing to accept the additional measurement/monitoring conditions as part of an approval of my application for permit. I request my application continued to be held by the Department—an applicant may request an application be held up to 1 year.

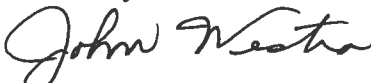
OR

WITHDRAW—I request my application for permit be withdrawn.

Please sign, date, and return the response form to the Department on or before **September 1, 2013**. An untimely or no response will result in the application being ordered void.

Should you have questions, please contact me or Rachel Sommer at the Western Regional Office, phone 208-334-2190.

Sincerely,


John Westra, Manager

Enclosure: response form, flow meter standards and listing

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES (IDWR)**

**MINIMUM ACCEPTABLE STANDARDS
FOR OPEN CHANNEL AND CLOSED CONDUIT
MEASURING DEVICES**

The source and means of diversion of water, whether surface or ground water, generally affects the selection of a measuring device. Surface water sources such as streams, springs and waste channels are normally diverted into open channels (ditches or canals), but closed conduits (pipes or culverts) are also used. Ground water is usually diverted into pipes (which may also discharge into open channels).

Measuring devices when required by IDWR are to be installed at or near the point of diversion from the public water source.

I. MEASUREMENTS IN OPEN CHANNELS

The following discussion is applicable only to diversions from surface water sources. Measurement of a ground water diversion with an open channel measuring device must be pre-approved by the IDWR.

A. Standard Open Channel Measuring Devices

All open channel surface water diversions should be measured using one of the following standard open channel flow measuring devices commonly used in Idaho:

- **Weirs:** contracted or suppressed rectangular weirs, Cipolletti weir, 90 degree V-notch weir
- **Flumes:** Parshall flume, trapezoidal flume, ramped flume (ramped, broad-crested weir)
- **Submerged Orifices:** submerged rectangular orifice, constant head orifice
- **Acoustic:** acoustic Doppler flow meter (ADFM), acoustic Doppler current profiler

The installed flow rate accuracy of open channel measurement devices must be +/- 10.0% as compared to an acceptable open channel current meter or other standard portable measuring devices such as an acoustic Doppler flow meter or acoustic Doppler current profiler.

Construction, installation and operation of these devices should follow published guidelines, such as those published by the United States Bureau of Reclamation¹

B. Non-standard open channel devices: Rated Structures or Rated Sections

Any weir, flume, or other measuring device that has not been constructed, installed, or maintained correctly and therefore does not measure flow in the standard manner consistent with standard rating tables or curves is considered to be a non-standard device. IDWR may authorize the use of non-standard devices and rated sections provided the device or section is rated or calibrated against a set of flow measurements using an acceptable open channel current meter or standard portable open channel measuring device. Examples of standard portable open channel measuring devices include the acoustic Doppler flow meter, the acoustic Doppler current profiler, or a portable flume. These devices are acceptable provided they are installed and operated according to all relevant manufacturer recommendations.

Further information and requirements are available from IDWR upon request.

¹ The Bureau of Reclamation measurement guidelines can be found at;
http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/BoR_WMM_%202001revision.pdf

II. CLOSED CONDUIT MEASURING DEVICES

The following discussion is applicable to measurement of diversions from any water source that diverts via a full-flowing, closed conduit.

A. Standard Closed Conduit Measuring Devices

A certified meter is required on new installations of measuring devices for closed conduit or pipe line diversions. A certified meter is a model of flow meter that has participated in independent third party testing and has been approved by IDWR for use. IDWR has published a list of meters that have participated in independent third party testing² and have been certified for use where the installation configuration and application meet manufacturer's requirements. Tests were conducted for both accuracy and repeatability on all submitted models, and a pass/fail rating awarded. A list of these meters may be found at:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/Approved_flow_meter_list.pdf.

Owners or operators who install a certified meter without the minimum manufacturer spacing requirements, or otherwise inconsistent with manufacturer's specifications, may need to provide an adequate testing section of straight pipe located somewhere on the diversion system either upstream or downstream of the installed flow meter. This testing section can be excavated pipeline as long as the section of pipe carries all water being measured through the installed flow meter. Water users choosing to expose pipe will be required to excavate the pipe at their expense at the request of the district hydrographer, watermaster and/or IDWR staff.

B. Non-standard Closed Conduit Measuring Devices: Requests for Variance

In some cases, site conditions preclude use of a certified meter, and another meter or method of measurement will produce similarly accurate results. In cases where the user can show that a proposed alternative meter or method would be as accurate as, or otherwise is better suited to an application than any of the meters on the approved list, a user can propose using an alternative meter or method by submitting a Request for Variance Form, available from IDWR. If a request is submitted and granted, the water user bears the risk that the alternative meter or method will perform as expected.

The following alternate measurement methods may be considered:

- Development of a Power Consumption Coefficient (PCC), which is a ratio of power usage to water withdrawal. Acceptance of the PCC method may be provided *for qualifying irrigation diversions only*;
- Use of an hour meter (time clock) *for qualifying diversions only*;
- Use of an acceptable flow meter that was installed *prior to the date of the measurement order*;
- *For irrigation diversions only*, use of an acceptable non-certified flow meter where it can be shown that installation of a certified flow meter would be burdensome or ineffective.

If a meter is already installed, that meter may be used if the meter is field-tested by IDWR staff, the water district watermaster, or a district hydrographer using a portable standard flow meter and upon a determination that the meter is installed properly and accurate to within $\pm 10\%$ of actual rate of flow and volume. If a non-certified meter is approved and installed but does not pass a field check, IDWR may require the water user to replace the meter with a certified meter at the water user's expense.

If an alternative method is approved and that method is later found to be insufficient, the variance will be withdrawn and a certified meter will be required to be installed. The suitability of any pumping station for an hour meter or the PCC method of measurement will be based on criteria found in this document and in the document entitled *IDWR ESPA Water Measurement and Reporting Guidelines*³.

² Testing was conducted at the Utah Water Research Laboratory (UWRL), a National Institute of Standards and Technology (NIST) traceable lab in Logan, Utah.

³ This document can be found at:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/IDWRESPA_WaterMeasurement_ReportingGuidelines.pdf

Idaho Department of Water Resources

List of Approved Closed Conduit Flow meters

The table below lists flow meters **that have been tested and approved by IDWR for use in closed conduit measurement applications where the installation configuration and application meet manufacturer's requirements for the selected model.** These approved flow meters were subject to testing requirements outlined by IDWR and conducted by staff from Utah State's NIST¹ traceable lab in Logan Utah and performed at or above IDWR minimum acceptable standards for accuracy when installed in piping distances that met or exceeded minimum straight run piping requirements specified by IDWR. The approved list is current as of this printing, but may change as additional models and manufacturers undergo testing and approval. The current version of these standards, including this list, is posted on the IDWR Internet site at the following URL:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/Approved_flow_meter_list.pdf

Note that not all models are appropriate for every application. Pipe size, available straight pipe lengths, water chemistry, pressure, velocity, environmental exposure, and power requirements are among the factors affecting whether a given meter will perform for a given application. Prior to selecting a meter, consult the manufacturer's installation requirements to assure they can be met.

Manufacturer	Model/Specifications	Type	IDWR-accepted Pipe Applications (Nominal Pipe Size)
Siemens	CLAMP-ON ULTRASONIC -SITRANS FUS 1010 w/ HIGH PRECISION TRANSDUCERS	Clamp-On Ultrasonic	>12"
Siemens	SITRANS F M MAGFLO MAG 5100W w/ 5000 converter	Full profile Electro-Magnetic	1" to 78"
Siemens	SITRANS FM, MAGFLO 8000, model 7ME6880	Full profile Electro-Magnetic	1" to 48"
Fuji	Time Delta C w/ 1MHz transducers	Clamp-On Ultrasonic	>12"
Seametrics	AG 2000	Full profile Electro-Magnetic	4" to 10"
GE Panametrics	AT868 w/ 1MHz transducers	Clamp-On Ultrasonic or Wetted Transducer	>12"
McCrometer	Ultra Mag w/ M-Series Converter	Full profile Electro-Magnetic	2" to 48"

¹ NIST - National Institute of Standards and Technology.

Manufacturer	Model/Specifications	Type	IDWR-accepted Pipe Applications (Nominal Pipe Size)
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Khrone	Enviromag 2000 w/ Optiflux 2000 F/G	Full profile Electro-Magnetic	3/8" to 80"
Rosemount	8705 w/ 8732E transmitter	Full profile Electro-Magnetic	1/2" to 36"
Burkert	8054/8055 w/ Magflow transmitter	Full profile Electro-Magnetic	1" to 80"
Sparling	Tiger Mag W/FM6561051110 Converter	Full profile Electro-Magnetic	3/8" to 48"
Sensus	IPerl	Full profile Electro-Magnetic	5/8"-1"
Master Meter	Octave	Full Profile Ultrasonic	2"-10"



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

March 30, 2012

LAYNE AND/OR LORI THORNTON
3224 SWAN FALLS RD
KUNA, ID 83634-1732

RE: South Ada County Ground Water Area
Application for Permit No. 63-33401 -- Thornton

Dear Applicant:

The purpose of this letter is to provide you with information regarding the local ground water aquifer sourced to your application and update you with the processing status of your application.

