

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No. 82367

RECEIVED

MAY 14 2016

Department of Water Resources
Eastern Region

MINIMUM REQUIREMENTS CHECKLIST

TO BE SUBMITTED WITH APPLICATION FOR TRANSFER

An application for transfer must be prepared in accordance with the minimum requirements listed below to be acceptable for processing by the Department. Incomplete applications will be returned. The instructions, fee schedule, Part 2A reports and additional Part 2B forms are available from any Department office or on the Department's website at www.idwr.idaho.gov.

Name of Applicant(s) Cassidy Howe and Jake Howe

Check whether each item below is *attached* (Yes) or *not applicable* (N/A) for the proposed transfer.

Yes N/A * Means the item is always required and must be included with the application.

- ☒ * Completed Application for Transfer of Water Right form, Part 1.
- ☒ * Signature of applicant(s) or applicant's authorized representative on Application for Transfer Part 1. Include evidence of authority labeled Attachment #3 (see below) if signed by representative.
- ☒ * Application for Transfer Part 2A. Attach a Part 2A report describing each water right in the transfer as currently recorded.
- ☐ Complete and attach an Application for Transfer Part 2B for each water right for which only a portion is proposed to be changed through this transfer application.
- ☒ * Application for Transfer Part 3A is always required (see Attachment #7a below); Parts 3B and 3C must be completed for transfer applications proposing to change the nature of use of the water right(s) or proposing changes to supplemental right(s).
- ☒ * Correct fee submitted with transfer application form. (Fee schedule is on website and instructions for application for transfer.)

Attachments to Application - Label each attachment with the corresponding number shown below as Attachment #1-10.

- ☐ ☒ #1 If the applicant is a business, partnership, organization, or association, and not currently registered in the State of Idaho as a business entity, attach documentation identifying officers authorized to sign or act on behalf of right holder. (See Part 1.)
- ☐ ☒ #2a Water Right ownership documentation if Dept. records do not show the applicant as the current water right owner. **
- ☐ ☒ #2b If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s).**
** Additional fee(s) required for water right ownership changes; see fee schedule.
- ☐ ☒ #3 Documentation of authority to make the change if the applicant is not the water right owner.
- ☐ ☒ #4 Power of Attorney or documentation providing authority to sign or act on the applicant's behalf. (See Part 1.)
- ☐ ☒ #5 If the transfer application proposes to change the point of diversion for a water right affecting the Eastern Snake Plain Aquifer (ESPA), attach the results of an ESPA analysis and a detailed mitigation plan to offset any depletions to hydraulically connected reaches of the Snake River. ESPA transfer spreadsheet and model grid labeled cells are available on the Department's website at www.idwr.idaho.gov/WaterManagement/WaterRights/WaterRightTransfers/resources.htm.
- ☐ ☒ #6 Notarized statement of agreement or a statement on official letterhead signed by an authorized representative from each lien holder or other entity with financial interest in the water right(s) or land affected by the proposed transfer. (See Part 1.5.c.)
- ☒ * #7a Attach a map identifying the proposed point(s) of diversion, place(s) of use, and water diversion and distribution system details as described on the application. Include legal description labels. If only a portion of the right is proposed to be changed, identify the current location of the part of the existing right(s) proposed to be changed. (See Part 3A.)
- ☒ ☐ #7b If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System (GIS) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use. If some or all of any right is leased to the Water Supply Bank, you must also show the the specific location and/or acres to be idled at the new, proposed place of use to satisfy lease requirements.
- ☐ ☒ #8a If the transfer application proposes to change the nature of use or period of use for one or more rights, provide documentation describing the extent of historic beneficial use for the water rights proposed to be transferred and document how enlargement will be avoided. (See Part 3B.) Additional fee required for proposed changes to nature of use; see fee schedule.
- ☐ ☒ #8b If the transfer application proposes to change the place of use of a supplemental irrigation right, provide documentation regarding the historic use of the supplemental right(s) and availability or reliability of the primary right(s) being supplemented, both before and after the proposed change. (See Part 3C.)
- ☐ ☒ #9 Water Supply Bank information for all rights proposed for transfer and currently leased to the Bank. (Attachment WSB)
- ☐ ☐ #10 Other. Please describe: _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1

RECEIVED
MAY 04 2018
Department of Water Resources
Eastern Region

Name of Applicant(s) Cassidy Howe and Jake Howe Phone (602) 549-3896
Mailing address 1193 W 600 S, Pingree, ID 83262 Email diamondspringsranch@gmail.

