

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

RECEIVED

In Re SRBA

) Subcase 37-297E

JUL 16 2009

Case No. 39576

) STANDARD FORM 4

DEPARTMENT OF
WATER RESOURCES

) MOTION TO FILE AMENDED NOTICE OF

) CLAIM

INSTRUCTIONS

This form is used to file an amendment to a Notice of Claim in a reporting area where the Director's Report has been filed. Forms may be obtained from the SRBA Court, the Idaho Department of Water Resources (IDWR), or you may copy or reproduce this blank form. If you copy or reproduce this form, please copy on both sides with the even number pages upside down.

The water right number for your late claim must be indicated above in the blank space following "Subcase." You must use a **separate form for each** late Notice of Claim.

This form has been adopted by the court in *SRBA Administrative Order 1, Rules of Procedure* (amended Sept. 30, 1996), Section 4, which may be consulted for further information.

By filing a *Motion to File Amended Notice of Claim*, you certify that it is well-grounded in fact; is warranted by existing law or a good-faith argument for the extension, modification or reversal of existing law; and is not filed for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation.

☒ I have read *SRBA Administrative Order 1, Rules of Procedure* (amended Sept. 30, 1996).

My name is

My address is

My phone number is: Work _____ Home _____

I am an attorney representing Tamera L. Clifford

My name is James P. Speck

My address is Speck & Aanestad, A Professional Corporation, PO Box 987, Ketchum, ID 83340

My phone number is 208-726-4421

MOTION TO FILE AN AMENDED NOTICE OF CLAIM

A Motion to File an Amended Notice of Claim may require a hearing before the Presiding Judge or Special Master or may be granted by leave of the court or by written consent of the parties and the Idaho Department of Water Resources. Leave to amend a claim shall be freely given when justice so requires.

I must amend my Notice of Claim to the use of water in the SRBA for the reasons set forth in the Affidavit of James P. Speck in Support of Motion to File Late Objection and Motion to File Amended Notice of Claim filed herewith (the "Speck Affidavit").

I am providing legal and factual documentation to support my amended Notice of Claim as set forth in and attached to the Speck Affidavit.

I have attached an Amended Notice of Claim.

Follow these instructions regarding the hearing on this motion.

1. Contact the Clerk of the SRBA Court (208-736-3011) to request a hearing date and time.
2. Fill in the following information:

This motion will be heard on

(Insert Date and Time)

at the SRBA courthouse, 253 Third Avenue North, Twin Falls, Idaho.

VERIFICATION (Must be completed)

State of Idaho

County of Blaine

James P. Speck, being first duly sworn, upon oath, deposes and says:

That I am the party/claimant filing this motion for late or amended claim (as listed on Page 2) as defined by I.C. §§ 42-1401A(1) and (7) or that I am the attorney for the party/claimant filing this motion for late or amended claim and that I have read this motion, know its contents, and believe that the statements are true to the best of my knowledge.

Signature of person filing motion

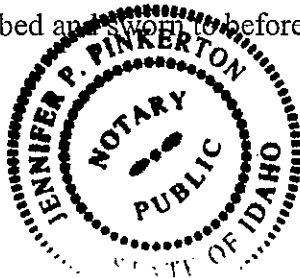
J. P. Speck

Attorney signing in representative capacity

Subscribed and sworn to before me on

July 15, 2009

(Insert Date)



Notary Public for Idaho

Residing at: Ketchum, Idaho

My Commission expires: 2/9/15

INSTRUCTIONS FOR MAILING

You must mail this form, including all attachments, to the Clerk of the SRBA Court. **FAX filings will not be accepted by the SRBA Clerk of the Court.** You must also send a copy to all the parties listed below in the Certificate of Mailing.

CERTIFICATE OF MAILING

I certify that on July 15, 2009, I mailed the original and copies of this form, including all attachments, to the following persons by mailing the original and/or copies, postage prepaid and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North PO
Box 2707 Twin Falls, ID
83303-2707

2. Copies to:

IDWR Document Depository
PO Box 83720 Boise, ID
83720-0098

Chief, Natural Resources
Division Office of the Attorney
General State of Idaho PO Box
44449 Boise, ID 83711-4449

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, MSC 033 Boise, ID
83724

3. If you are filing an amended Notice of Claim in a subcase being heard before the Presiding Judge or a Special Master, you must serve a copy on all parties to that subcase.

