

Notes of Lee Sim  
6-22-98

Tim  
I like these notes  
of Sim's best. Add  
any changes, but stick  
with his format. *ny*

**DRAFT  
CLEAR CREEK**

The following is from notes taken at a meeting held in Malta, Idaho on June 18, 1998. Those in attendance were Norm Young, Tim Luke, and Allen Merrit (State of Idaho); Dave Sundberg (Idaho watermaster); Lee Sim and Bob Fotheringham (State of Utah); Vern Kempton (Utah commissioner); and Mont Campbell (Utah wateruser).

**DESCRIPTION OF WATER DISTRIBUTION PRACTICES**

The basis of distribution in Utah has been the Christensen Decree, the Johnson Decree, and the Naf Irrigation Company rules (the company shareholders divert directly from Clear Creek rather than from a main company canal, so the Utah commissioner distributes water among shareholders). The distribution of water according to these documents was described as follows:

Depending on the weather, the Utah irrigators will start using water sometime in April or early May - the creek is usually at about 3 cfs at this point. The water continues to be entirely used in Utah until the flow increases to an average of 20 cfs or more for a period of 24 hours. The Johnson decree said this flow was to be determined by adding the measurement made at the USGS gaging station with the measurements made at the diversions above the gaging station. After the gaging station was abandoned, they started determining the flow by adding the measurement taken at the "stage crossing" (Kempton's diversions) and adding it to the measurements of the diversions above the "stage crossing". In 1995, in an effort to more closely follow the decree, they began taking measurements at the "temporary weir" (just below the old USGS gaging station and near the Sundberg and Campbell diversions) and adding the diversions above the "temporary weir" to determine the flow of the creek. There are six measurements that must be made to make this determination: two Scofield diversions, two Sundberg diversions, one Campbell diversion, and the flow over the "temporary weir". It was generally agreed at the meeting that measuring the water at these points would provide an adequate representation of the flow of the creek.

After the flow reaches an average of 20 cfs, it is turned down to the Idaho water users. They use the entire flow of the creek, except the Scofield right to 0.33 cfs and the Naf I.C. right to 0.5 cfs, until they have taken a volume of 560 acre feet. The flow used to determine this volume is measured at the Idaho weir.

Once the 560 acre feet has been delivered to the Idaho water users, the flow of the creek is then split between the water users - 57% to the Idaho water users and 43% to the Utah water users. The Idaho water is measured at the Idaho weir and the Utah water is the sum of the measurements taken at each of the diversions in Utah. The sum of the Idaho weir and the Utah diversions is taken to be the total flow of the creek. The water continues to be distributed on this basis until a total of 720 acre feet has been delivered under the 57%- 43% split.

After 720 acre feet has been delivered, if the flow of the creek is still above 36 cfs the water continues to be distributed according to the 57% - 43% split. If the flow drops below 36 cfs, then the entire flow goes to Idaho for 12 days (the "12 day run") except the Scofield right to 0.33 cfs and the Naf I.C. right to 0.5 cfs. After 12 days, the water is again split between the water users in the two states according to the 57% - 43% split until the flow of the creek drops to 17 cfs.

Once the flow of the creek drops to an average of 17 cfs for 24 hours, the entire flow is kept for use in Utah. This usually occurs in the end of July or August, however, any time the creek drops

to an average of 17 cfs or below for 24 hours during the distribution season, the entire flow of the stream is kept for use in Utah.

## **PROCEDURES FOR COORDINATING THE DISTRIBUTION EFFORTS OF THE UTAH COMMISSIONER AND THE IDAHO WATERMASTER**

### **DETERMINING WHEN THE FLOW SHOULD BE RELEASED TO IDAHO IN THE SPRING**

The Utah commissioner will take measurements at the "Temporary Weir" and at the diversions above between 7:00 a.m. and 10:00 a.m. When the flow of the creek reaches 10 cfs, the Utah commissioner will begin posting each of these measurements plus the total creek flow at the Naf store by noon each day. When the creek flow reaches 12 cfs, the Utah commissioner will notify the Idaho watermaster. When the average of the current day's total creek flow and the previous day's total creek flow (based on the measurements posted at the Naf store) is equal to or greater than 20 cfs, the water will be released to Idaho. The Utah commissioner will contact the Idaho watermaster when he believes it is likely that the water will be released to Idaho the next day. Once the determination has been made that water should be released to Idaho, the Utah commissioner will immediately begin to open the control structures on the Utah diversions to release the flow downstream. He will begin at the lowest diversion on the Utah system and continue up the system until all control structures have been opened. Creek flow measurements will not be posted at the Naf store after the water has been released to Idaho.