Ground Water Aquifer

The cold water aquifer in the area has been declining since the 1960's with an average rate of decline of 0.3 to 0.4 feet per year during the past 30 years. There appears to be a correlation between the increase in water right approvals and declines in the aquifer level. In 1960, the non domestic ground water diversions equaled approximately 100 cfs. By 1980, the cumulative diversion rate had approached 500 cfs and currently the withdrawal rate is approximately 600 cfs. It appears the aquifer is currently in overdraft as water levels have not yet stabilized to the current demand (see attached hydrologic memorandum).

Low temperature geothermal water (> 85 degrees) may be encountered as close as 400 feet in depth in this area. As water levels continue to decline, an increase in the ground water temperatures will occur. The reduced volume of cold water stored in the aquifer will cause an increase in the upwelling of geothermal waters from below. Our state water statutes require low temperature ground water be utilized primarily for the water heat value first and secondarily for the water value as in irrigation. Low temperature geothermal water cannot be a source for primary irrigation use.

At present, the Department has very limited data and knowledge regarding the area hydrology and aquifer characteristics. Additional data and information will continue to be compiled to obtain a true picture of the area ground water resources and potential for new water appropriations. However, recent reductions in Department resources and staff will make this a slow process; it will not likely be completed soon.

SCANNED
MAR 30 2012

New Appropriation Applications

Idaho Code (IC) 42-203A requires the Department to consider certain evaluation criteria in the processing of new appropriation applications. The applicant has the burden of proof and must provide evidence for the Department to evaluate the following criteria:

1. Will the new appropriation reduce the quantity injure existing water rights?
2. Is the water supply sufficient for the purpose for which it is sought?
3. Is the application made in good faith or for delay or speculation?
4. Does the applicant have sufficient financial resources to complete the project?
5. Will the proposed use conflict with the local public interest, where local public interest is defined as interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource?
6. Will the proposed use be contrary to the conservation of water resources within the State of Idaho?

Currently, there are 21 groundwater applications filed with our agency proposing a total flow rate of 27.5 cfs. in the area. Of the 21, the two Kuna-Cole 880 (Kirkwood) applications are protested. By priority received, the Kuna-Cole (Kirkwood) application no. 63-32860 is the next application to be processed (see attached application listing). A prehearing conference for this contested application is scheduled for early summer.

Options for Consideration

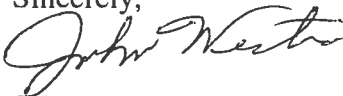
Given the limited hydrologic information and data regarding the aquifer, the following are options regarding your application:

- 1. Provide the Department convincing evidence and data that will satisfy the above evaluation criteria under IC 42-203A for continued processing. The evidence should include data analysis, arguments, and documents.*
- 2. Withdraw the Application; you may re-file at a later date if desired.*
- 3. Continue to have the application held until there is sufficient evidence and data available for the Department to further consider the application.*

It will be assumed you wish your application to continue to be held unless either convincing evidence and data (1) or an application withdrawal (2) is submitted.

Should you have questions, please contact me at the Western Regional Office, phone 334-2190.

Sincerely,



John Westra, Manager

Enclosure: application listings, boundary map, hydrologic memorandum, withdrawal form

SCANNED
MAR 30 2012

SOUTH ADA COUNTY GROUND WATER APPLICATIONS IDWR WESTERN REGION

GENERALLY

- ground water
- various (irrigation, municipal, etc.) use
- "Active" Status in database
- P/D in South Ada Co Ground Water Area of Concern
- Protested applications
- Advertised applications – no protests received
- Application being processed

<u>NAME</u>	<u>WR NUMBER</u>	<u>DATE FILED/ PRIORITY</u>	<u>CFS</u>	<u>USE</u>
1) Kuna-Cole 880 et al -to- Kirkwood Bank & Trust Co.	63-32680	05/22/07	5.22	IRR
2) Smith	63-33032	04/11/08	0.20	IRR
3) Halladay	63-33199	04/30/09	0.14	IRR
4) Brown	63-33235	07/07/09	0.20	IRR/ STOCK
5) Derr	63-33236	07/08/09	0.26	IRR/DOM/STOCK
6) Tippetts	63-33237	07/08/09	0.28	IRR/DOM/STOCK
7) Vollman	63-33261	08/06/09	0.20	IRR
8) Vollman	63-33262	08/06/09	0.20	IRR
9) Gust	63-33263	08/12/09	0.84	IRR/DOM
10) Kuna-Cole 880 et al -to- Kirkwood Bank & Trust Co.	63-33296	11/06/09	10.46	IRR
11) Vesel and/or Pupulidy	63-33312	12/04/09	0.18	IRR/STOCK
12) Hutchings	63-33207	05/15/09	3.00	IRR
13) Thornton	63-33401	07/12/10	0.84	IRR
14) Orlando -to- Axel	63-33402	07/21/10	0.20	IRR/DOM/STOCK
15) Orlando	63-33403	07/21/10	0.20	IRR/DOM/STOCK
16) Orlando -to- Fisher	63-33404	07/21/10	0.20	IRR/DOM/STOCK
17) Orlando -to- Wallace/Williams	63-33405	07/21/10	0.20	IRR/DOM/STOCK
18) D Yamamoto Development LLC	63-33415	08/19/10	2.98	IRR
19) Severe	63-33434	10/29/10	0.19	IRR/DOM
20) Fick	63-33531	06/13/11	0.76	IRR/DOM/STOCK
21) Behman	63-33598	11/02/11	0.78	IRR

TOTAL DIVERSION RATE ALL APPLICATIONS

27.53 cfs

SCANNED
MAR 30 2012

**WITHDRAWAL
OF
APPLICATION FOR PERMIT**

TO WHOM IT MAY CONCERN:

**I hereby withdraw Application for Permit to
Appropriate the Public Waters of the State of Idaho
No. _____.**

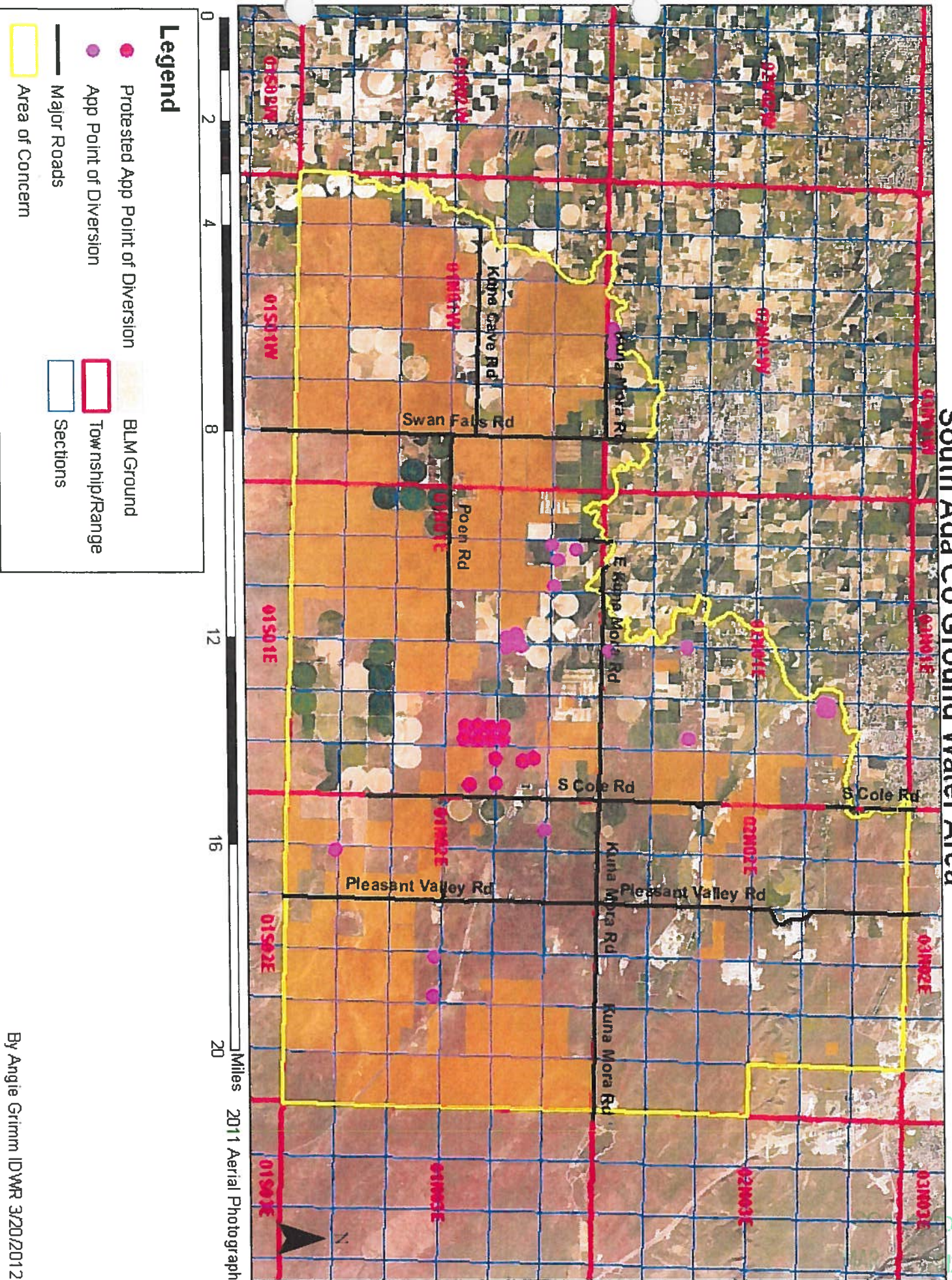
Signed this _____ day of _____, 20____.