(Insert Names/address of parties)



Signature of person or attorney mailing the form

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM

CIVIL CASE NUMBER: 39576

Subcase Number 37-297E
Date Received:
Receipt No:
Received By:

AMENDED NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name of Claimant(s)

Tamera L. Clifford
~~William P. Clifford~~
P.O. Box 153
Sun Valley, ID 83353

Phone: (208)622-2166

2. Date of Priority: November 26, 1886

3. Source: Big Wood River Trib. to: Malad River

4. Point of Diversion:

Township Range Section 1/4 of 1/4 of 1/4 Lot CountyType
3N 18E 20 SW NW Blaine

5. Description of diverting works: Hiawatha Canal

6. Water is used for the following purposes:

Purpose	From	To	C.F.S. (or)	A.F.A
IRRIGATION	04/15	10/31	0.07	
DIVERSION TO STORAGE	04/15	10/31	0.01	0.30
AESTHETIC STORAGE	01/01	12/31		0.30
AESTHETIC	04/15	10/31	0.01	0.16

7. Total Quantity Appropriated is:
0.08 CFS/0.46 AFA

8. Non-irrigation uses: Aesthetic use occurs in an excavated pond.

Last Name: Clifford

Subcase No. 37-297E

9. Place of use:

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	18E	33												1.9					1.9
3N	18E	33												A ¹					

Total number of acres irrigated: 1.9

10. Place of use in counties: Blaine

11. Do you own the property listed above as place of use? Yes

12. Other Water Rights Used: 37-28D

13. Remarks:

Right Nos. 37-28D and 37-297E are limited to the irrigation of a combined total of 1.9 acres in a single irrigation season.

Rights 37-28D and 37-297E when combined shall not exceed a total annual maximum storage volume of 0.46 af.

14. Basis of Claim: Decree

¹ Aesthetic Storage and Aesthetic use

15. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do ☐ do not ☒ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: 4 (map, ET_{Idaho} data, calculation spreadsheet and explanation)

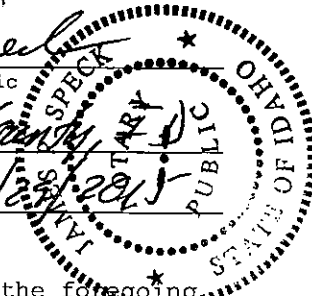
I do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant: Tamera L. Clifford Date: 6/24/09
Tamera L. Clifford

State of Idaho)
County of)

Subscribed and sworn (or affirmed) before me this 24 of June 2008.
4

J. P. Speck
Notary Public
Residing at Blain County, ID
My commission Expires 1/29/2015



I do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant: _____ Date: _____
William P. Clifford

State of Idaho)
County of)

Subscribed and sworn (or affirmed) before me this ____ of ____ 2008.

Notary Public
Residing at _____
My commission Expires _____

Last Name: Clifford

Subcase No. 37-297E

Explanation

Aesthetic use and year-round storage for aesthetic use are claimed as accomplished changes in nature of use and season of use, pursuant to §42-1425, Idaho Code. The following is a description of historical water use at the claimed site, changes to the use that occurred prior to 1987, and a narrative description of the net effect on the portions of water rights 37-28 and 37-297 claimed by Tamera and William Clifford (the claimants).

This amended claim also seeks to correct a typographical error in the description of the point of diversion. The water is diverted at the headgate of the Hiawatha Canal, which lies in the SWNW, Section 20, Township 3N, Range 18E; not the SENE, Section 19, Township 3N, Range 18E as originally recommended.

Background

Water rights 37-28 and 37-297 were diverted from the Big Wood River, delivered through the Hiawatha Canal, and used for the irrigation of agricultural land prior to subdivision and development. The claimants' pond was excavated and filled with water as the lots in Buckhorn Subdivision were sold; beneficial use as an aesthetic pond began in April 1987 when the neighboring home was completed and the Clifford's lot was sold.

