



State of Idaho  
DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000  
Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS  
GOVERNOR

R. KEITH HIGGINSON  
DIRECTOR

February 16, 1993

Re: Financial Audits of Water Districts

Dear Water District Secretary:

This letter and the attached copy of Section 42-619 of the Idaho Code is being sent to you to provide notice and reminder of certain statutory requirements concerning financial statements and audits for water districts.

Section 42-619 was added to the Idaho Code in 1989. This particular statute provides authority for Idaho counties to discontinue their statutory obligation of providing payment of water district expenses. This law also requires that in those districts where the counties no longer provide the service of paying water district expenses, the district must elect a treasurer (unless the budget is \$3000 or less, then the watermaster may serve as treasurer).

Section 42-619 also outlines the duties of the treasurer, which includes preparing a statement of the financial affairs of the district at the end of each fiscal year and to file such statement with the Department of Water Resources. We suggest that this statement be filed with the Annual Watermaster's Report.

For those districts which handle their own money (i.e.; districts which make their own payments and/or collect their own assessments), Section 42-619 further requires that a financial audit of the district be completed, at the districts expense, by an independent public accounting firm at least every three years for districts with annual budgets greater than \$3000, and every five years for districts with annual budgets of \$3000 or less. A certified copy of such an audit must also be filed with the Department of Water Resources. Districts are exempt from this requirement only if the county still provides the dual service of collecting assessments and disbursing funds.

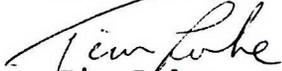
The purpose of this letter is merely to remind you about the financial statement and audit requirements of Section 42-619, Idaho Code. Since it has been at least three years since the legislature passed this statute, some districts should consider budgeting for a financial audit by a public accounting firm in this year's adopted budget. I would expect that this would be a relatively nominal expense for most districts.

For those districts which have already held annual meetings and have adopted budgets and to which this matter may be applicable,

please advise the advisory committee members of these requirements and the need to comply with the law.

If you have questions concerning this matter, please contact me directly at this office or a representative at one of our regional offices.

Sincerely,

A handwritten signature in cursive script that reads "Tim Luke".

Tim Luke  
Hydrologist  
Water Allocations

42-619. Alternate plan for payment of district expenses. (1) The county commissioners of any county having determined that providing the service of payment of water district expenses by the county treasurer from water district funds pursuant to section 42-613, Idaho Code, is an undue burden upon the county and shall no longer be provided, shall notify the director of the department of water resources of this action by December 1 in the year preceding the year for which the action shall first be effective by providing to the director a certified copy of the resolution of the commissioners taking such action.

(2) Notice of the action of the county commissioners shall be given to the water users of the district by the department of water resources together with the notice of the annual meeting given pursuant to section 42-605, Idaho Code.

(3) At each annual meeting of a district for which the county commissioners have taken the action provided for in subsection (1) of this section, the water users shall provide for the election or appointment of a water district treasurer. If a water district treasurer is not elected at the annual meeting, and one is found to be necessary, the director of the department of water resources shall appoint a water district treasurer. The water district treasurer shall keep a complete, accurate and permanent record of all moneys received by and disbursed for and on behalf of the district. The water district treasurer shall deposit all moneys of the district in a designated depository approved at the annual meeting, and shall comply with the public depository law as contained in chapter 1, title 57, Idaho Code.

(4) Before undertaking the duties of the office, the water district treasurer shall take and subscribe to an oath before an officer authorized by the laws of the state to administer oaths, to faithfully perform the duties of the office, and shall file the oath with the director of the department of water resources. Upon issuance by the director of a certificate confirming the election or appointment of a water district treasurer, the actions taken by the water district treasurer in fulfillment of the duties of the office are covered by the state group surety bond as provided in sections 59-801 through 59-804, Idaho Code.

(5) The water district treasurer shall serve until a successor is elected or appointed, and qualified. A water district treasurer may be removed from office by the director for failure to perform the duties of the office in the manner provided for removal of a watermaster.

(6) Compensation for the services of the water district treasurer shall be set at the annual meeting and may be established on a fixed-sum, per diem, or voluntary basis. If a water district treasurer is appointed by the director in the absence of being elected at the annual meeting, the director shall fix the compensation to be paid, if any.

(7) With respect to any district for which the county commissioners have taken the action provided for in subsection (1) of this section, or for which the water users have taken the action provided for in subsection (10) of this section and have notified the county thereof, the county auditor shall in the time and manner provided by section 63-2104, Idaho Code, transmit to the water district treasurer of the water district a settlement of all moneys belonging to such district paid into the county treasury and apportioned to such water district on or after the second Monday of the preceding month; provided, however, that in the months of July and January the money may be transmitted no later than the 25th of the month. The treasurer of the water district shall immediately deposit the funds in the designated depository for the district.

(8) The treasurer of the water district shall only disburse moneys from the water district account upon submission of a written voucher approved by the watermaster for expenses incurred for water district purposes related to the delivery of water or by a voucher approved by the chairman of the advisory committee for activities pursuant to resolutions adopted by the water users from district funds or funds retained pursuant to section 42-613A, Idaho Code.

(9) It shall be the duty of the water district treasurer to prepare a statement of the financial affairs of the district at the end of each fiscal year and to file the statement with the director of the department of water resources. An audit of the financial affairs of the district, by an independent public accounting firm, shall be made at district expense at intervals of not more than three (3) years for districts having an annual expense of more than three thousand dollars (\$3,000), and at intervals of not more than five (5) years for districts having an annual expense of three thousand dollars (\$3,000) or less. A certified copy of the audit shall be filed with the director of the department of water resources following the audit.

(10) In any water district for which the county commissioners have not taken the action provided for in subsection (1) of this section, the water users may at the annual meeting of the district approve a resolution authorizing the election or appointment of a water district treasurer who shall exercise all duties and responsibilities of a treasurer provided for in this section.