- ☐ If applicant is not an individual and not registered to do business in the State of Idaho, attach documentation identifying officers authorized to sign or act on behalf of the applicant. Label it **Attachment #1**.
- ☐ Attach water right ownership documentation if Department records do not show the transfer applicant as the current water right owner. Label it **Attachment #2a**.
- ☐ If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s). Label it **Attachment #2b**.
- ☐ Attach documentation of authority to make the proposed change if the applicant is not the water right owner. Label it **Attachment #3**.

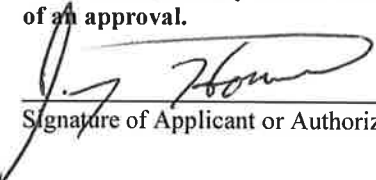
Provide contact information below if a consultant, attorney, or any other person is representing the applicant in this transfer process.

☐ No Representative

Name of Representative _____ Phone _____
Mailing address _____ Email _____

- ☐ Send all correspondence for this application to the representative and not to the applicant.
OR
☐ Send original correspondence to the applicant and copies to the representative.
- ☐ The representative may submit information for the applicant but is not authorized to sign for the applicant.
OR
☐ The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation providing authority to sign for the applicant and label it **Attachment #4**.

I hereby assert that no one will be injured by the proposed changes and that the proposed changes do not constitute an enlargement in use of the original right(s). The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.


Signature of Applicant or Authorized Representative

Print Name and Title if applicable

May 4/2018
Date

Signature of Applicant or Authorized Representative

Print Name and Title if applicable

Date

A. PURPOSE OF TRANSFER

- ☒ Change point of diversion
☒ Change nature of use

☐ Add diversion point(s)
☒ Change period of use

☒ Change place of use
☐ Other _____
- Describe your proposal in narrative form, including a detailed description of non-irrigation uses to justify amounts transferred (i.e. number of stock, etc.), and provide additional explanation of any other items on the application. Attach additional pages if necessary and label it **Part 1A.2**.
 This application proposes to change a 29.5-acre portion of water right 35-13283 to year-round stockwater use for a feedlot. The proposed point of diversion is an existing well located less than 20 feet from the existing irrigation point of diversion. According to ET Idaho (Blackfoot, alfalfa), 29.5 acres will provide 79.4 acre-feet for stockwater use.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

RECEIVED

MAY 07 2018

Department of Water Resources
Eastern Region

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1

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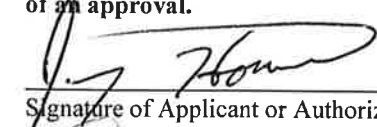
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☐ No Representative

Name of Representative _____ Phone _____
Mailing address _____ Email _____

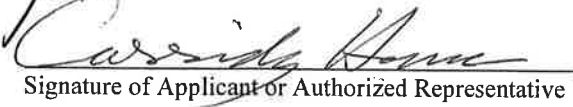
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OR
- ☐ Send original correspondence to the applicant and copies to the representative.
- ☐ The representative may submit information for the applicant but is not authorized to sign for the applicant.
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- ☐ The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation providing authority to sign for the applicant and label it **Attachment #4**.

I hereby assert that no one will be injured by the proposed changes and that the proposed changes do not constitute an enlargement in use of the original right(s). The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.