The pond now lies on three properties, owned by the Cliffords (the claimants), and their neighbors (Kennedy/Kirby and Mathieu, who will be claiming their portions of the pond separately). The following water rights are diverted from the Hiawatha Canal and flow through the claimed pond:

Water Right No.	Owner	Priority Date	Diversion Rate (cfs)	Irrigated Area (acres)
37-28D	Clifford	March 24, 1883	0.04	2.0
37-28J	Kennedy/Kirby	March 24, 1883	0.04	1.9
37-28K	Mathieu	March 24, 1883	0.04	1.9
37-297A	Mathieu	November 26, 1886	0.08	1.9
37-297E	Clifford	November 26, 1886	0.08	1.6
37-297M	Kennedy/Kirby	November 26, 1886	0.08	1.9

Table 1. Area Water Rights

The surface area of the pond is 0.44 acres, of which 0.10 acre are on the Clifford's lot. The pond depth averages three feet for a total volume of 1.32 acre-feet (0.30 acre-feet on the claimants' lot). A total diversion of 0.36 cfs flows into the pond from the Kennedy/Kirby, Clifford and Mathieu water rights.

Analysis

The claimants own a 2-acre parcel (Lot 1, Blk. 1, Buckhorn Subdivision) which was historically irrigated with the claimed water rights. It is assumed the primary crop was grass hay. GIS software was used to determine the irrigation place of use prior to construction of the home and driveway, and excavation of the pond (2.0 acres were irrigated). The irrigated area after excavation of the pond was also determined using GIS technology (1.9 acres were irrigated after construction of the pond).

Online data, available from the ET_{Idaho} website for the Hailey Ranger Station site (www.kimberly.uidaho.edu/ETIdaho), was used to calculate three volumes: 1) the volume of water used during the irrigation season for irrigation of 2.0 acres of grass hay, 2) the volume of water used for irrigation during the irrigation season for 1.9 acres of turf grass (lawn), and 3) the volume of water consumed by evaporative losses from the pond surface on the Clifford property (0.10 acres) year-round. The ET_{Idaho} data is attached to this application. These volumes were compared to show no enlargement of the water rights occurred when the change in nature of use and season of use was accomplished (see Table 5).

Precipitation Deficit (grass hay)	Mean Monthly PD* (mm/day)	Days	PD (mm)	PD (feet)	PD (acre-feet)
April	0.52	15	7.80	0.03	0.05
May	2.43	31	75.33	0.25	0.49
June	4.64	30	139.20	0.46	0.91
July	6.40	31	198.40	0.65	1.30
August	4.20	31	130.20	0.43	0.85
September	2.60	30	78.00	0.26	0.51
October	0.54	31	16.74	0.05	0.11
			Total	2.12	4.24

Table 2: Irrigation before change (grass hay)

Precipitation Deficit (turf grass)	Mean Monthly PD* (mm/day)	Days	PD (mm)	PD (feet)	PD (acre-feet)
April	0.47	15	7.05	0.02	0.04
May	2.02	31	62.62	0.21	0.39
June	4.04	30	121.20	0.40	0.76
July	5.42	31	168.02	0.55	1.05
August	4.49	31	139.19	0.46	0.87
September	2.69	30	80.70	0.26	0.50
October	0.6	31	18.60	0.06	0.12
			Total	1.96	3.72

Table 3: Irrigation after change (turf grass)

Precipitation Deficit (pond)	Mean Monthly PD* (mm/day)	Days	PD (mm)	PD (feet)	PD (acre-feet)
January	-1.91	31	-59.21	-0.19	0.00
February	-1.05	28	-29.40	-0.10	0.00
March	0.07	31	2.17	0.01	0.00
April	1.33	15	19.95	0.07	0.01
May	2.19	31	67.89	0.22	0.02
June	2.62	30	78.60	0.26	0.03
July	3.97	31	123.07	0.40	0.04
August	3.40	31	105.40	0.35	0.03
September	2.17	30	65.10	0.21	0.02
October	1.03	31	31.93	0.10	0.01
November	-0.78	30	-23.40	-0.08	0.00
December	-1.53	31	-47.43	-0.16	0.00
			Total	1.10	0.16