(11) In water districts with an annual budget of three thousand dollars (\$3,000) or less, the water users may by resolution adopted at the annual meeting authorize the watermaster to serve as water district treasurer. Watermasters in water districts with annual budgets in excess of three thousand dollars (\$3,000) shall not be authorized to act as water district treasurer.

## MEMORANDUM OF UNDERSTANDING

This memorandum of understanding is entered into by and between the Director of the Department of Water Resources, (hereinafter called the Director) and the water users of Water District No. 1, Upper Snake River, (hereinafter called Water District No. 1) acting through the Water District advisory committee known as the Committee of Nine.

WHEREAS, the statutes of the State of Idaho provide for the Director to have direction and control of the distribution of the waters of the state to those holding valid rights to the use thereto; and

WHEREAS, the Water District No. 1 authorized the Committee of Nine, as advisors to, and elected representatives of the water district, by resolution duly adopted at the March 2, 1993, annual meeting of the water users of the district to enter this memorandum of understanding continuing a cooperative program with the Director to provide watermaster services for Water District No. 1 and

WHEREAS, the Committee of Nine will, among other things, serve as advisors to the Director and the watermaster in matters relating to the distribution of the natural flow and stored water within the district:

NOW, THEREFORE, the Director agrees to provide the following services to Water District No. 1, effective upon the execution of this memorandum of understanding and to continue to provide the services from year-to-year as herein provided upon election of the regional manager of the Department as watermaster and the adoption of a budget by the water users at the annual water district meeting authorizing expenditures in accordance with the purposes of this memorandum of understanding:

- 1) To provide watermaster services to Water District No. 1 for the period from the effective date of this memorandum until the end of any subsequent water district year as agreed to by the water users of Water District No. 1 at their annual meeting and the director of the Department. Such watermaster services will be provided under the direction of the regional manager of the Department's Eastern Region consistent with the provisions of Title 42, Idaho Code.
- 2) To provide the equivalent of 2/3 of a person year of the Regional manager as watermaster throughout the Water District year and to provide any additional part time

or full time employees as necessary for the water distribution operations of Water District No. 1 in accordance with its adopted budget.

3) To provide office space as necessary for operation of Water District No. 1 and to provide Department vehicles for use by full-time employees of the Department, to conduct Water District business, and to share the use of other Department equipment and facilities as are necessary to equitably distribute the waters to the users within Water District No. 1.

WATER DISTRICT NO. 1 agrees as follows:

1) To pay the Department, on an advance basis, sufficient funds to cover the costs of operations incurred in providing watermaster services to Water District No. 1 provided, however, that reimbursement for the watermaster shall not exceed 2/3 of the personnel costs of the regional manager and provided further that all other costs incurred in conducting Water District No. 1 business will be paid in full. Indirect costs will be paid at the rate approved by the Department of the Interior Inspector General and current at the time of the water district annual meeting. The approved indirect rate shall be reduced in recognition of the Department's statutory responsibility to supervise water distribution by subtracting in the indirect calculation any personnel costs included for the Director and the Administrator of the Water Management Division.

Mileage and per diem costs will be based upon the rate provided by state law for state employees.

The Department will credit the District for a portion of the District's expenditures to the U.S. Geological Survey for the cooperative streamgaging program. The amount credited each year will be one-half (1/2) the amount the district pays for that year to the U.S. Geological Survey for operation of certain streamgages the Director determines are needed for data collection purposes needed by the Department other than and in addition to the District's water distribution data needs.

THE PARTIES mutually agree that:

1) The regional manager and any other persons directly employed by the Department as classified state employees, performing duties on behalf of Water District No. 1 under this memorandum will only perform duties necessary to:

**MEMORANDUM OF UNDERSTANDING - 2**

**SCANNED**  
**AUG 24 2006**

- a) Deliver and account for distribution of natural flow and stored water within the District,
- b) Provide assistance to the Committee of Nine in operating the local rental pool. This assistance will include accepting applications to put water into the pool and to rent water from the pool, receipting and depositing funds associated with the bank, providing information on the water in the bank and rentals therefrom. The Committee of Nine, or its designated subcommittee will determine the water leases and rentals and approve all disbursements of rental pool money.
- c) Prepare reports and proposed budgets as required by Title 42, Idaho Code.
- d) Provide technical assistance and information to the Committee of Nine and the Department relative to the water distribution and water banking duties of the watermaster.

The Committee of Nine will make other arrangements for representation and management of any other interests of the water users within the Water District as directed at the annual meeting.

2) The director of the Department and the chairman of the Committee of Nine shall consult annually prior to the end of the water district's fiscal year concerning the continuation of this memorandum and any need for modification of it.

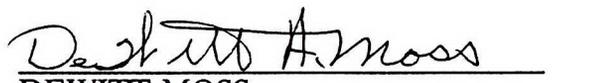
3) This memorandum of understanding will continue from year to year and can be amended or terminated at any time by agreement of the director of the Department and Water District No. 1, on the recommendation of the Committee of Nine.

4) This memorandum of understanding supersedes and replaces the memorandum of understanding dated March 3-4, 1979.

5) Nothing in this agreement will act to change, modify, or release either party of any obligation or responsibility otherwise provided by contract or by law.