Signature of Applicant or Authorized Representative

Print Name and Title if applicable

May 4/2018
Date


Signature of Applicant or Authorized Representative

Print Name and Title if applicable

5-4-18
Date

A. PURPOSE OF TRANSFER

- ☒ Change point of diversion
☒ Change nature of use

☐ Add diversion point(s)
☒ Change period of use

☒ Change place of use
☐ Other _____
- Describe your proposal in narrative form, including a detailed description of non-irrigation uses to justify amounts transferred (i.e. number of stock, etc.), and provide additional explanation of any other items on the application. Attach additional pages if necessary and label it **Part 1A.2**.
This application proposes to change a 29.5-acre portion of water right 35-13283 to year-round stockwater use for a feedlot. The proposed point of diversion is an existing well located less than 20 feet from the existing irrigation point of diversion. According to ET Idaho (Blackfoot, alfalfa), 29.5 acres will provide 79.4 acre-feet for stockwater use.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1 Continued

B. DESCRIPTION OF RIGHTS AFTER THE REQUESTED CHANGES. IF THE RIGHTS ARE BEING SPLIT, DESCRIBE PORTIONS TO BE CHANGED AS THEY WOULD APPEAR AFTER THE REQUESTED CHANGES.

1.	Right Number	Amount (cfs/ac-ft)	Nature of Use	Period of Use	Source & Tributary
All or Part ☐ ☒	35-13283	0.41cfs/79.4af	Stockwater	1/1 to 12/31	Ground Water
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	

Total authorized under rights 0.41 cfs and/or 79.4 acre-feet.

2. Total amount of water proposed to be transferred or changed 0.41 cubic feet per second and/or 79.4 acre-feet per year.

3. Point(s) of Diversion:

- ☐ No changes to point(s) of diversion are proposed - the following chart is therefore not completed. (Proceed to #4.)
- ☐ Attach Eastern Snake Plain Aquifer analysis if this transfer proposes to change a point of diversion affecting the ESPA. Label it **Attachment #5**.

New ?	Lot	¼	¼	¼	Sec	Twp	Rge	County	Source	Local name or tag #
			NE	SE	16	03S	33E	Bingham	Ground Water	Stockwater Well

4. Place of use: (If irrigation, identify with number of acres irrigated per ¼ ¼ tract.)

- ☐ No changes to place of use are proposed - the following chart is therefore not completed. (Proceed to #5.)

Twp	Rge	Sec	NE ¼				NW ¼				SW ¼				SE ¼				Acre Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03S	33E	16													S			S	
Total Acres (for irrigation use)																			

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1 Continued

5. General Information:

- a. Describe the complete diversion system, including how you will accommodate a measuring device and lockable controlling works should they be required now or in the future:

Stockwater well is located right next to irrigation well. Well is within Water District 120. We will install a flow meter before diverting water.

- b. Who owns the property at the point(s) of diversion? Applicants

If other than the applicant, describe the arrangement enabling the applicant to access the property for the diversion system:

- c. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts?

If yes, ☐ attach a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes on official letterhead signed by an authorized representative. Label it **Attachment #6**. List the name of the entity and type of lien: N/A Water right is not being moved off of property.

It is the applicant's responsibility to provide notice to lien holder, trustee, mortgagor, or contract holder of the proposed changes that may impact or change the value of the water rights or affected real property. Any misrepresentation of legal encumbrance on this application may result in rejection of the application or cancellation of an approval.

- d. Are any of the water rights proposed for transfer currently leased to the Water Supply Bank?

If yes, ☐ complete Attachment WSB.

- e. Describe the effect on the land now irrigated if the place or purpose of use is changed pursuant to this transfer:

29.5 acres will be dried up and converted to a feedlot.

- f. Describe the use of any other water right(s) for the same purpose or land, or the same diversion system as right(s) proposed to be transferred at both the existing and proposed point(s) of diversion and place(s) use:

Water right 35-7212B is diverted from a separate stockwater well on south end of property and will also be used for stockwater at the feedlot.