Table 4: Evaporation from pond surface after change

Before Change		Diversion (cfs)	Area (acres)	Vol (afa)	PD Vol (afa)	Notes
irrigation	37-28D	0.04	2.0		4.24	grass hay; 4/15 to 10/31
	37-297E	0.08				
Totals		0.12	2.0	4.24 afa for irrigation only		
After Change		Diversion (cfs)	Area (acres)	Vol (afa)	PD Vol (afa)	Notes
irrigation	37-28D	0.04	1.9		3.72	turf grass; 4/15 to 10/31
	37-297E	0.08				
diversion to pond	37-28D	0.04		0.3		4/15 to 10/31
	37-297E	0.08				
pond evaporation	37-28D		0.1		0.16	4/15 to 10/31
	37-297E					
Totals		0.12	2.0	0.3	3.89	
				3.89 afa for irrigation and storage		

Table 5: Water Consumption Before and After Change in Nature of Use

Summary

The Clifford pond was excavated at the time the subdivision was developed, without benefit of a formal design. The pond is relatively small and the inflow from the Hiawatha canal (a total of 0.36 cfs from Kennedy/Kirby, Clifford and Mathieu) contributes to a pond environment that is clean and clear with a healthy population of fish, aquatic plants and invertebrates. The pond has been used for its aesthetic value since 1987.

Actual water consumption prior to excavation of the pond is estimated to have been 4.24 acre-feet annually. Actual water consumption (for irrigation and evaporative loss) after excavation of the pond is estimated to be 3.89 acre-feet annually (including filling the pond annually, when needed).

ET *Idaho* --- Evapotranspiration and Consumptive Irrigation

Water Requirements for Idaho

Please send suggestions for improving this site to robison@kimberly.uidaho.edu Copyright 2007, University of Idaho.

Hailey Ranger Stn (NWS NOAA--103942)

Statistics based on 30 years between 1947 to 1981

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.

Grass - Turf (lawns) - Irrigated														
Precipitation Deficit (Click here for a graph)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Annual
Mean	mm/day												mm	
Monthly ^b	0.02	0.13	0.21	0.47	2.02	4.04	5.42	4.49	2.69	0.60	-0.26	-0.05	574	620
15-Day Moving Average ^c	0.03	0.12	0.23	0.46	1.94	4.02	5.48	4.45	2.66	0.57	-0.38	-0.06		
7-Day Moving Average ^d	0.03	0.12	0.22	0.47	1.98	3.99	5.45	4.48	2.67	0.57	-0.33	-0.06		
3-Day Moving Average ^e	0.02	0.13	0.21	0.46	2.02	4.02	5.42	4.50	2.68	0.60	-0.28	-0.06		
Standard Deviation	mm/day												mm	
Monthly	0.15	0.09	0.19	0.30	1.62	1.26	0.69	1.54	1.10	0.82	0.26	0.29	84	83
15-Day Moving Average	0.15	0.15	0.22	0.41	1.42	1.59	0.63	1.49	1.37	0.85	0.49	0.31		
7-Day Moving Average	0.25	0.28	0.36	0.66	1.78	2.09	0.87	1.66	1.70	1.21	0.82	0.43		
3-Day Moving Average	0.43	0.45	0.62	1.14	2.23	2.64	1.32	2.03	2.17	1.63	1.25	0.62		
20% Exceedance	mm/day												mm	
Monthly	0.10	0.21	0.31	0.75	3.06	4.96	5.83	5.12	3.70	0.85	-0.07	0.04	630	689
15-Day Moving Average	0.23	0.34	0.51	0.95	4.28	5.77	6.10	5.66	4.30	1.98	0.25	0.17		
7-Day Moving Average	0.33	0.54	0.74	1.16	5.18	6.40	6.67	6.20	4.63	2.85	0.45	0.27		
3-Day Moving Average	0.40	0.61	1.02	1.83	6.19	7.17	7.25	6.61	5.59	3.54	0.66	0.34		
80% Exceedance	mm/day												mm	
Monthly	0.08	0.04	0.04	0.21	0.94	3.21	4.88	4.19	1.71	0.18	-0.56	-0.17	491	546
15-Day Moving	-									-				