  
R. KEITH HIGGINSON  
Director  
Department of Water Resources

Date: 3/04/93

  
DEWITT MOSS  
Chairman  
Committee of Nine/Water District No. 1

Date: 3/10/93

**STATE OF IDAHO**  
**DEPARTMENT OF WATER RESOURCES**  
Water District No. 1  
150 Shoup - Suite 15  
Idaho Falls, Idaho 83402



R KEITH HIGGINSON DIR  
STATE WATER RESOURCES  
1301 N ORCHARD  
BOISE ID 83706-2337



Cluff M Kendall  
2842 N 4000 W  
Dayton, Idaho 83232

747-3414

~~Write:~~

42-243 Claims  
xfer  
water agreement



State of Idaho  
DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

March 24, 1992

CECIL D. ANDRUS  
GOVERNOR

R. KEITH HIGGINSON  
DIRECTOR

COLLEEN WRAY  
150 SHOUP AVE.  
SUITE 15  
IDAHO FALLS, ID 83402  
WATER DISTRICT #01

NOTICE OF WATERMASTER TRAINING

The Department has scheduled training sessions for watermasters on the following dates and locations:

April 2, 1992	Salmon, Idaho 9:00-5:00 Salmon Valley Center City Hall 200 Main St.
April 13, 1992	Burley, Idaho 9:00-5:00 Burley City Hall 1401 Overland Ave.
April 14, 1992	Pocatello, Idaho 9:00-5:00 North Fork Room Pond Student Union Bldg. Idaho State University 1055 South 8th St.
April 16, 1992	Boise, Idaho 8:00-5:00 Idaho Water Resources 1301 North Orchard

Attached is a draft agenda listing topics for discussion. Attendance at the training sessions is encouraged. All water district officials and members are welcome to attend. Staff from the Water Resources Department will conduct the discussions. We hope you can attend.

Respectfully,

TIM LUKE, Hydrologist  
Department of Water Resources

TL:js

Enclosures

cc: Regions



State of Idaho

# Water District 1

RONALD CARLSON  
WATERMASTER  
(208) 525-7172

150 Shoup Ave., Suite 15  
Idaho Falls, Idaho 83402

*RMA*  
*Norm*  
*Glen*  
*JMS*

## COMMITTEE OF NINE

### CHAIRMAN

Leonard Scheer  
*Rupert*

### VICE CHAIRMAN

Paul Berggren  
*Blackfoot*

### SECRETARY

Reed Murdock  
*Blackfoot*

Dave Rydalch  
*St. Anthony*

Reed Oldham  
*Rexburg*

Claude Storer  
*Idaho Falls*

Dale Rockwood  
*Idaho Falls*

Robert Reichert  
*Filer*

Jim Shawver  
*Eden*

### ALTERNATES

Jeff Marotz  
*Ashton*

Leonard Beck  
*Burley*

### ADVISORY

Murle Kunz  
*Victor*

Larry Moore  
*Heyburn*

Jim Bright  
*Murtaugh*

Richard Oneida  
*Shoshone*

Lee Peterson  
*American Falls*

Max Van Den Berg  
*Burley*

John Rosholt  
*Twin Falls*

R. Keith Higginson  
*Boise*

### ATTORNEY

Ken Foster  
*Idaho Falls*

March 12, 1992

For several years Water District 1 and the Bureau of Reclamation have conducted an annual workshop for water users, canal managers, and others involved or interested in water allocation and delivery.

We have scheduled the 1992 workshop on March 18 at the Elks Lodge in Idaho Falls. We encourage you to attend. The proposed agenda for the meeting is included. We have made arrangements with the Elks Lodge for a buffet luncheon.

RONALD D. CARLSON  
Watermaster

**RECEIVED**  
MAR 16 1992

Department of Water Resources

AGENDA  
IRRIGATORS AND MANAGERS  
WORKSHOP  
IDAHO FALLS ELKS CLUB  
MARCH 18, 1992

9:00 a.m. REGISTRATION

WATER SUPPLY OUTLOOK FOR 1992

1. Reservoir carry over & Accrual
2. Water supply forecast
3. Water supply management

1992 STORAGE ALLOCATIONS

1. Current (Year to date) Accrual
2. Projected reservoir fill

COFFEE BREAK

THE RENTAL POOL FOR 1992

1. Projected supply/demand
2. Projected natural flow supply

"LETS COMMUNICATE!"

1. Ordering water
2. Changing Diversion rates

12:00

LUNCH

MEASURING DEVICES

1. What are your options
2. Maintenance
3. Water Measurement & your water right

MENTAL WATER AEROBICS

Exercise in using the Water Right  
Accounting report  
Exercise in using 1-800-922-FLOW  
Practice computing gage height  
settings  
Exercise in budgeting your storage

QUESTIONS & ANSWERS

SUMMARY

3:00 p.m. ADJOURN



State of Idaho  
DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000  
Phone: (208) 327-7900 FAX: (208) 327-7866

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CECIL D. ANDRUS  
GOVERNOR

R. KEITH HIGGINSON  
DIRECTOR

February 21, 1992

Colleen Wray  
150 Shoup Ave.  
Suite 15  
Idaho Falls, ID 83402  
Water District #01

Dear Secretary:

The Department of Water Resources is planning to conduct training sessions for watermasters during late March or early April. Your watermaster will be notified of the time and place following the annual meeting.

The Department anticipates a full eight hours of training. Your water district should allocate sufficient funds to pay the watermaster his wages during the training, and the cost of mileage and meals. Allocation of \$200 to \$300 will probably be sufficient.