- g. To your knowledge, has/is any portion of the water right(s) proposed to be changed:

Yes No

- ☐ ☒ undergone a period of five or more consecutive years of non-use,
☐ ☒ currently leased to the Water Supply Bank,
☐ ☒ currently used in a mitigation plan limiting the use of water under the right, or
☐ ☒ currently enrolled in a Federal set-aside program limiting the use of water under the rights?

If yes, describe:

IDAHO DEPARTMENT OF WATER RESOURCES
Proof Report

5/4/2018

Water Right 35-13283

Owner Type **Name and Address**
Current Owner JAKE HOWE
 1193 W 600 S
 PINGREE, ID 83262

Current Owner CASSIDY HOWE
 1193 W 600 S
 PINGREE, ID 83262

Priority Date: 2/23/1972

Basis: Decreed

Status: Active

Source
GROUND WATER

Tributary

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
IRRIGATION	04/01	11/01	1.660 CFS	480.0 AF
	<u>Total Diversion</u>		1.660 CFS	480.0 AF

Source and Point(s) of Diversion

GROUND WATER NWSE Sec. 16, Twp 03S, Rge 33E, BINGHAM County

Place Of Use

IRRIGATION within BINGHAM County

			NE				NW				SW				SE				Totals
Twp	Rng	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03S	33E	16													30.0	32.0	32.0	26.0	120.0

POU Total Acres: 120.0

Conditions of Approval:

1. 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.
2. P21 THIS RIGHT IS A SPLIT FROM FORMER RIGHT 35-7212A
3. 067 The right holder shall measure and annually report diversions of water and/or other pertinent hydrologic and system information as required by Section 42-701, Idaho Code.
4. R64 This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the lands above.

Decreed Date: 1/31/2002

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 3

A. PLAT MAP (See Part 3A of Instructions for application for transfer for complete requirements.)

- ☒ Attach a map of the diversion, measurement, control, and distribution system. Label it **Attachment #7a**.
- ☒ If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System (GIS) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use. Label it **Attachment #7b**.

If the place of use currently consists of a permissible place of use, then the attachment is not required if the application contains a clear statement that the boundaries for the place of use are not proposed to be changed by the transfer and the total number of irrigated acres within the place of use before and after the transfer is clearly stated.

If any part of the irrigation water right is leased to the Water Supply Bank, you must also specify the location and number of acres that will remain idled for the duration of the lease contract at the new, proposed place of use.

B. CHANGES IN NATURE OF USE (Water Balance)

- ☒ If you propose to change the nature of use or period of use of all or part of the right(s) listed in this application, attach documentation describing the extent of historic beneficial use of the portion of the right(s) proposed to be changed. Also attach documentation showing that the portion of the right(s) to be changed will not be enlarged in rate, volume, or consumptive use through the proposed change. Label it **Attachment #8a**.

C. PLACE OF USE CHANGES TO SUPPLEMENTAL IRRIGATION RIGHTS

- ☐ If you propose to change the place of use of a supplemental irrigation right, answer below and attach supporting documentation. Label it **Attachment #8b**.

Describe how the supplemental water rights have been used historically in conjunction with other water rights at the existing place of use. Describe the time during the irrigation season that the supplemental rights have been used. Include information about the availability or reliability of the primary right(s) being supplemented, both before and after the change. If the applicant is proposing to change a supplemental irrigation right to a primary right, provide the information required on Part 3B above:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page.