Signature of Applicant

Printed Name of Applicant

SCANNED
MAR 30 2012

South Ada Co Ground Water Area



MEMO

State of Idaho

Department of Water Resources

322 E Front Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 287-4800 Fax: (208) 287-6700

Date: September 13, 2010

To: John Westra, Western Region

From: Dennis Dwyer, Hydrology Section, State Office

cc: Sean Vincent and Rick Raymondi

Subject: SE Kuna/S Boise Significant Water Right Development Proposals -- Revised

Introduction

A request was submitted to the Hydrology Section at the State Office to analyze a group of twenty-one permit applications for ground water development in the area southeast of Kuna. The request identified the following concerns:

- 1) **Sufficiency of cold water ground water supply.** Only a few deep wells exist in this area, many of which have encountered low temp geothermal water below 400 ft. Applications 63-12546 (200-500 ft), 63-32860 (350-650 ft), 63-33186 (200-431 ft), 63-33207 (300-480 ft), 63-33263 (190-465 ft), and 63-33296 (350-700 ft) all indicate a proposed water bearing zone below 400 ft.
- 2) **Potential injury to existing users and cumulative impact** the proposed appropriations may have on current water right users and the ground water resource in this area.
- 3) **Appropriation of ground water for the proposed uses in the public interest.** The State of Idaho (Penitentiary) has protested Tyson Fresh Meats Inc.'s application 63-12546 based on the claim that approval of this permit is not in the public's best interest due to close proximity to the Penitentiary and the potential negative impact to existing municipal uses there.

Summary of Water Right Applications

The location of proposed ground water development is the 216 mi² area southeast of Kuna defined by townships 02N01W, 02N01E, 02N02E, 01N01W, 01N01E, and 01N02E (Figure 1). There are currently 21 permit applications for development of ground water within this area. The primary use for most of these 21 applications is irrigation. The combined total maximum diversion rate is 54 cubic feet per second (cfs).

In addition to the 21 pending applications, there are 79 approved ground water permits with a combined total maximum diversion rate of 106 cfs that are currently being developed in this area. In

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combination, the pending and previously approved permits in the area amount to more than 160 cfs of ground water extraction, which is a significant increase considering the total maximum diversion rate for existing ground water rights in the area is approximately 600 cfs.

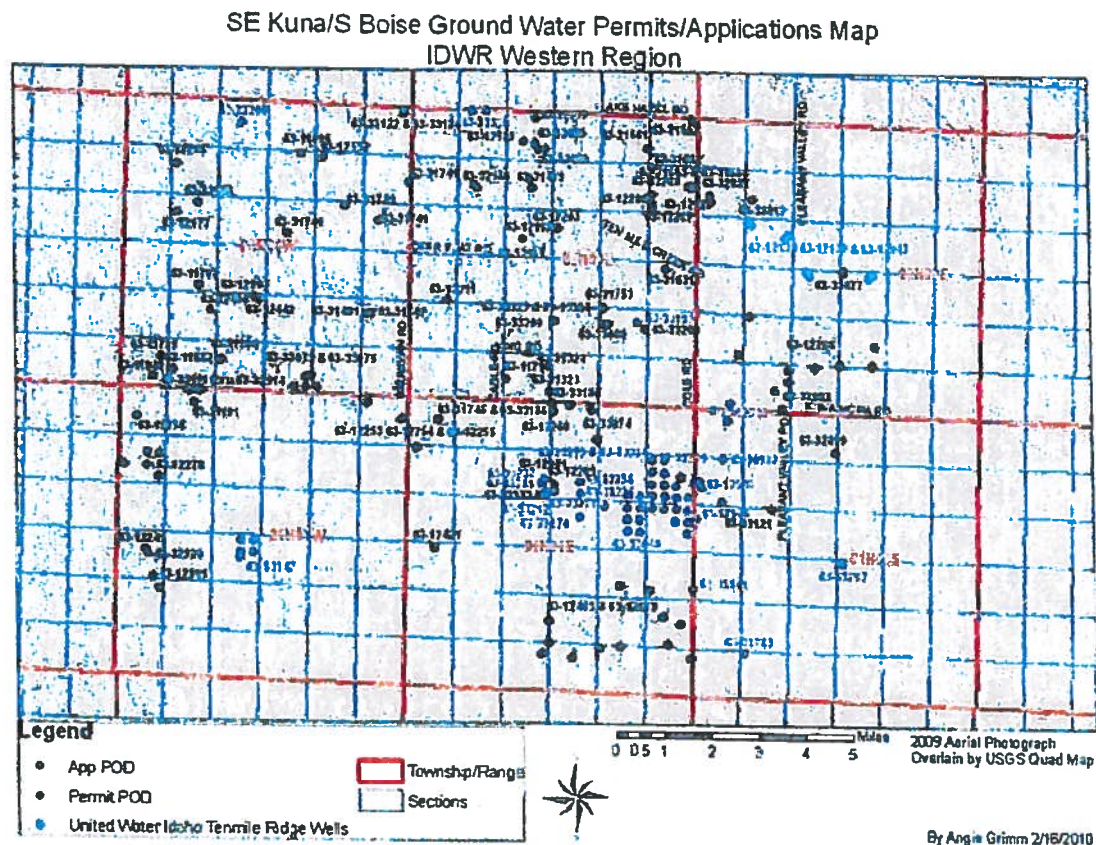


Figure 1. Pending and approved water right permits and applications.

Hydrogeology

The hydrogeology of the area consists of basalt flows and sedimentary units of the Idaho Group (Ralston and Chapman, 1970). The area of interest is bisected by a northeast trending zone of complex faulting and is at the edge of the basalt flows that are exposed at the surface southwest of Kuna (Mitchell, 1981). Shallow basalt flows encountered during drilling are generally thicker in the southwest portion of the study area (Figure 2). Sand, silt, clay, and gravel layers are below the basalt units and form the primary aquifer of the area.

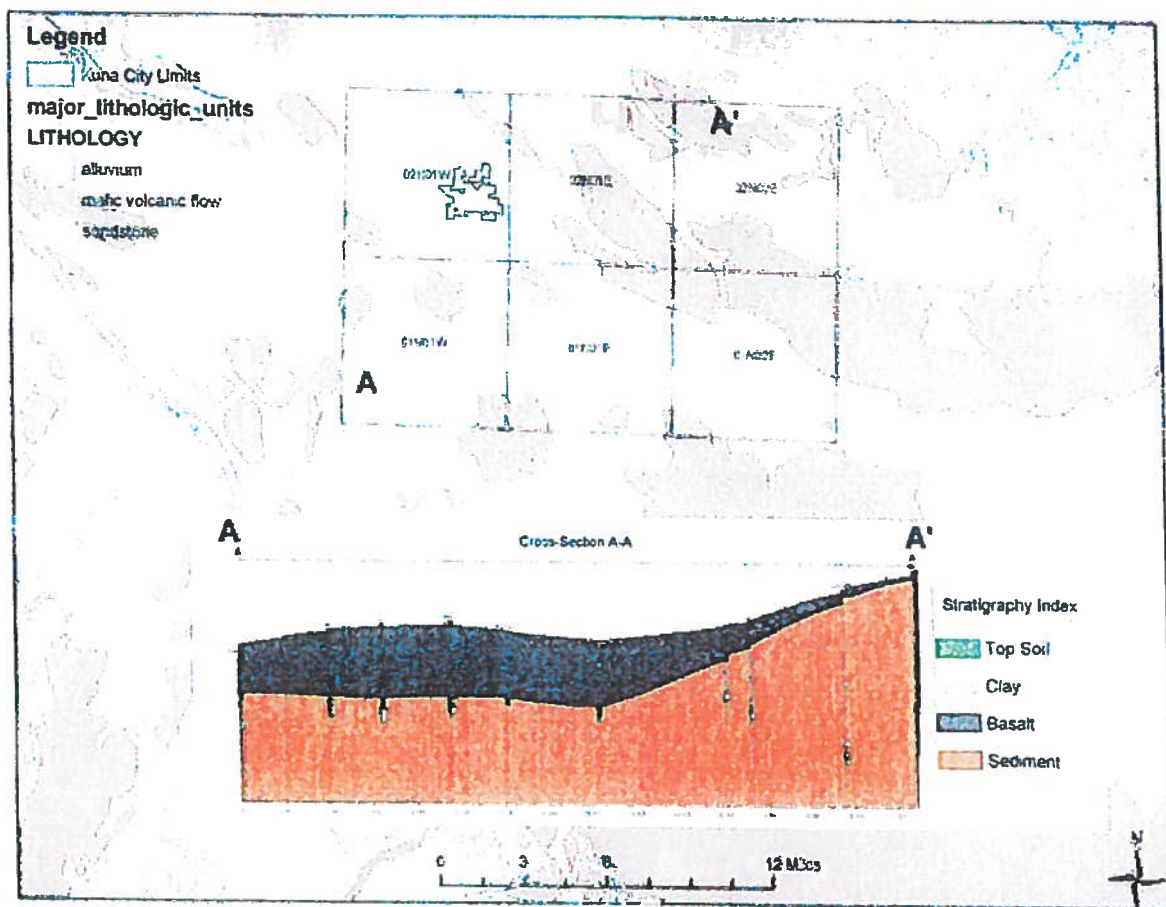


Figure 2. Generalized geologic cross section across the study area from the southwest (A) to the northeast (A').