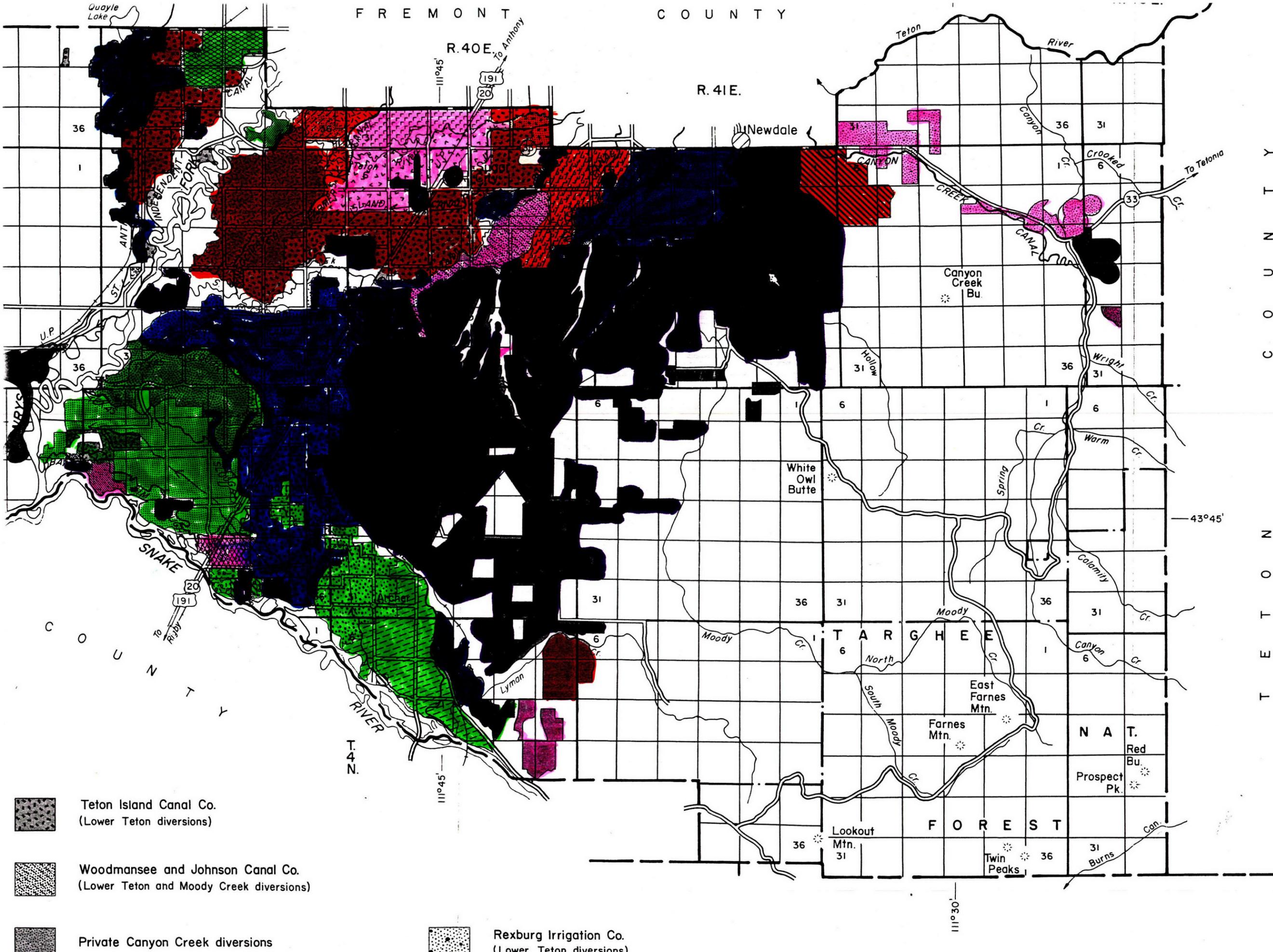
The Department strongly encourages attendance of your watermaster to a training session. He should attend unless unforeseeable circumstances prevent attendance.

Respectfully,

TIM J. LUKE, Hydrologist  
Water Right Permits Section

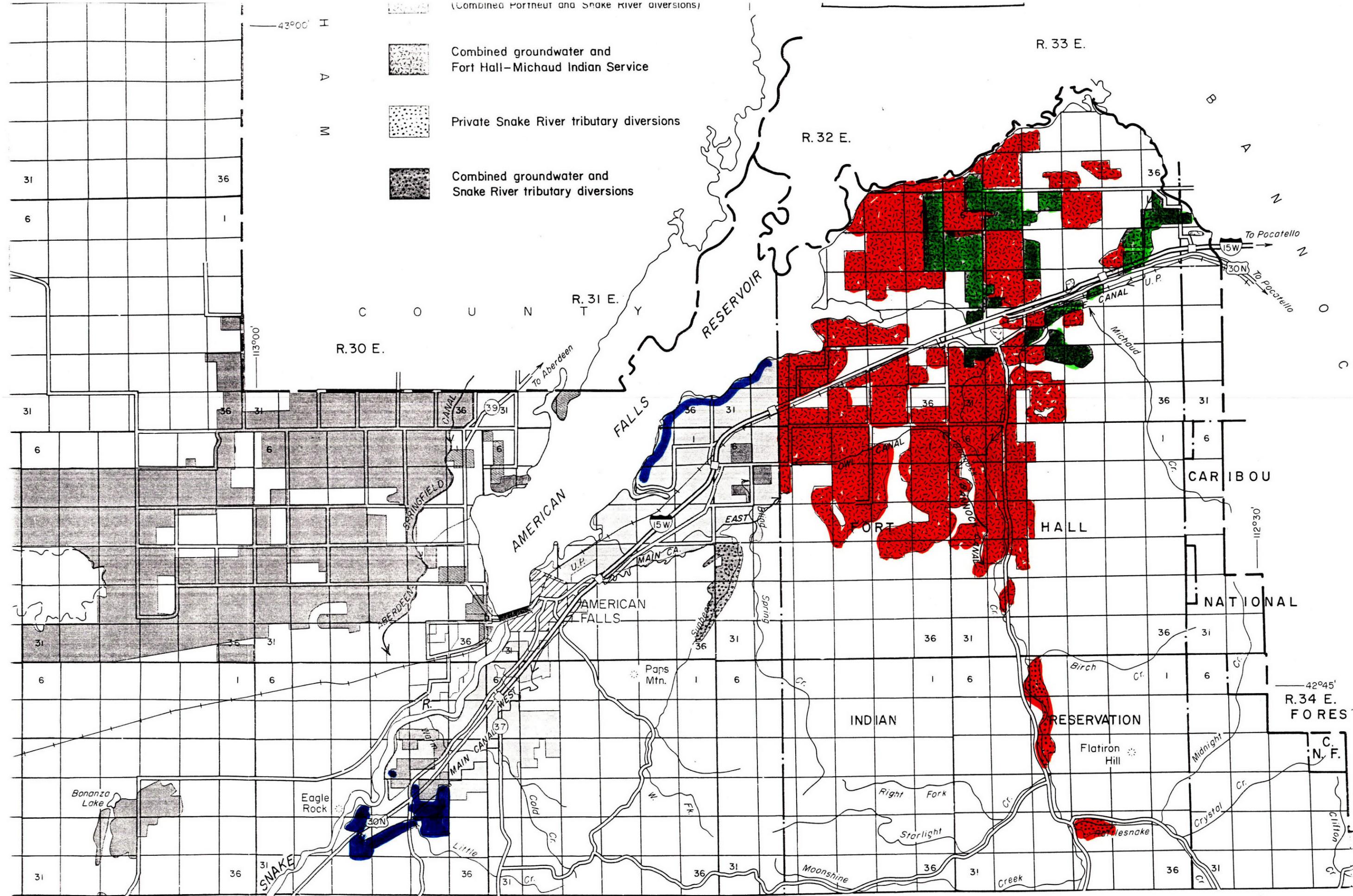
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cc: Regions