FOR DEPARTMENT USE ONLY

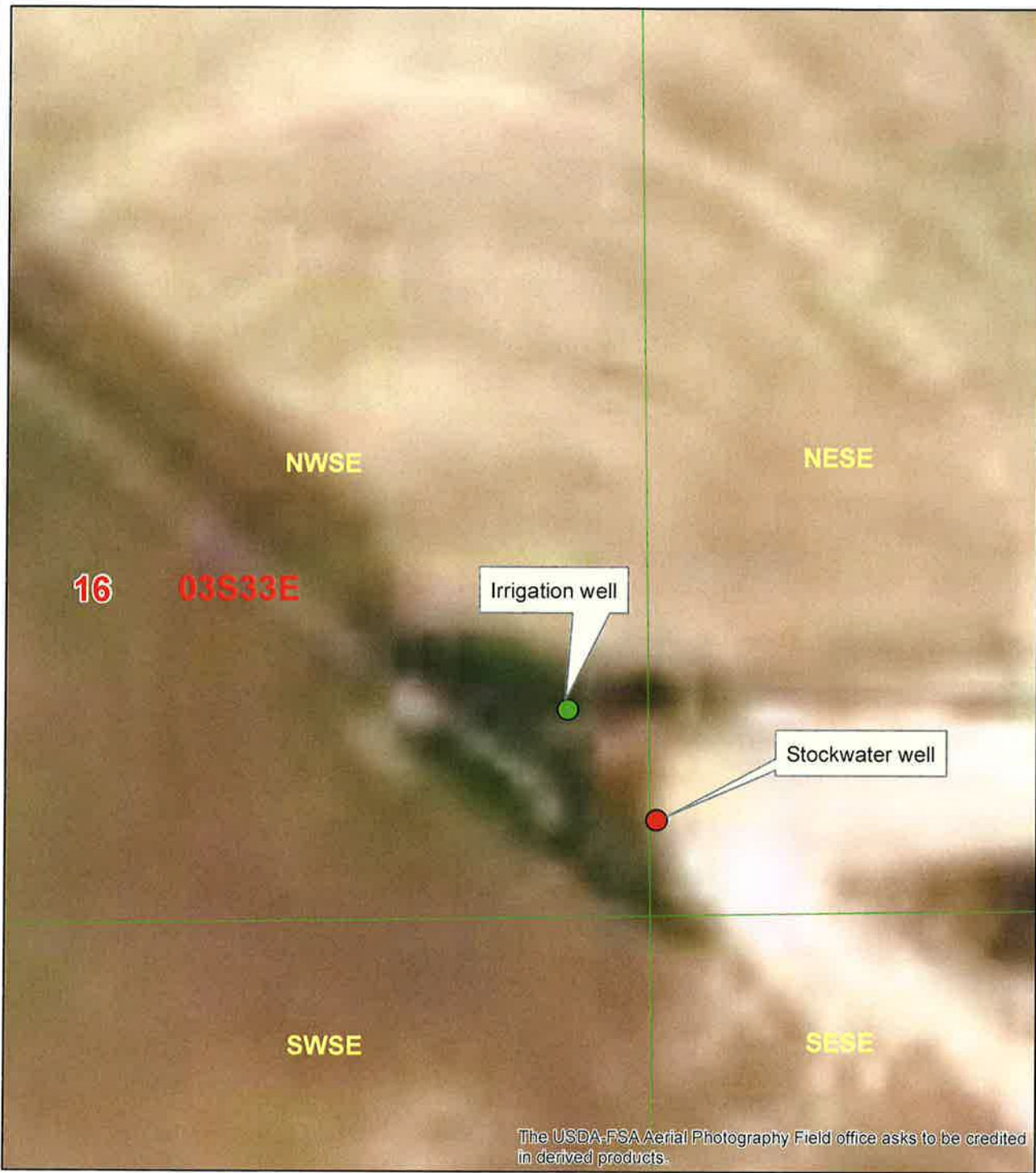
Transfer contains _____ pages and _____ attachments.