The area has undergone significant faulting and both northeast and northwest trending faults are present (Otto and Wylie, 2003). Fault zones impact water temperatures by providing a conduit for geothermal water to flow upward into the overlying cold water aquifer within the Idaho Group (Mitchell, 1981).

Primary sources of recharge to the cold water aquifer are irrigation leakage (canal seepage and flood irrigation) and geothermal input (Otto and Wylie, 2003). Hydrographs for two area wells (02N01W18BBB1 and 02N01W04DDA1) suggest a positive response to development of the canal system in the Treasure Valley in the early 1900's (Figure 3). These hydrographs lend support to the notion that irrigation water is a significant source of aquifer recharge. The first well (02N01W18BBB1) is 300 feet deep and experienced a water level increase of approximately 50 feet between 1917 and 1953. The second well (02N01W04DDA1) is 203 feet deep, and demonstrates a water level increase of approximately 80 feet between 1914 and 1953. Based on these two hydrographs, it appears the response to surface recharge is less significant at depth since the shallower of the two wells showed the greater response.

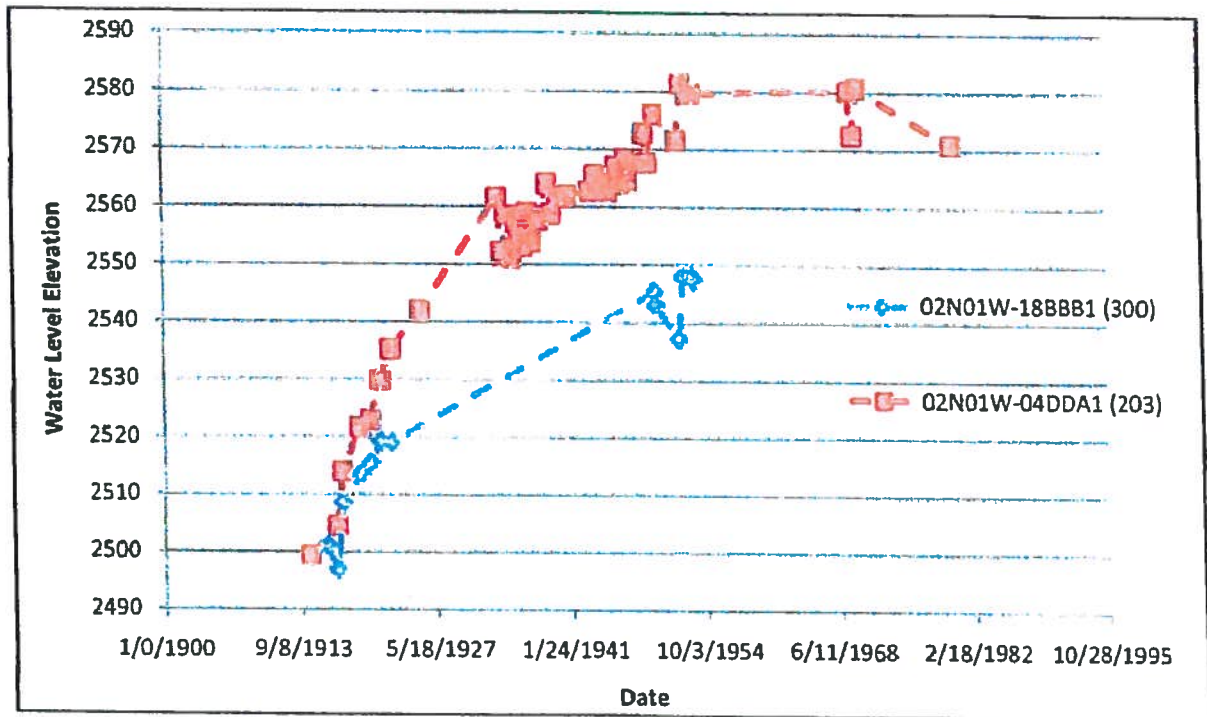


Figure 3. Hydrographs showing water level increases during the period following development of surface water irrigation in the area.

Ground water flow direction in the study area is generally to the south/southwest, towards the Snake River (Figure 4). Although gage data is limited, Snake River to the south of the study area is a gaining reach and receives ground water that discharges from this study area (Petrich, 2004; Newton, 1991). Based on the potentiometric map of the region (Figure 4), it appears a significant portion of the ground water flow across the study area discharges to the Snake River below the Murphy gage. The hydraulic conductivity of the aquifer varies, depending on the type of aquifer material encountered, with production rates ranging from 11 to over 3,000 gallons per minute (gpm). Transmissivity estimates based upon analysis of specific capacity data from well driller's reports range from approximately 1,000 ft²/day to 250,000 ft²/day.

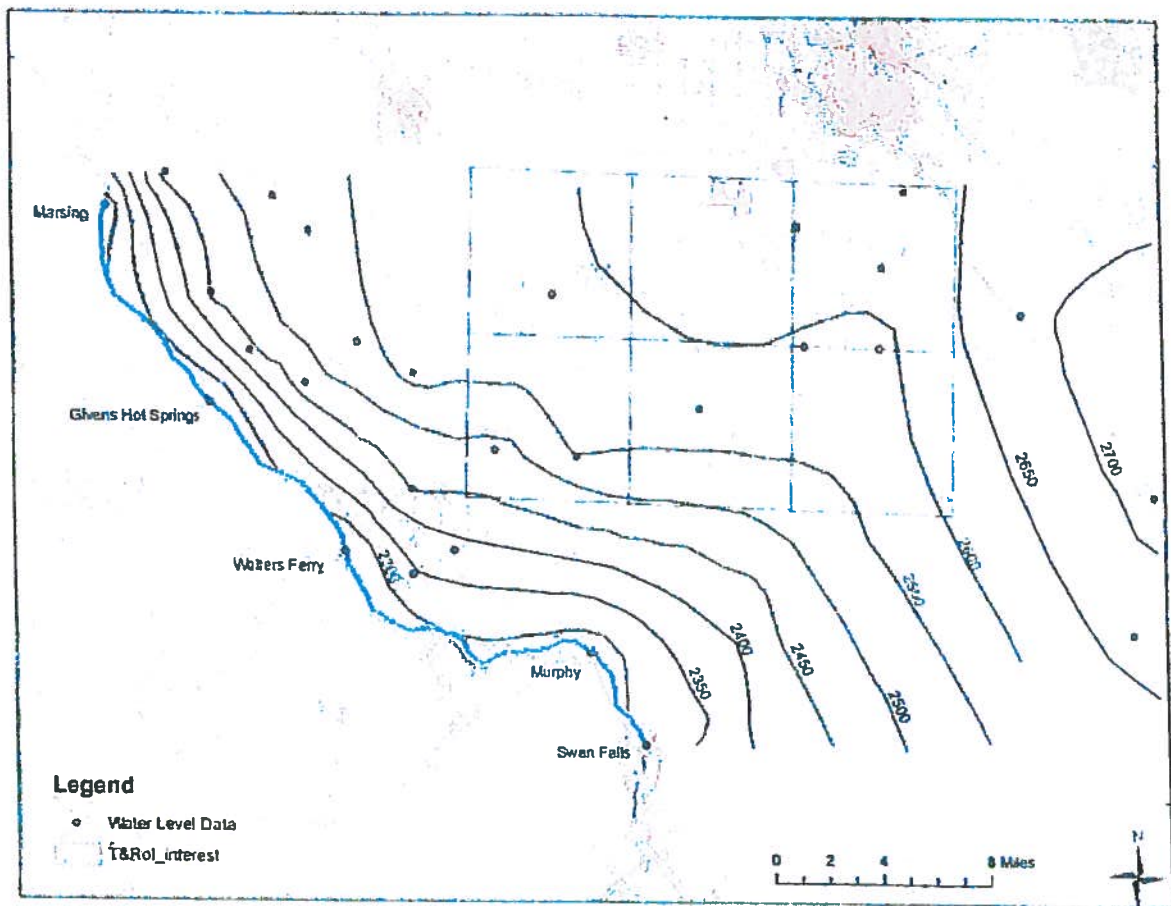


Figure 4. Potentiometric surface map for spring 2009.