-  Private
-  Private
-  Bannoc (Snake)
-  Hill-Pe (Snake)
-  Lenroot (Snake)
-  Liberty (Snake)
-  Nelson (Snake)
-  Spring (Snake)
-  Sunnyd (Snake)
-  Texas (Snake)
-  The Re (Snake)
-  Consoli (Henry's)
-  Combin Canal C.
-  Egin Irr (Henry's)
-  Indeper (Henry's)

-  Teton Island Canal Co. (Lower Teton diversions)
-  Woodmansee and Johnson Canal Co. (Lower Teton and Moody Creek diversions)
-  Private Canyon Creek diversions
-  Rexburg Irrigation Co. (Lower Teton diversions)



- (Combined Portneuf and Snake River diversions)
- Combined groundwater and Snake River tributary diversions
  - Combined groundwater and Fort Hall-Michaud Indian Service
  - Private Snake River tributary diversions

JOINS SHEET 2

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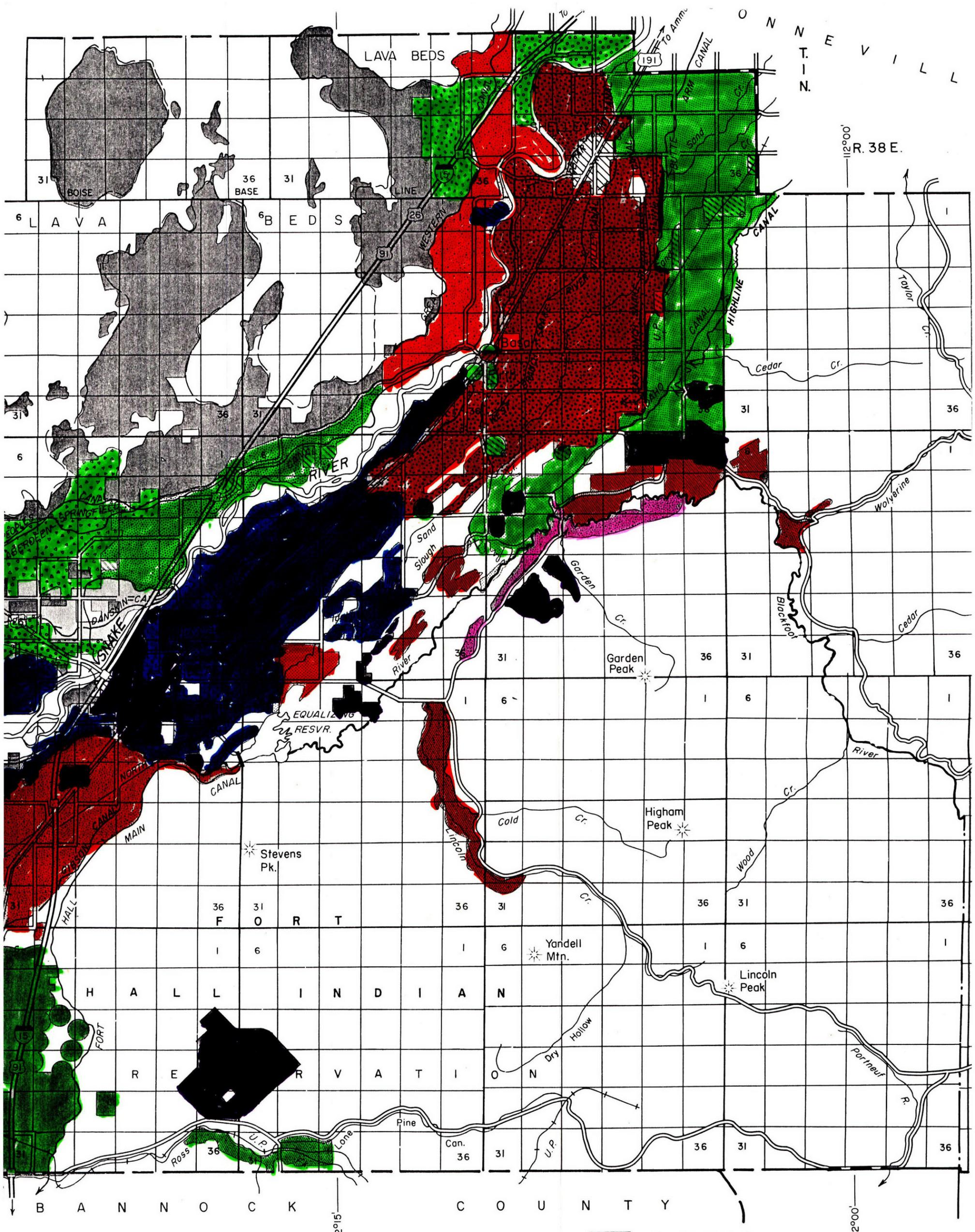
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**IRRIGATION WATER SOURCES**