Average	0.27	-0.13	-0.21	-0.29	-0.02	2.07	4.48	3.44	0.23	0.59	-1.27	-0.35		
7-Day Moving Average	0.75	-0.60	-0.72	-0.93	-2.04	-1.25	3.39	1.82	0.76	2.21	-2.63	-0.79		
3-Day Moving Average	2.03	-1.43	-1.92	-2.67	-5.52	-3.46	1.21	-0.17	5.12	5.38	-6.48	-1.68		
Ave Highest ET	mm/day												--	
15-Day Moving Average ^f	0.16	0.28	0.44	0.78	2.95	5.04	5.92	5.15	3.58	1.21	0.15	0.11		
7-Day Moving Average ^g	0.27	0.45	0.65	1.09	4.02	5.98	6.42	5.84	4.17	1.64	0.39	0.23		
3-Day Moving Average ^h	0.36	0.55	0.88	1.62	5.21	6.72	6.96	6.34	4.97	2.20	0.51	0.29		
Ave Lowest ET	mm/day												--	
15-Day Moving Average ^f	0.13	-0.02	-0.01	0.06	0.99	3.06	4.98	3.78	1.74	0.04	-0.65	-0.23		
7-Day Moving Average ^g	0.42	-0.31	-0.38	-0.62	-0.21	1.62	4.31	2.87	0.81	0.95	-1.42	-0.54		
3-Day Moving Average ^h	1.06	-0.92	-1.30	-2.10	-2.48	-0.80	2.52	1.06	1.10	2.67	-3.16	-1.23		
Special normal distribution parameters for monthly, seasonal, and annual intervals													--	
Skew	0.28	-0.82	0.12	0.26	0.16	-0.89	0.14	-0.75	0.65	0.18	-0.38	-1.14	0.31	0.15
Kurtosis	0.81	3.57	0.72	2.81	0.64	3.66	0.64	1.61	2.52	0.90	2.22	3.78	3.11	2.87

^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 Mean of the average daily value for month

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

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

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

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

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

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

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This work and report were prepared by the University of Idaho Research and Extension Center at Kimberly, Idaho under contract with the Idaho Department of Water Resources. Work was supported by funding from IDWR and the Idaho

Agricultural Experiment Station and Idaho Engineering Experiment Station. The authors gratefully acknowledge the long-term evapotranspiration data collection and long-standing advice provided by Dr. James L. Wright, USDA-ARS Kimberly (ret.), the more than two decades of high quality agricultural weather data collection by the U.S. Bureau of Reclamation AgriMet system, and the very long-standing, routine data collection by the hundreds of cooperative weather station volunteers across the state who, for more than one-hundred years, have faithfully observed daily air temperature and precipitation.

The citation for the evapotranspiration data used from this site should be: *Allen, Richard G. and Clarence W. Robison, 2006 (Revised 2007). Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID.*

Questions regarding the data should be addressed to Clarence W. Robison or Richard G. Allen, University of Idaho, Kimberly Research and Extension Center, 3793 North 3600 East, Kimberly, ID 83341. Telephone (208)-423-6610

ETIdaho --- Evapotranspiration and Consumptive Irrigation

Water Requirements for Idaho

Please send suggestions for improving this site to robison@kimberly.uidaho.edu Copyright 2007, University of Idaho.

Hailey Ranger Stn (NWS NOAA--103942)

Statistics based on 30 years between 1947 to 1981

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.