Water levels have been declining since the 1960's with measured declines of approximately 10 to 13 feet during the past 30 years (Figure 5). The average rate of decline is approximately 0.3 to 0.4 feet per year, indicating the rate of aquifer recharge has been exceeded by rate of withdrawal. Figure 6 shows individual hydrographs for a suite of wells with detailed water level histories.

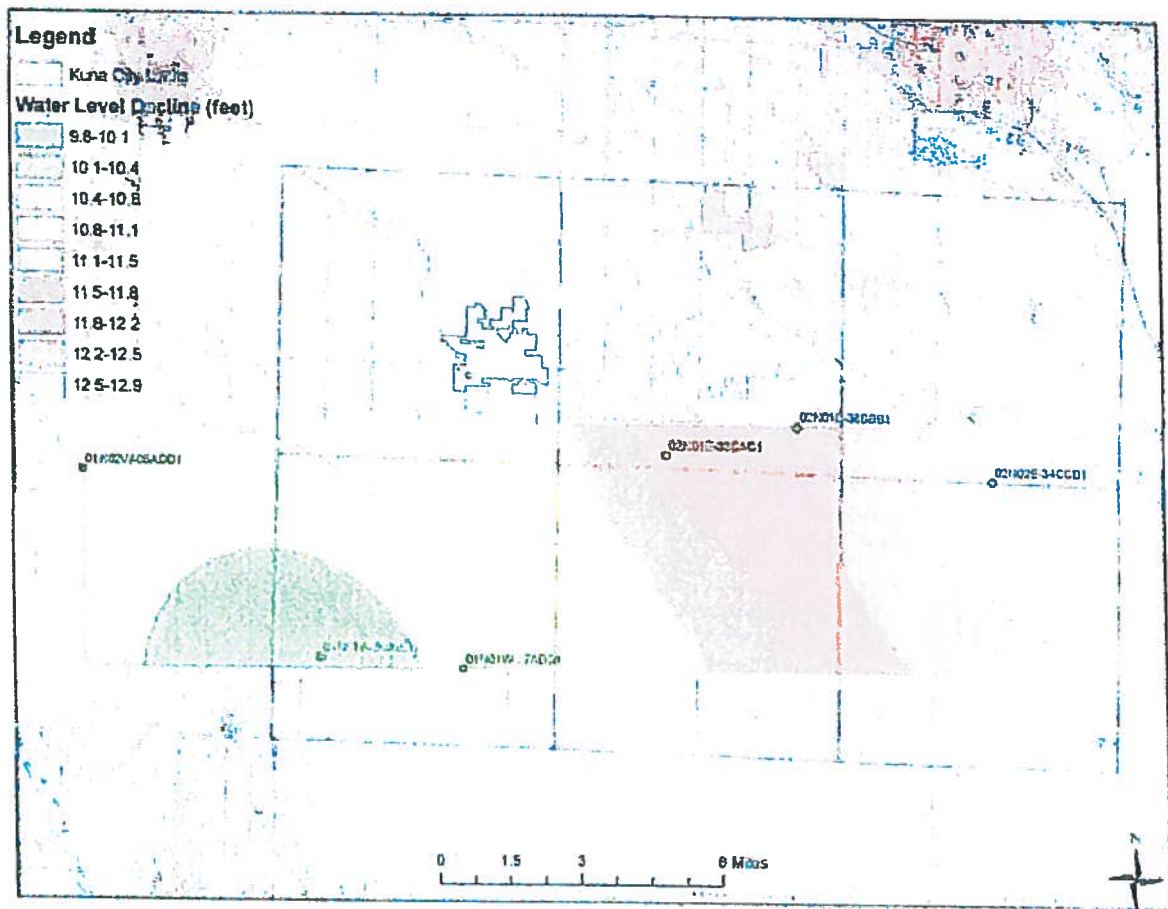


Figure 5. Water level declines for the period 1976 through 2009.

Response to Technical Concerns

1. **Sufficiency of a cold ground water supply.** Only a few deep wells exist in this area, many of which have encountered low temp geothermal water below 400 ft. Applications 63-12546 (200-500 ft), 63-32860 (350-650 ft), 63-33186 (200-431 ft), 63-33207 (300-480 ft), 63-33263 (190-465 ft), and 63-33296 (350-700 ft) all indicate a proposed water bearing zone below 400 ft.

The cold water aquifer has sufficient productivity to develop large capacity irrigation or municipal wells. This statement is based on the fact that many deep wells exist throughout this area that produce cold water. In addition, specific capacity data reviewed from driller's reports indicates high transmissivity values, supporting the conclusion that the aquifer has sufficient productivity for developing deep cold ground water wells.

Although the cold ground water supply is currently sufficient for additional well development in terms of aquifer productivity, the declining water levels indicate the aquifer is currently in an overdraft with respect to the local ground water budget. Future impacts from ground water permit applications and approved but undeveloped ground water permits may increase the rate

of water level decline and could cause an increase in water temperature from the geothermal contribution to the aquifer.

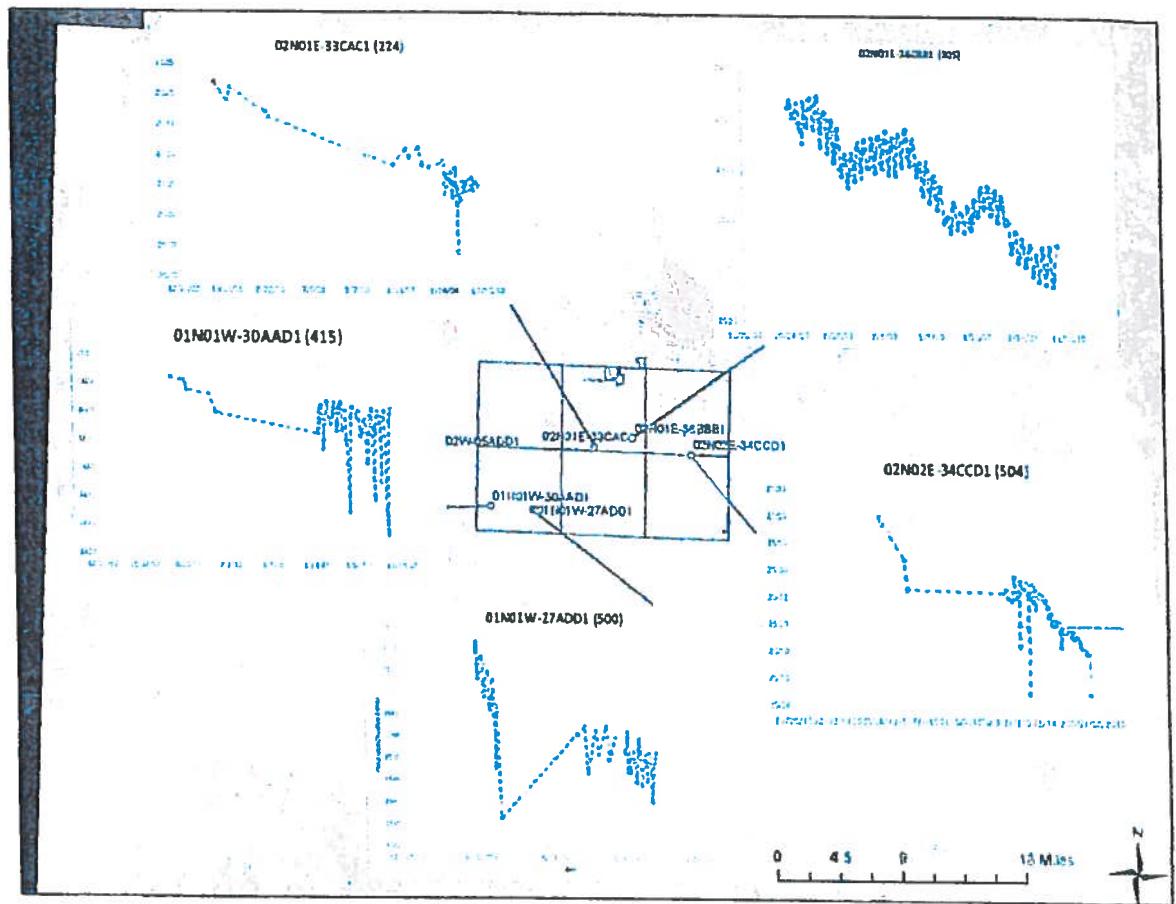


Figure 6. Hydrographs for select study area wells.

The recharge rate to the cold ground water aquifer appears insufficient to sustain additional ground water development without additional water level declines. Hydrographs and water level data indicate that the ground water pumping in this area has exceeded the recharge rate, resulting in ground water level declines. The declines indicate a portion of the ground water currently being withdrawn is being removed from storage. The magnitude and timing of the additional water level declines cannot be accurately predicted, but it can be assumed to at least be equal to or more likely exceed the historic water level declines. It is likely that ground water levels will continue to decline, until ground water withdrawals and recharge rates reach an equilibrium. The timing and water level at which this new equilibrium will be met cannot be accurately forecasted at this time.