Data based on 1975 agricultural season



Private groundwater diversions



Blackfoot Irrigation Co.  
(Snake River diversions)



Danskin Ditch Co.  
(Snake River diversions)

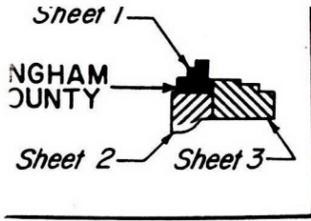


Idaho Irrigation District  
(Snake River diversions)

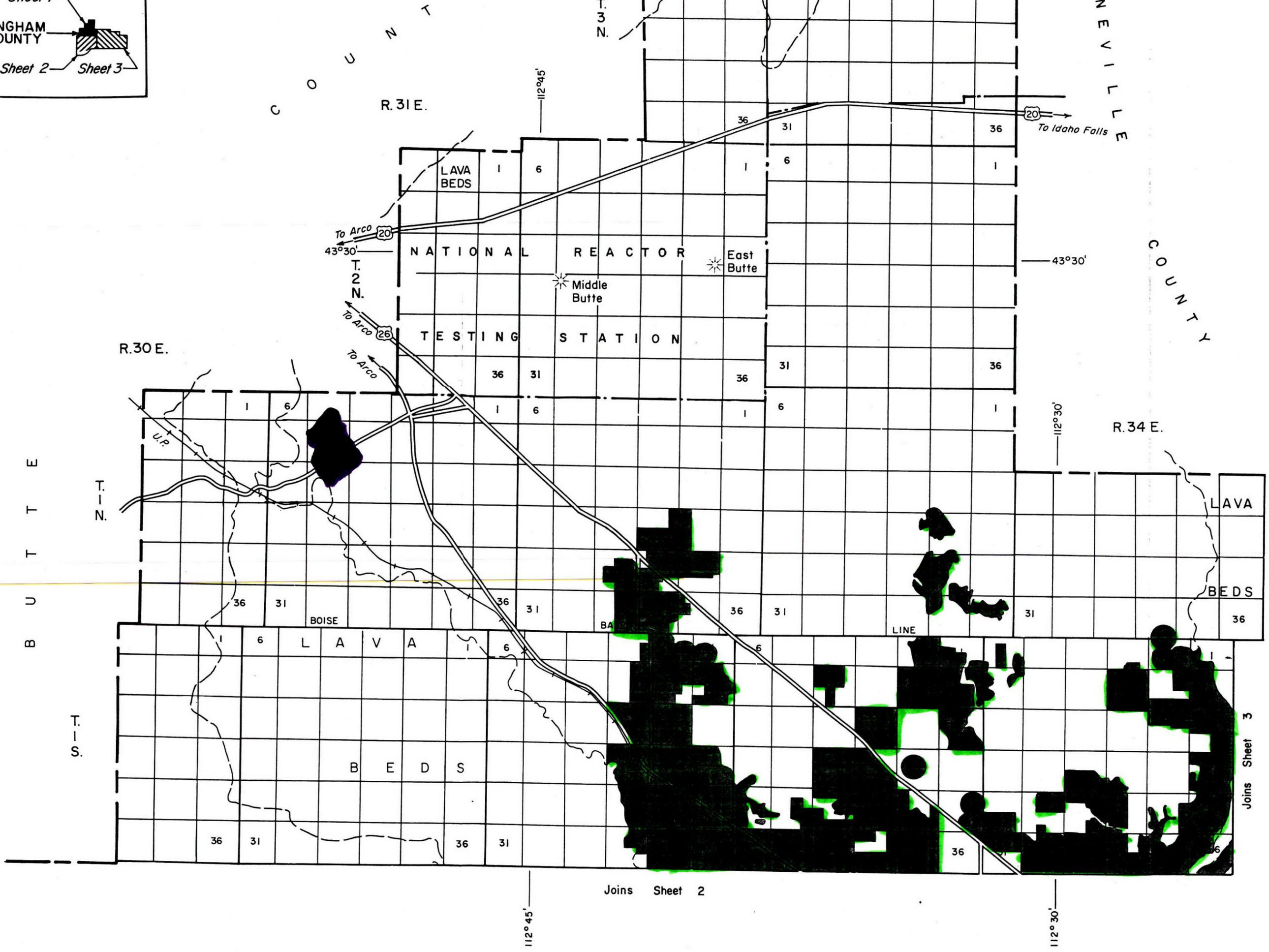


New Sweden Irrigation District  
(Snake River diversions)