Grass Hay														
Precipitation Deficit (Click here for a graph)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Annual
Mean	mm/day												mm	
Monthly ^b	0.06	0.12	0.21	0.52	2.43	4.64	6.40	4.20	2.60	0.54	-0.38	-0.19	624	657
15-Day Moving Average ^c	0.06	0.12	0.23	0.48	2.38	4.58	6.50	4.04	2.57	0.50	-0.47	-0.22		
7-Day Moving Average ^d	0.06	0.12	0.22	0.49	2.41	4.56	6.46	4.13	2.57	0.50	-0.43	-0.19		
3-Day Moving Average ^e	0.06	0.12	0.21	0.50	2.44	4.61	6.40	4.18	2.58	0.53	-0.40	-0.19		
Standard Deviation	mm/day												mm	
Monthly	0.46	0.11	0.19	0.38	1.74	1.32	0.69	1.48	1.13	0.90	0.44	0.45	87	88
15-Day Moving Average	0.42	0.17	0.22	0.44	1.56	1.67	0.66	1.51	1.39	0.93	0.63	0.50		
7-Day Moving Average	0.60	0.31	0.36	0.70	1.98	2.16	0.94	1.79	1.72	1.34	1.01	0.65		
3-Day Moving Average	0.87	0.49	0.62	1.20	2.43	2.68	1.38	2.16	2.24	1.82	1.52	0.93		
20% Exceedance	mm/day												mm	
Monthly	0.10	0.21	0.31	0.75	3.64	5.66	6.75	4.84	3.62	0.68	-0.08	0.03	677	742
15-Day Moving Average	0.23	0.34	0.51	1.00	4.63	6.68	7.20	6.16	4.18	1.91	0.24	0.17		
7-Day Moving Average	0.33	0.54	0.74	1.18	5.43	7.19	7.56	6.70	4.70	2.67	0.45	0.27		
3-Day Moving Average	0.40	0.61	1.02	2.08	6.33	7.61	7.98	6.98	5.56	3.40	0.66	0.34		
80% Exceedance	mm/day												mm	
Monthly	0.16	0.04	0.04	0.21	1.46	3.82	5.90	3.71	1.70	0.03	-0.83	-0.41	544	580

15-Day Moving Average	0.50	-0.13	-0.20	-0.29	0.48	2.69	5.34	2.79	0.23	0.63	-1.69	-0.95	
7-Day Moving Average	1.07	-0.60	-0.72	-0.93	-1.21	-0.77	4.17	1.15	0.76	2.56	-3.05	-1.88	
3-Day Moving Average	2.53	-1.43	-1.95	-2.67	-5.81	-3.59	1.41	0.00	4.47	5.74	-6.92	-3.94	
Ave Highest ET	mm/day												--
15-Day Moving Average ^f	0.15	0.28	0.44	0.86	3.53	5.70	6.97	5.08	3.41	1.20	0.14	0.10	
7-Day Moving Average ^g	0.27	0.45	0.65	1.23	4.63	6.69	7.31	5.93	4.10	1.66	0.39	0.23	
3-Day Moving Average ^h	0.36	0.55	0.88	1.90	5.72	7.28	7.77	6.64	4.78	2.19	0.52	0.29	
Ave Lowest ET	mm/day												--
15-Day Moving Average ^f	0.26	-0.03	0.00	0.06	1.32	3.55	5.95	3.16	1.72	0.16	-0.89	-0.49	
7-Day Moving Average ^g	0.68	-0.32	-0.38	-0.61	-0.02	2.07	5.07	2.18	0.76	1.20	-1.81	-1.04	
3-Day Moving Average ^h	1.62	-0.97	-1.30	-2.10	-2.34	-0.41	3.27	0.69	1.24	3.23	-3.88	-2.24	
Special normal distribution parameters for monthly, seasonal, and annual intervals													--
Skew	1.16	-1.89	0.11	0.97	0.11	-0.74	0.16	-0.54	0.66	0.08	-1.01	-0.51	0.44 0.30
Kurtosis	3.30	8.06	0.71	3.81	0.68	3.46	0.74	1.21	2.67	1.00	3.31	1.19	3.27 2.66

^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 Mean of the average daily value for month

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

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

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

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Questions regarding the data should be addressed to Clarence W. Robison or Richard G. Allen, University of Idaho, Kimberly Research and Extension Center, 3793 North 3600 East, Kimberly, ID 83341. Telephone (208)-423-6610

ETIdaho --- Evapotranspiration and Consumptive Irrigation

Water Requirements for Idaho

Please send suggestions for improving this site to robison at kimberly dot uidaho dot edu Copyright 2007, University of Idaho.

Hailey Ranger Stn (NWS NOAA--103942)

Statistics based on 30 years between 1947 to 1981

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.