At some point in the future, the depletions and decrease in head may be sufficient to allow the geothermal contribution to impact the cold water supply, resulting in elevated ground water

temperatures across the area. The timing and depth at which this may occur cannot be precisely determined due to a lack of data regarding the locations and rates of geothermal input into the cold water aquifer system.

To assess the potential of encountering low temperature geothermal water, a review of driller's reports and records within the IDWR geothermal database was conducted. Between the two data sources, 237 water temperature records were reviewed. Reported temperatures ranged from 50 to 99 degrees, with six wells reporting water temperatures classified as low temperature geothermal (85 degrees or greater).

Figure 7 is a plot of water temperature versus well depth. The relatively low correlation coefficient (R^2) of 0.31 indicates that temperature is not strongly correlated to total well depth. The weakly correlated data suggest a temperature gradient of approximately 17 degrees Fahrenheit for every 200 feet of depth (8.5 °F/100 ft). This gradient is approximately three times higher than the gradient of 29 degrees Fahrenheit for every 1000 feet of depth (2.9 °F/100 ft) reported by Otto, and Wylie (2003) and roughly two times higher than the gradient of 9 degrees Fahrenheit for every 200 feet of depth (4.5 °F/100 ft) reported by Mitchell (1981) for this same aquifer system.

The average temperature gradient for the data on Figure 7 is biased upward by data from several wells that exhibit significantly elevated temperatures. Most notably, the warmest water (99 degrees Fahrenheit) is from a well that is only 553 feet deep. The temperature is considered anomalous because there are 27 wells deeper than 553 feet in which the water temperature is consistently cooler than 99 degrees. This variability required a review of the spatial distribution of elevated water temperatures to determine the potential of applicants to encounter warm water.

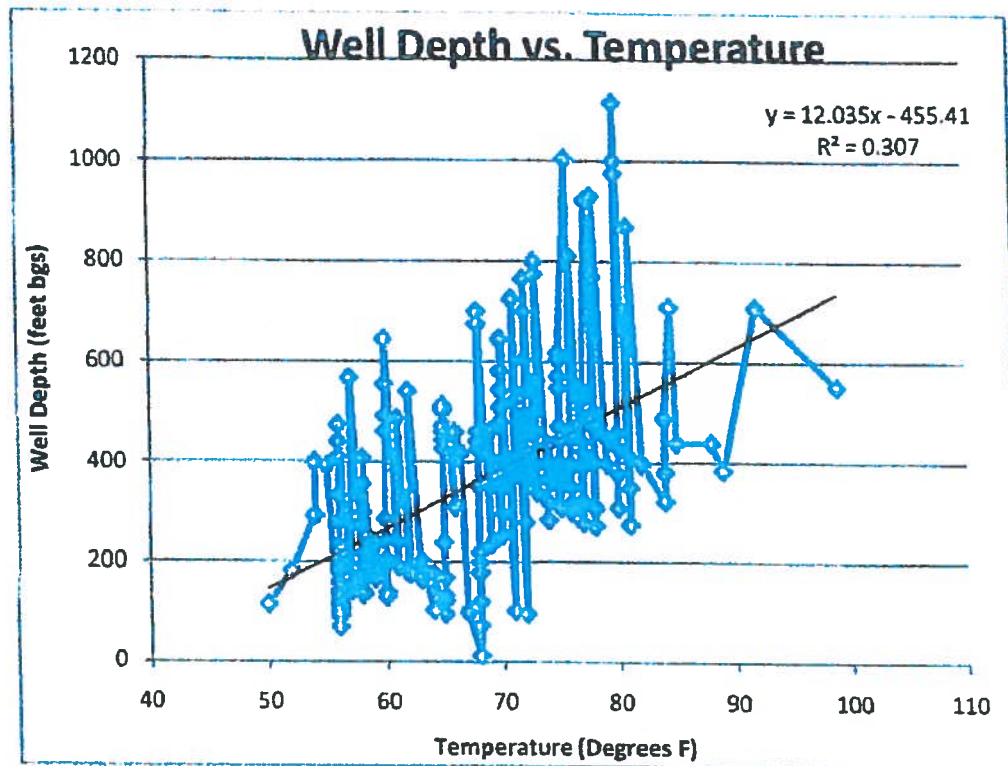


Figure 7. Plot of well depth versus temperature within the study area.

Figure 8 shows wells with elevated (68 degrees or warmer) temperatures in the study area are located throughout the area and do not appear to be completely controlled by structural features. A mapped "zone of complex faulting and northeastern edge of the basalt flows" (Mitchell, 1981) southwest of Kuna appears to correlate with a linear trend of wells with elevated temperatures in that area (Figure 9). In addition to well depth, this zone of faulting appears to be a contributing factor to elevated water temperatures.

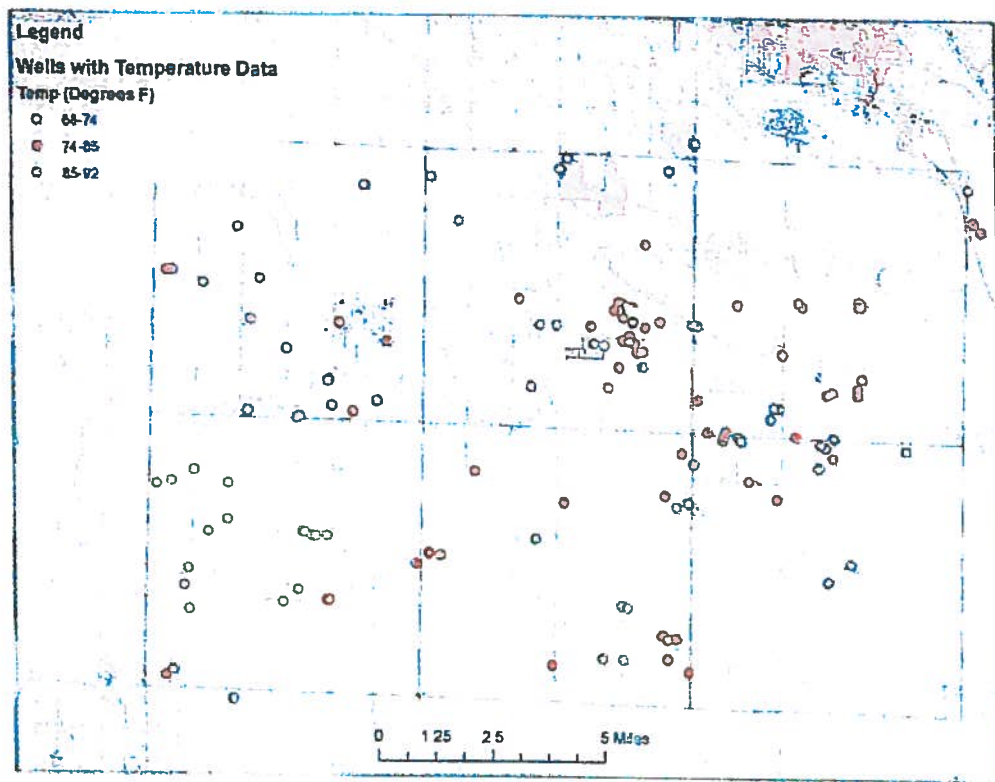


Figure 8. Wells with elevated temperatures (above 68 degrees).

Additional unmapped faults may exist in this area that also contribute to the elevated temperatures by providing a conduit of deep geothermal water to enter the cold water aquifer system of the area. It appears that elevated water temperatures within the area of interest can be attributed to a combination of well depth and proximity to conductive fault zones.

The mapped faults to the northwest of the study area have a NW/SE trend. If this trend was extrapolated linearly to the southeast into this area of concern, the extrapolated location of the fault zone would be positioned in the direct vicinity of majority of the applications associated with this request (off of South Cole Road). Therefore, there is the potential for encountering geothermal waters in this area, and any future drilling should be conducted cautiously, so that low temperature geothermal water is not developed.