Private grou



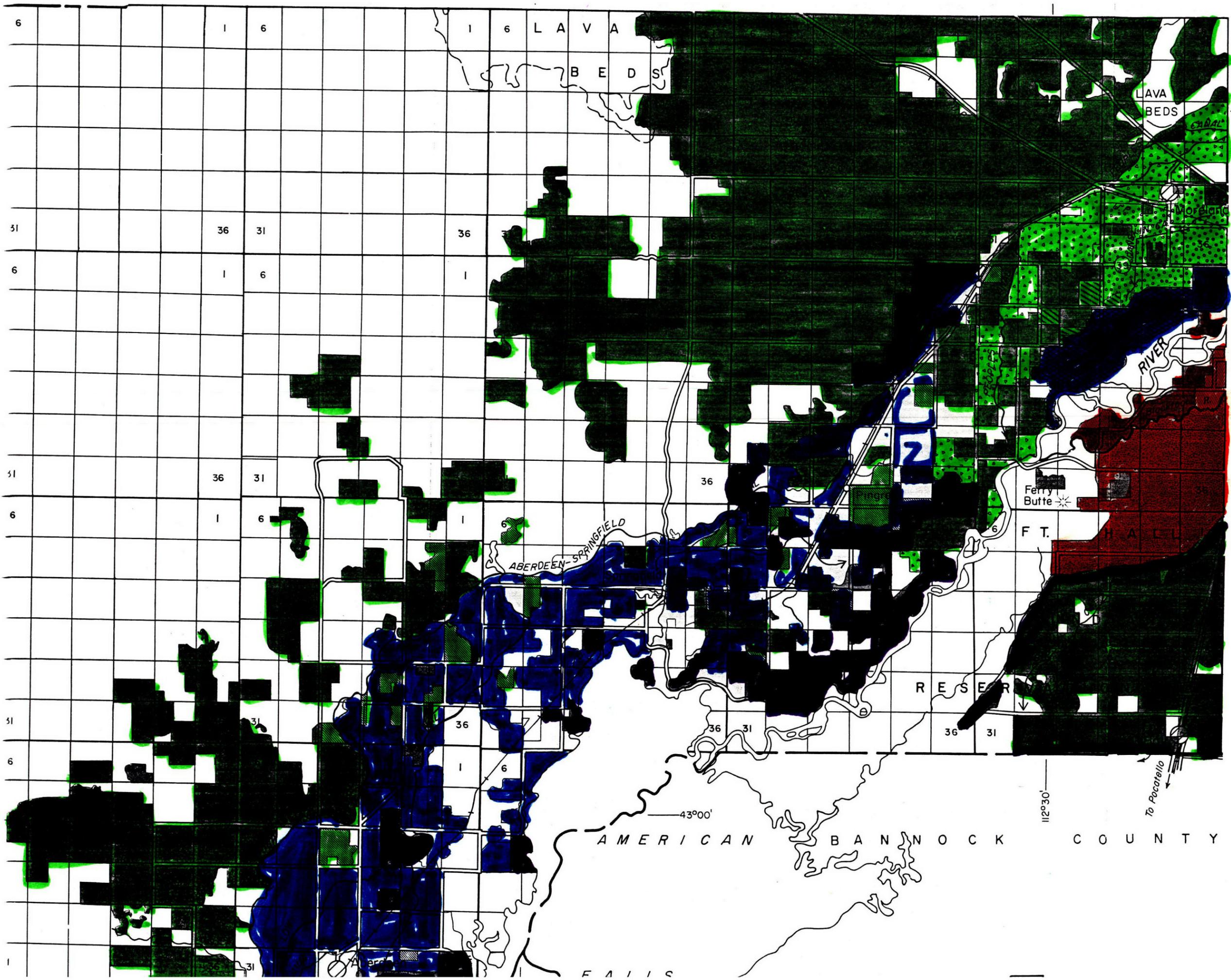
Sheet 1  
Sheet 2  
Sheet 3



Joins Sheet 2

Joins Sheet 3

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Joins Sheet 3

*Keith PA**RETURN TO  
Norm ✓*

## M E M O R A N D U M

DATE: SEPTEMBER 4, 1992

TO: NORM

FROM: RON *RJC*

RE: WATER DISTRICT 1 DATA CORRECTION &amp; FINAL ACCOUNTING RUN

In previous memos I have attempted to identify the work that needs to be accomplished before we can make a final accounting run. In these memos I indicated that the state office hydrology staff could provide assistance in accomplishing some of the steps necessary before we can make a final accounting run for 1992. I identified some things that hydrology has done before and could assist us with again. Apparently hydrology is not involved at this point. You, however are still asking me to tell you how the state office can help get the final accounting done. This memo has been prepared in an effort to identify, in some detail, the data review process and associated steps we go through each year prior to making the final accounting run. I have prepared a schematic that illustrates the steps that must be taken to assure that the data used are correct. In this memo I will be referring to the diagram. The diagram indicates a six (6) step process. The memo attempts to identify groups of data at various stages of review and will refer to the Step (eg. Step A) and the Element (eg. (3A)) in discussing the details of data collection, review and correction process.

PRELIMINARY DATA  
(STEP A) to (STEP B)

The Water District 1 accounting process must have reliable daily flow, reservoir, diversion and evaporation data to compute the reach gains that are required before the daily water right cuts can be determined. The tables attached to this memo provide a listing of the sites for which daily data are required in order to run the accounting program. A variety of processes have been employed to acquire these data each day. The data for diversions that are not on the HYDROMET system are collected manually by field personnel and hand entered each day. Those gaging sites that can be "sampled" once daily with some assurance that the observed data point is representative of the day's diversion are hand entered daily. Pump diversions are unpredictable and are generally not included in the preliminary accounting runs. However, these data are collected periodically through out the summer by field personnel. In addition we ask each pump owner to keep a record of his daily diversions each month and mail



them in on a stamped and addressed form that is mailed to each pumper every month. At the end of the year we have a collection of field data which include the crop being grown, acreage served, horsepower of the pump, description of the irrigation system, flow meter readings, and power meter readings. At the end of the season all of the available data for each pump are reviewed and a pumping schedule and appropriate diversion rates for each pump are determined and entered into the VAX. This process is time consuming and may be more art than science. The computation of pump data and the entry of these data is something that can be delegated. I estimate three man-weeks of effort will go into the computation of pump data. In addition, we have identified over 100 pumps between Minidoka and Milner that will need to be included in the 1992 accounting. Since the majority of these are small systems (lawn & garden) we anticipate computing combined daily diversions and entering them as one or two combined systems. This is something that Bob Sutter will need to be involved in and do the appropriate programming for. I estimate that this year these additional pumps will require another eight man days.