Received by JC Date 5/4/18 Preliminary check by _____ Date _____

Fee paid 750⁰⁰ Date 5/4/18 Received by SC Receipt # 1043972

Add'l fee paid _____ Date _____ Received by _____ Receipt # _____

Check all that apply: Attachment WSB ☐ (copy sent to state office) Lessor Designation form ☐ &/or W-9 ☐ (originals to state office)



-  Township/Range
-  Sections
-  QQ

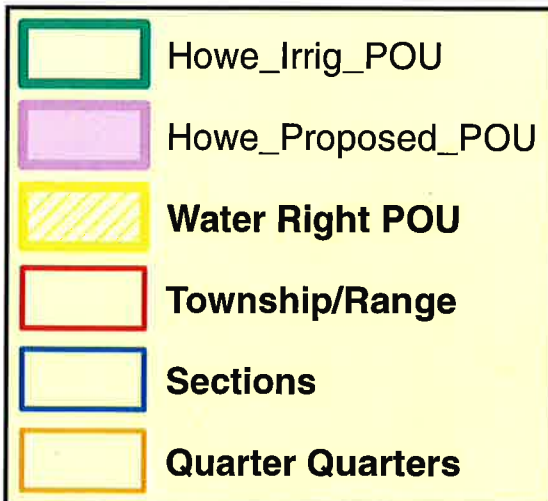
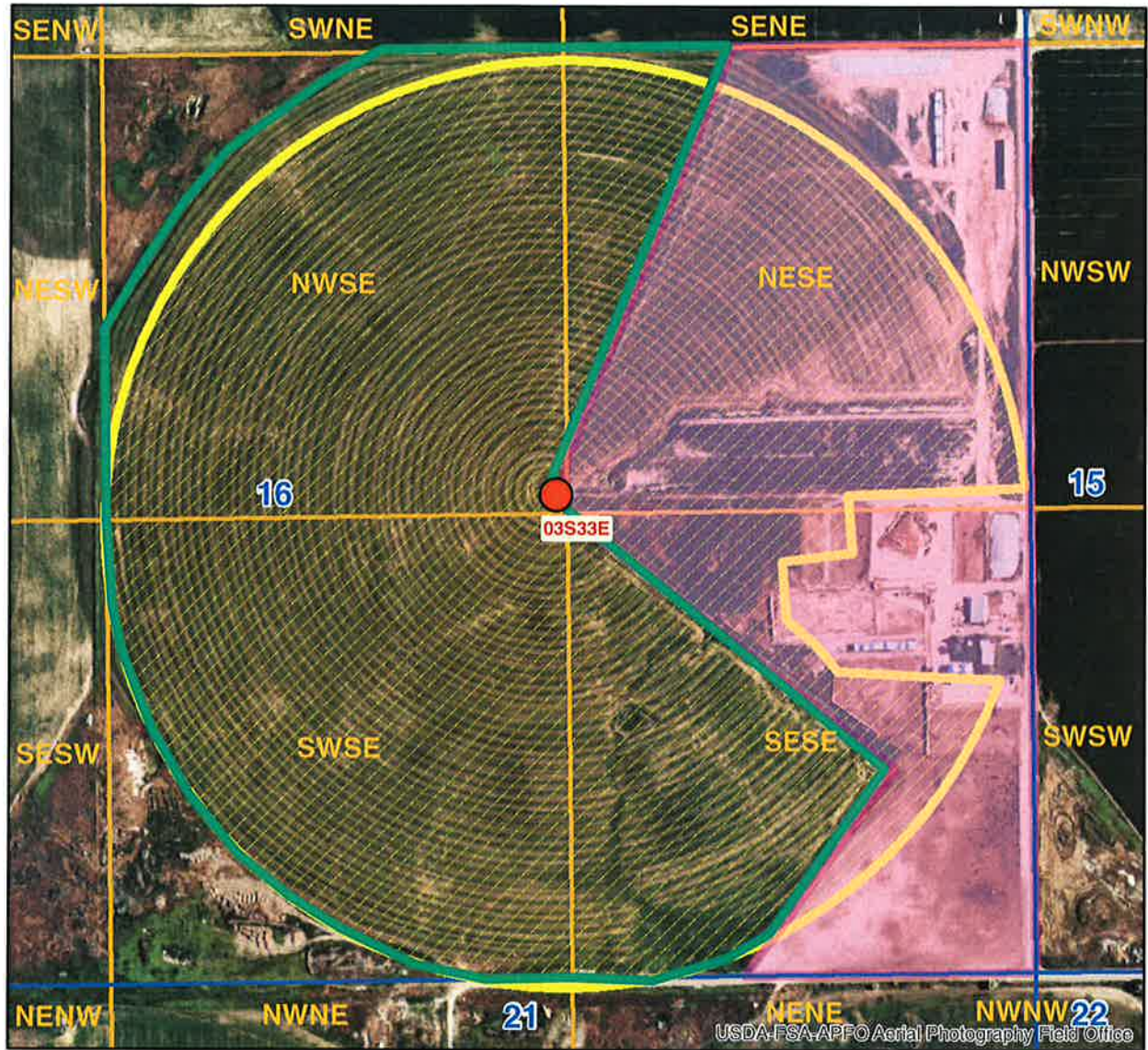
0 15 30 60 Feet

