



**State of Idaho**  
**DEPARTMENT OF WATER RESOURCES**

1301 North Orchard Street, P.O. Box 83720, Boise, Idaho 83720-0098  
Phone: (208) 327-7900 FAX: (208) 327-7866

April 14, 1995

Jack Eastman  
106 Doral Dr.  
Jerome, ID 83338

PHILIP E. BATT  
GOVERNOR

R. KEITH HIGGINSON  
DIRECTOR

Re: Delivery of Devil Creek Ranch Inc. Water Right from Deadwood  
Creek, IDWR Water Right No. 51-00132.

Dear Mr. Eastman:

I have reviewed the information and recommendation from Tim Luke regarding the 1995 season of use for the above referenced water right. I have also reviewed the request for delivery, dated April 6, 1995, submitted by Justin Seamons on behalf of his client, Devil Creek Ranch, Inc. I concur with the recommendation made by Mr. Luke.

The purpose of this letter is to formally notify you that no water shall be delivered under the above referenced water right prior to May 1, 1995. The water right may be delivered on or after May 1, 1995.

This directive concerning the delivery of this right applies only to the 1995 irrigation season. This directive should not be used as the basis of making a decision about the delivery of the Devil Creek Ranch Deadwood Creek water right in any succeeding year.

Sincerely,

*Norman Cepung*  
for R. Keith Higginson  
Director

cc: Justin Seamons  
John Coleman  
Jack Eastman  
Southern Region



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April 14, 1995

R. KEITH HIGGINSON  
DIRECTOR

IDWR Conference Call Participants of 4/13/95

Re: Devil Creek Ranch Call for Water and Irrigation Season of Use  
Issue

Gentlemen:

I wish to thank all of you for participating in yesterday's conference call regarding the above referenced issue. I appreciate your availability and input on this matter.

Based on our conference, I understand that the opposing parties to this matter could not reach agreement and opted instead to have the Department make a decision regarding the appropriate starting date for the 1995 irrigation season of use applicable to the Devil Creek Ranch water right from Deadwood Creek. It is my further understanding that the Department's decision regarding this matter is applicable only to the 1995 irrigation season and may serve as an interim compromise between the parties for at least the 1995 season. I also understand that the parties have agreed to abide by the Department's decision for the 1995 season. Additionally, a decision by IDWR should not injure or strengthen either parties position towards the determination of this matter in the Snake River Basin Adjudication (SRBA).

Following our meeting, I took time to research some irrigation season of use and climate data for the Three Creek area. Attached to this letter is an inter-department memo dated February 15, 1994, from Jeff Peppersack to Jan Shurte. Mr. Peppersack is an IDWR water resource engineer and has helped the Department develop irrigation season of use standards for the SRBA. Mr. Peppersack's memo reviews four methods for determining the irrigation season of use. The table attached to his memo shows the irrigation season of use starting date at Three Creek as determined by each method. The starting dates range from April 15 to May 26. It should be noted that the April 15 date is a date based on a 75% chance of a 24 degree Fahrenheit frost which has been extrapolated over a broad geographic area within portions of Owyhee and Twin Falls Counties. This date is not specific to the Three Creek area. Data published by the University of Idaho shows that at Three Creek, May 11 is the date with a 75% chance of a 24 degree Fahrenheit frost. The average 24 degree frost at Three Creek is May 26.

I have discussed the above season of use data and methodology with Mr. Peppersack. He has informed me that the season of use dates based on the mean 45 degree Fahrenheit and solar thermal methodologies are probably most representative of normal season of

use dates. Note that May 6 and May 4 are the irrigation season of use starting dates based on those respective methodologies.

In addition to reviewing different season of use dates for the Deadwood Creek vicinity, I have also looked at some precipitation data. Total precipitation for the month of March at Murphy Hot Springs, elevation 5,160 ft., was 1.32 inches. The average precipitation for March at this same location is 1.06 inches. March precipitation therefore was 0.26 inches or 20% greater than normal. The Soil Conservation Service Water Supply Outlook published on April 1 reports that precipitation for the water year across the Southside Snake River Basins is just below average at 93% of average. The Surface Water Supply Index is near the median value for Salmon Falls Creek basin, indicating a near normal supply of water.

Based on all of the above data I think it is fair to say that current climate and field conditions along Deadwood Creek are near normal. Recent rains and colder temperatures over the past two weeks should have benefitted the soil moisture profile. As a result, soil moisture conditions are adequate for this time of year and can be maintained assuming normal precipitation and evapotranspiration rates occur. It is my opinion that artificial irrigation is not required at this time and that a hay crop in the Three Creek/Deadwood Creek area can be sustained without artificial irrigation until at least May 1.

I am today recommending to the Director that he issue a directive to the watermaster of Water District 47-C that the Devil Creek Ranch water right from Deadwood Creek not be delivered until May 1. I believe that this proposed decision is one that is fair to both parties. A separate cover letter will be sent to the watermaster with carbon copies sent to interested parties.

Sincerely,



Tim Luke  
Hydrologist  
Water Allocations

cc: Justin Seamons  
John Coleman  
Jack Eastman  
Jim Stanton, IDWR

MEMO

February 15, 1994

To: Jan Shurte

From: Jeff Peppersack

Re: Season of Use Along Bruneau River and Vicinity

In response to your request I have computed a season of use for the area along the Bruneau River in Owyhee County from Three Creek on down to the Snake River using various methods. Temperature data is available for weather stations at Grandview, Bruneau, Grasmere and Three Creek. Results are shown in the attached table along with the current IDWR standards for the area.

The first method is the average period between 24 degree Fahrenheit frosts. This is considered a severe freeze where all plants sustain heavy damage (Everson, Faubion, and Amos). The second method is the average period between a mean daily temperature of 45 degrees Fahrenheit or greater. This is considered the moisture-use period for crops (Soil Conservation Service). The third method is based on the Solar Thermal Unit Model. A solar thermal unit for a given day is defined as the product of the mean daily temperature minus a threshold temperature of 31 degrees Fahrenheit times the daily total solar radiation in Langleys. The season begins at a point where 200,000 solar thermal units (STU) have accumulated and ends when the average daily STU's have fallen to about 4,000 (Caprio).

Current IDWR standards are based on a 75% chance of a 24 degree Fahrenheit frost. The standard dates for the area are shown in the table.

#### REFERENCES

- Caprio, Joseph M., World Maps of Potential Evapotranspiration, Plant Development, and Spring Greening and Autumn Browning of Vegetation, Based on the Solar Thermal Unit Model, Montana State University, 1974.
- Everson, Dale O., Faubion and Amos, Spring and Fall Freezing Temperatures and Growing Seasons in Idaho, University of Idaho, 1978.
- Soil Conservation Service, Irrigation Water Requirements, U.S. Dept. of Agriculture, 1967.

### IRRIGATION SEASON OF USE

Station	24 deg. F. Frost	45 deg. F. Mean	Solar Thermal Units	IDWR Standards
Grandview	April 7	March 24	March 31	March 15
	Oct. 20	Nov. 1	Nov. 4	Nov. 15
Bruneau		March 27	April 4	March 15
		Nov. 1	Nov. 4	Nov. 15
Grasmere		April 28	April 25	April 15
		Oct. 20	Oct. 23	Oct. 15
Three Creek	May 26	May 6	May 4	April 15
	Sept. 6	Oct. 1	Oct. 21	Oct. 15