### **DETERMINING WHEN THE 57% - 43% SPLIT SHOULD BEGIN**

After the water has been turned to Idaho, the Utah commissioner will monitor the flow of the creek at the Idaho weir. When it appears that delivery of the 560 acre feet will be completed in the next day or so, the Idaho watermaster and the Utah commissioner will coordinate with each other about the start the 57% - 43% split. The Idaho watermaster will determine when the 560 acre feet has been delivered and the split should begin.

### **REVIEW OF WATER MEASUREMENT PRACTICES IN UTAH**

At any time during the season, if the Idaho watermaster desires to accompany the Utah commissioner on his rounds, he should make arrangements with him the night before. It is anticipated that this will occur three times a season, however, more times a season will not create a problem as long as arrangements are made the night before.

There was a general consensus that because of the time of year the first and second of the procedures listed above would be implemented starting in 1999 and the third would be implemented immediately. These procedures are subject to review and may be modified from year to year as the need arises and as the Utah commissioner, Idaho watermaster, and the Utah and Idaho state officials can agree.

Summary of Notes from Clear Creek Meeting, June 18, 1998 at Raft River Rural Electric, Malta  
Notes of Tim Luke and Norm Young, IDWR  
Prepared by Tim Luke

Attendees: Norm Young, Allen Merritt & Tim Luke, IDWR  
Lee Sim and Bob Fotheringham, Utah Division of Water Rights  
Dave Sundberg, Idaho Watermaster, Clear Creek and Upper Raft River  
Vern Kempton, Clear Creek Water Commissioner  
Monte Campbell, Utah Clear Creek water user

Water Right Decrees

Vern Kempton and Monte Campbell explained that Vern uses the Christensen decree to administer rights in Utah, and also the Johnson decree to deliver water as between Utah and Idaho. Some mention was made of Naf Irrigation Company rules. Bob Fotheringham said that those rules are the same thing as the Christensen decree. Dave Sundberg explained that he delivers water in Idaho based on the Dietrich decree (Albion Land Co.) for delivery of rights in Idaho, and also relies on the Johnson decree concerning delivery of water as between the two states. Sundberg also follows any orders which may have been issued over the past several years by Judge Hurlbutt, Idaho District Court and Snake River Basin Adjudication (SRBA) presiding judge. Sundberg mentioned that there are several rights on Clear Creek from the Jobe Adams decree, which is the decree for Upper Raft River. However, these Clear Creek rights, according to Sundberg, have always been ignored and only the rights from the Dietrich Decree have been delivered.

Delivery Protocol in Utah and Idaho

a) Call for water and determination of 20 cfs flow on Clear Creek

Kempton, Campbell and Sundberg all provided explanation of how water is delivered in the two states. Specific explanation was given about splitting of water between the states under the Johnson decree. Campbell and Kempton stated that the Utah commissioner is called on as soon water is diverted in Utah. Water can not be diverted without the commissioner being called to duty. When the creek averages a flow of 20 cfs over a 24 hour period, all of the diversions in Utah are shut off and the water is turned to Idaho, with the exception of two permanent rights, one for 0.5 cfs which is diverted to Scofield, and one for 0.33 cfs which is diverted to Naf Irrigation Co.(total of 0.83 cfs).

Under the Johnson decree, the 20 cfs is measured at a USGS gage some distance upstream from the state line and above all but three of the Utah diversions. The USGS gage was washed out many years ago and the 20 cfs was for a long time measured at a diversion structure known as the "Stage Crossing." This is the diversion structure used for the Kempton diversions. Upstream diversions were added to the measurement at the crossing for purposes of determining the 20 cfs and/or the total flow of the creek. Since 1995 however, this measurement site, known as the "temporary weir", has been moved upstream to a point just below the old USGS gage site. The Clear Creek measurement now and since 1995 has been accomplished by using a wooden cippolletti weir placed in a diversion dam structure, and adding to this the upstream diversions, including two ditch diversions which take out adjacent to or above the weir and diversion dam structure.