1 inch = 40 feet



82367

Application for Transfer (Howe)



2017 Aerial Photo

0 500 1,000 Feet



82367

ET_{Idaho} 2012 -- Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho

Please send suggestions for improving this site to robison at kimberly dot uidaho dot edu Copyright 2012, University of Idaho.

Blackfoot (NWS -- 100915)

Statistics based on thirty year normal spans 1946 to 2010 years

For a different land cover or crop click on the above link.

You can highlight this table and copy via the clipboard to a Microsoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

Alfalfa - frequent cuttings Precipitation Deficit (Click here for a graph)															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Non Growing Season ^b	Annual
Mean^j	mm/day												mm		
Monthly ^c	-0.30	0.03	0.10	1.21	4.83	4.90	5.73	5.18	3.42	1.51	-0.12	-0.35	819	-21	824
15-Day Moving Average ^d	-0.36	-0.03	0.05	1.11	4.76	4.67	5.89	5.39	3.52	1.51	-0.09	-0.30	819 mm = 2.69 ft		
7-Day Moving Average ^e	-0.31	0.01	0.06	1.11	4.77	4.73	5.82	5.31	3.50	1.49	-0.13	-0.34			
3-Day Moving Average ^f	-0.28	0.03	0.09	1.16	4.81	4.84	5.75	5.20	3.48	1.50	-0.13	-0.35			
Standard Deviation^k	mm/day												mm		
Monthly ^c	0.67	0.42	0.36	0.97	2.05	1.05	0.75	0.79	1.02	1.38	0.46	0.72	104	25	92
15-Day Moving Average ^d	0.80	0.65	0.41	1.22	1.77	1.44	1.31	1.37	1.29	1.34	0.67	0.63			
7-Day Moving Average ^e	1.04	0.99	0.74	1.60	2.33	2.15	1.94	1.88	1.68	1.78	1.01	0.91			
3-Day Moving Average ^f	1.37	1.34	1.28	2.25	3.11	2.74	2.47	2.30	2.24	2.36	1.48	1.32			
20% Exceedance^l	mm/day												mm		
Monthly ^c	0.00	0.38	0.31	2.13	5.84	5.71	6.12	5.68	4.26	2.48	-0.08	0.00	890	4	891
15-Day Moving Average ^d	0.53	0.77	0.90	3.53	7.10	7.25	7.84	7.24	5.36	3.70	0.78	0.28			