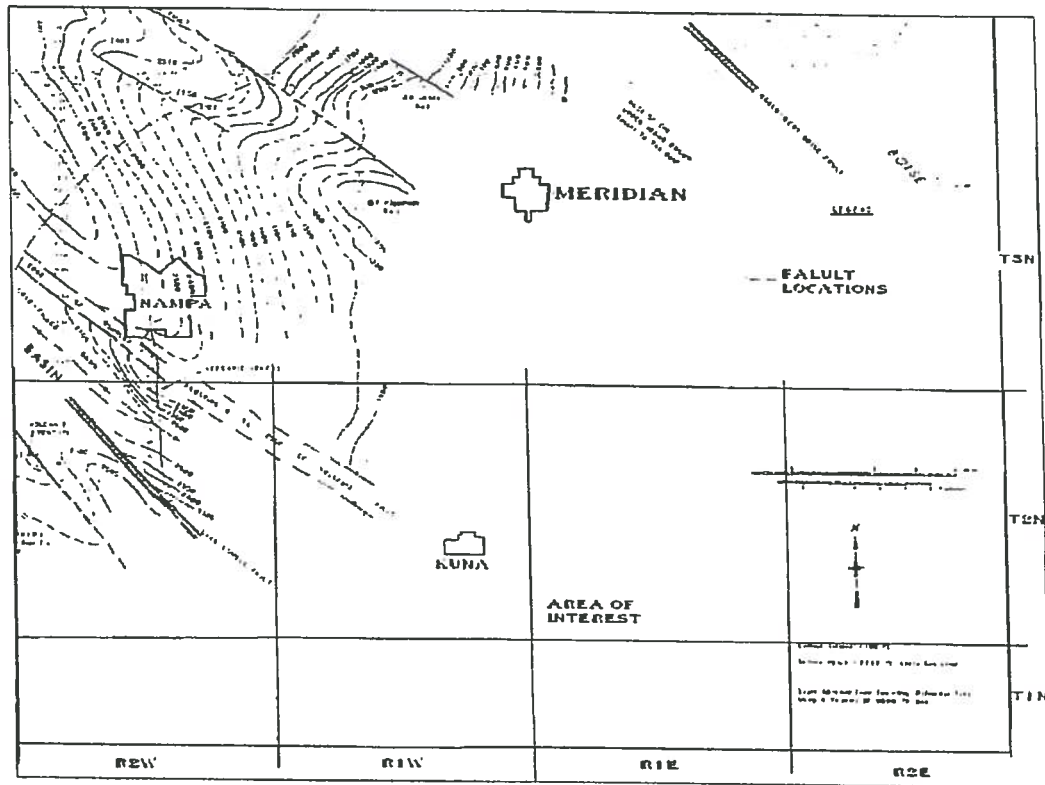


Figure 9. Structural map of the Idaho Group sediments showing the locations of mapped faults in the area (modified from Mitchell, 1981).

2. Potential injury to existing users and cumulative impact the proposed appropriations may have on current water right users and the ground water resource in this area?

As previously mentioned, water levels across this area have been declining for decades. The information provided by the consultant representing Kuna-Cole 880 LLC (Application for Permit 63-32680), dated January 26, 2007, also shows declining water levels in the area (SPF, 2007). To investigate the magnitude of the water level declines, historic water level records were reviewed.

Figure 10 is a plot of cumulative water right diversions over time with one hydrograph containing a long detailed water level record. Well 02N01W07BBC1 had a historic high water level in August, 1960. Since that time, the water level in this well has continually declined. This well is 103 feet deep, and should represent a best case scenario for water levels since shallower wells have generally demonstrated a more direct response to surficial recharge.

There appears to be a correlation between the large increase in approved water rights in the 1960's and 1970's and water level declines. In January of 1960, non-domestic ground water diversions equaled approximately 100 cfs. By January of 1970, the cumulative maximum diversion rate had increased to nearly 300 cfs. In January of 1980, the cumulative maximum diversion rate had approached 500 cfs. The past 20 years have shown an increase of

approximately 100 cfs, as the current ground water withdrawal rate within this area is approximately 600 cfs. The increase in approved ground water withdrawals in the 1960's and 1970's appears to have exceeded the natural recharge rate, resulting in water level declines.

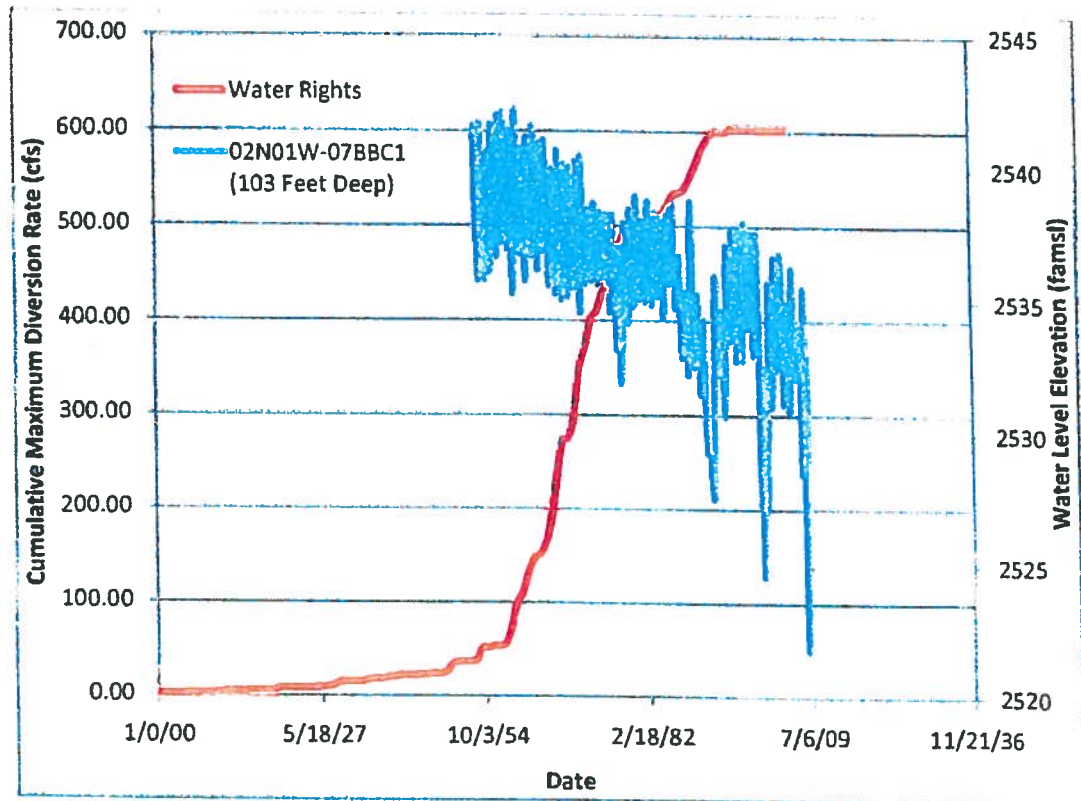


Figure 10. Plot showing trends of cumulative maximum ground water diversion rate and water level elevation in a 103-foot deep well in the northwest part of the study area.

To evaluate the potential injury to existing users and cumulative impacts of the approval of these water right applications, the increase in overall withdrawal rates was reviewed. As previously noted, the current cumulative maximum ground water diversion rate for existing water rights in the area is 603 cfs. An additional 106 cfs is currently permitted in the area and impacts from these permits have not been evaluated through monitoring data. Adding 54 cfs of ground water withdrawals associated with this request is expected to increase ground water declines across the area.

As indicated in the consulting report for Application 63-32680:

"Future water levels will likely stabilize at a new water level equilibrium if groundwater withdrawals stabilize." (pg. 3, SPF, 2009)

This conclusion agrees with the data that has been reviewed for this group of applications that shows a regional water level decline in response to ground water withdrawals associated with

previously approved water rights. It is currently unknown if an additional increase in ground water withdrawals will accelerate the current rate of decline but it seems unlikely that the aquifer system will stabilize until the withdrawal rates stabilize. Wells that were drilled too shallow to accommodate future water level declines will have to be deepened or replaced at some point in the future if the water level declines continue.

Well to well impacts are predicted to be significant only in wells that are located within close proximity to one another (Baker, 1993). Drawdown predicted from a well pumping 1,550 gpm is approximately 7 feet at a distance of ¼ mile, with drawdown decreasing with distance from the pumping well (Baker, 1993).

To further assess potential impacts, the predictive modeling scenarios completed as part of the Treasure Valley Hydrologic Project were reviewed. One predictive scenario included an overall increase of 20% of the ground water withdrawals across the Treasure Valley. The results for this area indicated a general water level decline ranging from approximately 10 to 20 feet for this particular area (Petrich, 2004). The 20% water right increase modeled in this scenario is similar in magnitude to the increase in water rights associated with the applications and permits associated with this review.

With respect to potential impacts to the Snake River, an increase in pumping would reduce the amount of ground water discharge entering the Snake River to the south. The USGS estimated 280,000 acre-feet of ground water discharge to the Snake River between the King Hill and Murphy (Newton, 1991). This estimate includes ground water discharge from both the north and south sides of the river, that contributes about 4% of the total Snake River flow at Murphy (Newton, 1991). Modeling efforts associated with the TVHP project estimated 290,800 acre-feet of ground water discharge to the Snake River between Swan Falls Dam and the confluence with the Boise River (Petrich, 2004). This estimate includes direct ground water discharge to the river as well as drain return flows. Using the 1996 water budget estimates for the Treasure Valley, the Bureau of Reclamation estimated that the Treasure Valley aquifer system discharged 276,800 acre-feet along the north side of the river between Murphy and Nyssa (BOR, 2008).

3. *Appropriation of ground water for the proposed uses in the public interest?*

The public interest issue is not a technical concern and, consequently, it will not be addressed herein.

Conclusions

The following conclusions are based upon the preceding analysis of currently available information:

1. *Sufficiency of a cold water ground water supply?*

- The current quantity of cold water available is unknown, but the aquifer appears sufficiently productive to complete large scale production wells. The long term sustainability of the cold water supply is also unknown, but based on the declining water

levels across the area; it appears the area is currently in an overdraft and water levels have yet to stabilize to the current demands.