Open water - shallow systems (ponds, streams)														
Precipitation Deficit (Click here for a graph)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Annual
Mean	mm/day												mm	
Monthly ^b	-1.91	-1.05	0.07	1.33	2.19	2.62	3.97	3.40	2.17	1.03	-0.78	-1.53	353	353
15-Day Moving Average ^c	-2.13	-1.02	0.01	1.48	2.17	2.59	4.01	3.43	2.12	1.03	-0.94	-1.46		
7-Day Moving Average ^d	-2.00	-1.03	0.03	1.40	2.19	2.56	4.00	3.43	2.15	1.02	-0.84	-1.51		
3-Day Moving Average ^e	-1.93	-1.02	0.04	1.33	2.20	2.59	3.97	3.41	2.17	1.03	-0.79	-1.53		
Standard Deviation	mm/day												mm	
Monthly	2.42	1.13	0.99	0.91	1.49	1.33	0.63	1.09	0.86	0.98	1.06	2.54	118	118
15-Day Moving Average	2.67	1.75	1.10	1.15	1.51	1.65	0.57	1.10	1.19	1.00	1.43	2.51		
7-Day Moving Average	3.52	2.55	1.51	1.63	1.90	2.20	0.76	1.24	1.52	1.44	1.99	3.31		
3-Day Moving Average	4.76	3.40	2.24	2.37	2.44	2.74	1.12	1.62	2.09	1.96	2.77	4.19		
20% Exceedance	mm/day												mm	
Monthly	-0.55	-0.10	0.75	1.98	2.88	3.75	4.32	3.84	2.80	1.67	0.29	-0.20	459	459
15-Day Moving Average	0.37	0.64	1.33	2.88	3.84	4.22	4.59	4.19	3.16	2.06	0.64	0.36		
7-Day Moving Average	0.63	0.99	1.62	3.18	4.23	4.64	4.75	4.31	3.52	2.46	1.06	0.48		
3-Day Moving Average	0.76	1.09	2.03	3.60	4.64	4.89	4.98	4.54	3.73	2.70	1.16	0.59		
80% Exceedance	mm/day												mm	

Monthly	-3.55	-2.27	-0.83	0.23	1.71	1.58	3.64	3.11	1.66	0.26	-2.00	-2.46	280	280
15-Day Moving Average	-6.21	-4.27	-1.94	-0.96	0.18	0.11	3.18	2.35	0.49	0.92	-3.92	-4.25		
7-Day Moving Average	10.90	-8.97	-3.84	-2.94	-1.79	3.01	2.16	1.17	1.26	2.62	-6.30	-6.68		
3-Day Moving Average	16.43	15.38	-8.92	-6.49	-5.97	6.56	0.04	-1.57	5.32	6.20	10.55	13.65		
Ave Highest ET	mm/day												--	
15-Day Moving Average ^f	0.19	0.38	0.93	2.23	3.11	3.61	4.35	3.91	2.78	1.76	0.36	0.17		
7-Day Moving Average ^g	0.48	0.87	1.45	2.77	3.91	4.38	4.59	4.23	3.29	2.16	0.82	0.40		
3-Day Moving Average ^h	0.64	1.00	1.77	3.22	4.30	4.75	4.85	4.45	3.59	2.51	1.05	0.50		
Ave Lowest ET	mm/day												--	
15-Day Moving Average ^f	-3.77	-2.22	-0.86	0.50	1.17	1.60	3.63	2.85	1.46	0.30	-1.84	-2.87		
7-Day Moving Average ^g	-6.92	-4.66	-2.20	-1.05	-0.48	0.01	2.98	2.05	0.53	0.97	-3.55	-5.21		
3-Day Moving Average ^h	12.77	-8.87	-5.14	-3.85	-3.36	2.44	1.54	0.43	1.77	3.31	-6.94	-9.69		
Special normal distribution parameters for monthly, seasonal, and annual intervals													--	
Skew	-0.39	-0.58	-0.12	-0.53	-0.51	0.92	0.31	-1.28	1.30	0.07	-0.53	-1.00	-0.13	-0.13
Kurtosis	0.95	2.84	0.51	2.60	1.63	3.39	0.87	4.26	4.28	0.49	2.19	3.23	3.36	3.36

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