82367

7-Day Moving Average ^e	0.83	1.37	1.69	4.60	8.48	8.61	8.57	7.76	6.10	4.80	1.18	0.57			
3-Day Moving Average ^f	1.24	1.84	2.97	5.97	9.51	9.37	9.30	8.44	6.90	5.45	1.89	0.88			
80% Exceedance^m	mm/day												mm		
Monthly ^c	-0.70	-0.58	-0.16	0.18	2.81	3.96	5.43	4.66	2.71	0.35	-0.59	-0.84	746	-40	747
15-Day Moving Average ^d	-1.67	-1.38	-0.80	-0.29	1.92	2.62	3.69	2.79	1.41	-0.36	-1.29	-1.55			
7-Day Moving Average ^e	-3.21	-2.15	-1.91	-1.69	0.02	0.77	2.04	1.58	-0.33	-1.64	-2.71	-2.77			
3-Day Moving Average ^f	-6.47	-4.04	-4.42	-5.30	-6.06	-1.80	0.32	-0.70	-2.54	-4.69	-6.79	-5.46			
Ave Highest P_{def}	mm/day												--		
15-Day Moving Average ^g	0.29	0.49	0.55	2.12	5.99	6.01	7.35	6.76	4.51	2.60	0.41	0.20			
7-Day Moving Average ^h	0.56	1.05	1.13	3.15	7.42	7.73	8.20	7.49	5.37	3.62	0.87	0.41			
3-Day Moving Average ⁱ	0.88	1.57	2.06	4.66	8.44	8.63	8.85	7.94	6.14	4.30	1.27	0.69			
Ave Lowest P_{def}	mm/day												--		
15-Day Moving Average ^g	-0.87	-0.47	-0.41	0.15	3.49	3.43	4.23	3.81	2.51	0.43	-0.69	-0.70			
7-Day Moving Average ^h	-1.60	-1.30	-1.06	-0.91	1.89	1.85	2.53	2.33	1.17	-0.63	-1.59	-1.34			
3-Day Moving Average ⁱ	-3.21	-2.60	-2.65	-2.90	-1.38	0.23	0.90	0.81	-1.03	-2.88	-3.45	-2.87			
Special normal distribution parameters for monthly, seasonal, and annual intervals															
Skew ^m	-0.44	-0.48	0.01	-0.04	-0.16	-0.63	-0.15	0.04	-0.17	-0.06	0.18	-0.38	-0.06	-0.58	0.13
Kurtosis ^o	0.94	2.01	0.63	1.91	0.65	3.04	0.93	0.62	2.63	0.57	4.17	0.85	3.28	3.41	3.02

^a Growing Season: This is usually the time from green up or planting in the spring to a killing frost or harvest in the fall. It is not applicable for entries without a growing season and will be blank.

^b Nongrowing Season: This is usually the time from a killing frost or harvest in the fall to the of green up in the spring. It is not applicable for entries without a growing season.

^c Mean of the average daily value for month

^d Mean of the fourteen 15-day period averages contained in the month

^e Mean of the twenty three 7-day period averages contained in the month

^f Mean of the twenty seven 3-day period averages contained in the month

^g Mean of the highest/lowest 15-day period average in month

^h Mean of the highest/lowest 7-day period average in month

ⁱ Mean of the highest/lowest 3-day period average in month

^j This value represents the *mean value* for the parameter for the month over the 'normal' period of record. Generally, the 'normal' period is the last thirty years with data.

^k This value represents the *standard deviation* for the parameter for the month over the 'normal' period.

^l This value represents the *value* for the parameter that has a 20% chance of being exceeded that month during any particular year. Conversely, there is an 80% chance that the parameter value will be less than the *value* shown.

^m This value represents the *value* for the parameter that has a 80% chance of being exceeded that month during any particular year. Conversely, there is an 20% chance that the parameter value will be less than the *value* shown.

ⁿ This value represents the *skewness (asymmetry) of the distribution of the parameter values* for the month (year) over the 'normal' period. A value near zero indicates that the distribution approximates a normal (Gaussian) and symmetrical distribution. A negative skew indicates that the parameter distribution has relatively few low values compared to high values. A positive skew indicates that the distribution has relatively few high values compared to the number of low values. A skew value near 1 indicates that the underlying distribution approximates a lognormal distribution.

^o This value represents the *kurtosis* of the parameter value distribution for the month (year) over the 'normal' period. Kurtosis is a measurement of the height to width ratio of the probability distribution, or the *peakedness (slenderness)*. A normal (Gaussian) distribution has a kurtosis of 3. A high kurtosis distribution has a sharper peak and longer tails, while a low kurtosis distribution has a more rounded peak and shorter tails.

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