- Only six of the 237 wells reviewed with temperature records indicate low temperature geothermal water was encountered. Elevated temperatures are common across the area, but only a few of the wells exceed the temperature threshold of 85 degrees Fahrenheit.
- The likelihood of encountering low temperature geothermal water increases with depth but also is dependent on the proximity of the well to zones of upwelling associated with faulting. It is assumed that these faults are the primary sources of geothermal water mixing with the cold water aquifer. Based on the existence of the mapped faults to the northwest of the study area, the potential of encountering low temperature geothermal water in the vicinity of the applications along South Cole Road is high.
- As water levels continue to decline across the area, an overall increase in ground water temperatures may occur, as there will be a reduced volume of cold water stored in the aquifer to be mixed with the upwelling geothermal waters.
- Future land use changes (agricultural land converted to residential, the development of additional ground water supplied agricultural acres) could alter the current ground water budget, resulting in additional ground water declines.

2. *Potential injury to existing users and cumulative impact the proposed appropriations may have on current water right users and the ground water resource in this area?*

- Based on analysis of the hydrographs presented in this memo, water levels have declined across the study area for approximately 50 years. The water level trends suggest that the aquifer has not yet stabilized.
- The fact that the water levels are declining suggests that the withdrawal rates of ground water have exceeded the rate of natural recharge.
- Additional withdrawals from the aquifer in this area are expected to result in additional ground water declines. The rate of decline is difficult to predict without a transient numerical groundwater flow model, but it is reasonable to assume that the average rate of decline will equal or exceed the long-term approximate average rate of 0.3 to 0.4 feet per year. Development of a transient version of the Treasure Valley numerical groundwater flow model is underway but it is not scheduled to be available for at least a year. The simulations performed with this updated version of the ground water flow model may be used to assess potential impacts to flow in the Snake River and to evaluate the timing and magnitude of water level declines.
- Based on the relatively high aquifer transmissivity estimates that are derived from specific capacity data submitted on driller's logs, well to well impacts will most likely be minimal. In combination, indications that the aquifer is transmissive and that the rate of withdrawals exceed the rate of recharge make it likely that regional water level declines will continue to be a more significant problem than well to well impacts. If required, the distribution of water level declines that results from pumping (i.e., drawdown) can be calculated on a case by case basis using the semi logarithmic approximation of the Theis (1935) equation. Previous research in this area has predicted drawdown associated with a well pumping 1,550 gpm will result in approximately seven feet of drawdown at a distance of ¼ mile, and less than a foot of drawdown at ¾ mile (Baker, 1993). Wells with

water levels at or near the level of the pump intake will either have to have the pumps lowered or be deepened if the water level declines continue into the future.

3. *Appropriation of ground water for the proposed uses in the public interest?*

- Determination of what is in the public interest is an administrative rather than technical issue. It is my recommendation that administrative personnel make public interest determinations on a case by case basis.

In summary, it appears that this area of the Treasure Valley is experiencing water level declines associated with withdrawal rates exceeding natural recharge. In addition, the fact that elevated ground water temperatures exist in the area limits the potential of developing the deeper cold water aquifer system. Ongoing ground water level monitoring and water temperature monitoring during the development of the 79 ground water permits will help determine whether additional water is available for appropriation. The water level monitoring will indicate whether the rate of water level decline increases or stabilizes and provide a basis for determining impacts associated with additional ground water pumping. The water temperature monitoring will indicate whether the cold water resource in the area is being depleted to a point in which an increase in temperature can be monitored.

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U.S. Bureau of Reclamation (BOR), 2008. A Distributed Parameter Water Budget Data Base for the Lower Boise Valley. Boise, Idaho.

LEGAL PROOF OF PUBLICATION

Account #	Ad Number	Identification	PO	Amount	Cols	Lines
47628	0000543436	LEGAL NOTICE	Thornton	\$427.00	2	103

Attention: Denise Buffington

IDAHO DEPT WATER RESOURCE

2735 AIRPORT WAY

BOISE

ID

83705

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MAR 25 2011

WATER RESOURCES
WESTERN REGION

LEGAL NOTICE

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

63-33401

LAYNE THORNTON

LORI THORNTON

3224 SHAW FALLS RD

KUNA, ID 83634

Point of Diversion: SWSW S34 T02N R01E ADA County Source GROUND

WATER Tributary

Use: IRRIGATION 03/01 to 11/15 0.84 CFS

Total Diversion: 0.84 CFS

Date Filed: 7/21/2010

Place of Use: IRRIGATION

T02N R01E S34 SW (ALL)

Total Acres: 106

Water bearing zone to be appropriated is from 100 to 335 feet.

63-33402

PAUL ORLANDO

4922 S BITTERCREEK AVE

MERIDIAN, ID 83642

Point of Diversion: NWSW S11 T02N R01E ADA County Source GROUND

WATER Tributary

Use: IRRIGATION 03/01 to 11/15 0.14 CFS

Use: STOCKWATER 01/01 to 12/31 0.02 CFS

Use: DOMESTIC 01/01 to 12/31 0.04 CFS

Total Diversion: 0.2 CFS

Date Filed: 7/21/2010

Place of Use: IRRIGATION, DOMESTIC & STOCKWATER

T02N R01E S11 NWSW

Total Acres: 7

Water bearing zone to be appropriated is from 240 to 260 feet.

63-33403

PAUL ORLANDO

4922 S BITTERCREEK AVE

MERIDIAN, ID 83642

Point of Diversion: NWSW S11 T02N R01E ADA County Source GROUND

WATER Tributary

Use: IRRIGATION 03/01 to 11/15 0.14 CFS

Use: STOCKWATER 01/01 to 12/31 0.02 CFS

Use: DOMESTIC 01/01 to 12/31 0.04 CFS

Total Diversion: 0.2 CFS

Date Filed: 7/21/2010

Place of Use: IRRIGATION, DOMESTIC & STOCKWATER

T02N R01E S11 NWSW

Total Acres: 7

Water bearing zone to be appropriated is from 240 to 260 feet.

63-33404

PAUL ORLANDO

4922 S BITTERCREEK AVE

MERIDIAN, ID 83642

Point of Diversion: NWSW S11 T02N R01E ADA County Source GROUND

WATER Tributary

Use: IRRIGATION 03/01 to 11/15 0.14 CFS

Use: STOCKWATER 01/01 to 12/31 0.02 CFS

Use: DOMESTIC 01/01 to 12/31 0.04 CFS

Total Diversion: 0.2 CFS

Date Filed: 7/21/2010

Place of Use: IRRIGATION, DOMESTIC & STOCKWATER

T02N R01E S11 NWSW

Total Acres: 7

Water bearing zone to be appropriated is from 240 to 260 feet.

63-33405

PAUL ORLANDO

4922 S BITTERCREEK AVE

MERIDIAN, ID 83642

Point of Diversion: NWSW S11 T02N R01E ADA County Source GROUND

WATER Tributary

Use: IRRIGATION 03/01 to 11/15 0.14 CFS

Use: STOCKWATER 01/01 to 12/31 0.02 CFS

Use: DOMESTIC 01/01 to 12/31 0.04 CFS

Total Diversion: 0.2 CFS

Date Filed: 7/21/2010

Place of Use: IRRIGATION, DOMESTIC & STOCKWATER

T02N R01E S11 NWSW

Total Acres: 7

Water bearing zone to be appropriated is from 240 to 260 feet.

PROPOSED CHANGE OF WATER RIGHT

LNB Farms of Idaho LLC of 2890 NW 11th Ave, Meridian ID 83646 filed Application No. 77066 to transfer a water right with a 1960 priority date from ground water totaling 6.97 cfs to irrigate 675 acres. The purpose of the transfer is to add the use of 2 existing wells drilled in 2007 to offset well production problems with the single well that has been used for this right. All 3 wells are close together, straddling the Ada & Canyon County line in the Power Butte area between Kuna and Melba.

For a full description of the rights and/or the proposed transfers, please see www.idwr.idaho.gov/apps/ExtSearch/WRFiling.asp. Protests may be submitted based on the criteria of Sec 42-222 and 42-203A, Idaho Code. Permits will be subject to all prior water rights. Any protest against the approval of this application(s) must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Wy, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before April 4, 2011. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Interim Director

Pub. Mar. 17.24, 2011

0000543436-01

JANICE HILDRETH, being duly sworn, deposes and says: That she is the Principal Clerk of The Idaho Statesman, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein, and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto: that said notice was published in The Idaho Statesman, in conformity with Section 60-108, Idaho Code, as amended, for:

2 Insertions

Beginning issue of: 03/17/2011

Ending issue of: 03/24/2011

Janice Hildreth
(Legals Clerk)

STATE OF IDAHO)

.SS

COUNTY OF ADA)

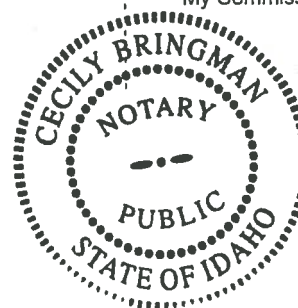
On this 24 day of March in the year of 2011 before me, a Notary Public, personally appeared before me Janice Hildreth known or identified to me to be the person whose name subscribed to the within instrument, and being by first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

Cecily Bringman

Notary Public for Idaho
Residing at: Boise, Idaho

My Commission expires:

8-27-15



✓ ok DB 4-8-2011