b) Determination of 560 acre-feet, and 720 acre-feet totals

When Clear Creek exceeds 20 cfs over a 24 hour period, all of the water is turned to Idaho except for the 0.83 cfs permanent rights. The total creek flow except the 0.83 cfs remains available to Idaho until a total volume of 560 acre-feet (af) is delivered at the Idaho weir. It was explained that it generally takes about 5 to 10 days to accrue the 560 af. The 560 af volume is determined in Idaho by summing the flow of the Idaho weir along with the two ditch diversions that take out along side or above the weir. When this volume is accrued, the creek is then split between the two states, with Idaho getting 57% of the available flow, and Utah getting 43% of the flow. Utah flow is determined by adding up all of the diversions in Utah. The Idaho water is measured by summing the Idaho weir and the two diversions upstream of the weir. For purposes of determining the volume accumulations between the states, Clear Creek tributaries below the Idaho weir are not considered.

c) Distribution after accumulation of 720 af

The 57-43% split continues until 720 af is accrued on the creek. (Note: decree identifies 750 af, not 720 af). If this volume is reached and the flow of the creek exceeds 36 cfs, then the two states continue to split the creek at the same percentage. When the average flow of the creek recedes to 17 cfs or less over a 24 hour period, then the entire flow is turned back to Utah. If after the 750 af is accumulated and the flow of the creek drops between 17 and 36 cfs, then Idaho receives the full flow of the creek, except for the 0.83 cfs primary rights, for a period of time not to exceed 12 days. If the creek at any time goes back above 36 cfs, then the states again split the creek at 57-43 percent. Campbell, Sundberg and Kempton stated that the flow always recedes to 17 cfs or less before 12 days. They also stated that it was rare if ever that the flow returns to above 36 cfs once it drops below 17 cfs.

During those times when all of the creek is used by Utah, determination of stream flow is determined using the temporary weir plus any diversions above this weir.

Problems with Delivery of Water Between Idaho and Utah

The main problem identified concerning distribution between the two states appears to be in determining the 20 cfs natural flow of the creek. This is the critical flow that triggers the turning of water to Idaho and also starts the accrual of the 560 and 720 af (or 750 af by decree) volume amounts. The Idaho watermaster this year had a concern that water was not timely turned to Idaho when the 20 cfs was reached. There appears to be difficulty with communication or meetings between Idaho watermaster and Utah commissioner regarding the 20 cfs.

There does not appear to be much problem with determination of the 560 and 720 af amounts because both Sundberg and Kempton make daily measurements at the Idaho weir. However, the Idaho watermaster also expressed a desire to be able to monitor diversions in Utah to confirm the 57-43% split.

Future Arrangements for Monitoring and Determination of 20 cfs Flow of Clear Creek

All of those present at the meeting of June 18th agreed to a proposal whereby certain Clear Creek measurements at certain critical times would be posted outside of the Naf store by Vern Kempton so that the Idaho watermaster and other water users in both Idaho and Utah would know the

flows of the creek and can better anticipate when the water will be turned to Idaho. Specifically, the plan proposed that Kempton begin posting measured flows of the creek in the spring when flows reach 10 cfs. The measurements will be made daily by the Utah commissioner between 7 and 10 a.m., and posted daily somewhere outside at the Naf store before 12 noon. The Utah commissioner will list separately the following measurements:

- 1) measurement of the Idaho weir
- 2) measurement and name of each ditch diversion that is taking water above the Idaho weir (may include up to five ditches)
- 3) total flow of creek (weir plus diversions)

When the average of the current day's total creek flow and the previous day's total creek flow (based on the measurements posted at the Naf store) is equal to or greater than 20 cfs, the water will be released to Idaho. The Utah commissioner can either call the Idaho watermaster directly and/or post additional comments or a note at the Naf store which advises when the gates in Utah will be shut off to provide water to Idaho. Once the 20 cfs flow has been determined, then posting of flows and diversions can be discontinued for the remainder of the season. This posting procedure should be implemented next season, and every year thereafter provided the procedure is successful.

The Idaho watermaster will have responsibility for determining the accrual of the 560 af and will coordinate with the Utah commissioner concerning the start of the 57-43% split between the states, as well as the accrual of the 720 af.

Those present at the June 18th meeting also agreed that the Utah commissioner will accommodate requests by the Idaho watermaster during the irrigation season to let the Idaho watermaster accompany the Utah commissioner on his daily ride of diversions and measurements, provided that the Idaho watermaster will only accompany the Utah commissioner up to three times during the season. The Idaho watermaster must make arrangements with the Utah commissioner the night before any of the three visits. This cooperative effort can be implemented during this 1998 irrigation season.