Similarly, there are several exchange wells that discharge water into the river. These are similar to pump diversions but because they are more predictable they are normally included in the daily accounting program. The primary source of these data is the records of the water district field personnel. Corrections made at the end of the irrigation year may be based upon power meter data, hydrographer notes, measurements made during the year and other information the water district has acquired through out the year. The data review and correction process for exchange well pumpage is normally less complex and time consuming than is required for other types of data. I estimate the review of exchange well data and the associated data entry can be accomplished in two (2) man days. The listing of the exchange pumps in the system are included in the attachments.

While most of the water diverted each day is accounted for through data collected by the HYDROMET system, the majority of the daily diversion data are acquired by simply having someone read the gage. This single-point "sample" normally is not the best indicator of the average daily diversion for a canal. Currently we have eighteen (18) canals that have continuous strip-chart recorders and are not on the HYDROMET system. At the end of the season the data from the charts is "digitized" and replaces the original once-daily readings. We have found that we can accomplish this task by hand as accurately and quickly as it could be done using a digitizer. We believe these data could be prepared by a clerical person after a short training session. This process can be expected to take five (5) man days. However, we would want the data entry done by someone with experience simply to assure the best quality control in this process. I estimate the data entry will not require more than one man-day.

The diversion data that are acquired through the

HYDROMET system also must be reviewed. If the canal is also equipped with a chart recorder these data can be used to fill in missing data that might have been lost because of a malfunction of the data collection platform (DCP). For sites that are not equipped with a strip chart recorder we rely upon gage reader and hydrographer field notes to reconstruct the lost record. In addition the HYDROMET gage heights must be compared with the once-daily gage height readings of our field personnel. It is not uncommon to find that the HYDROMET system will continue to transmit a non-zero gage height after a canal has been shut of. The gage heights and flows for these periods must be corrected. This task requires a printout of the daily gage heights for every location and a corresponding listing of the once-daily readings. While this process is tedious it is not complicated. However, it does require someone to think about the data and to identify unusual patterns in the data. I estimate this process will require one man-week to accomplish.

The majority of the canals within Water District 1 do not have measuring devices. Consequently this requires periodic current meter measurements to assure that accurate stage-discharge relationships are maintained. Because the rating tends to "shift" between measurements we must enter all of the correct shifts and create a smooth transition in the shift adjustments between measurements. The record of the measurement date and the shift must be entered into the data base and the previously entered shifts deleted. In addition the first measured shift must be entered for the first day the canal began diverting, and the last measured shift must be entered on the last day the canal diverted. There are some canals that require special procedures because of irrigation checks, split diversions, new rating tables etc. These canals include: The Bramwell, Ellis, White, Milner-Gooding, Idaho from Sand Creek, Demick, Roy Cooper (Sand Creek), Great Western, North Rigby, Dilts, and Palisades Canal. While most of the shift data could be prepared by someone else, the water district staff will need to make the corrections for these canals. I anticipate the review and entry of shift data to take eight man-days to accomplish.

Once all of the shifts have been computed and entered for those canals that do not have measuring devices the INTERPOLATION PROGRAM can be run. John Lindgren has been involved in portions of this process in the past. Through this program all of the canal discharges are recalculated using a daily shift adjustment that represents the linear average between the entered shifts. Diversion rates thus computed replace the preliminary data. This is included in the data set identified by (Step B), Element (1B). However, additional corrections may still be required before these data are considered to be final. After the interpolation program is run, the diversion data must be rechecked for errors. Frequently we will find that the computed stage results in an erroneous flow because the rating table is not accurate at low flows or gage heights. The interpolated data must again be

checked against the daily discharge readings made by our gage readers. This second review will probably require another two man-days.

Under Step A, elements (4A) and (5A) represent USGS HYDROMET data. The USGS has agreed to provide us essentially final data on a quarterly basis. These data must be transferred from the USGS computer system to the department VAX. The data through September 30 are usually available in early November. Once the quarterly data are available, the USGS provides us with hard copies. While these data have been reviewed by GS personnel they are still classified as provisional and subject to change. The process of transferring them requires someone on this end to get it done. This process has previously required about one man-day to accomplish. However, before these data can be merged with the WD 1 data base they must be reviewed. The reservoir data in particular require a substantial amount of work. The data provided to us is in the format the USGS uses for publishing its data. In the case of Palisades they include 201,000 acre-feet of dead storage which must be subtracted before we can use their data. Similarly, the numbers representing reservoir contents that come from the USGS are only accurate to four (4) significant digits. Since the daily change in storage enters into our computations of the natural flow available each day, we must have greater precision in reservoir data than the electronic data provided by the USGS. (This has long been an area of irritation. We have discussed this problem with the GS on several occasions in the past but change comes hard for them. We believe that the water district has contracted with the USGS for the data we need to allocate and distribute water and if that requires changes in how they do things that is implicit in the contract.) In the past the USGS office in Idaho Falls has sent us daily data for Henry's Lake and Ririe Reservoir which they have estimated to the nearest ten (10) acre-feet. This, of course requires that all of these data be hand entered. The contents of American Falls and Palisades reservoirs have to be corrected to the nearest one-hundred acre-feet (five significant figures instead of four) when their respective contents are over 1,000,000 acre-feet. Since hydrology is intimately familiar with the reservoir data requirements in the Water District 1 accounting program, they could be very helpful in getting the appropriate reservoir data reviewed and transferred or entered into the Water District 1 data base. We normally expect this effort to require about five man-days to complete.

(STEP C)

After the data from Step A have been entered and corrected and the canal shifts interpolated the next process in checking the data is to run the REACH GAINS PROGRAM. Bob Sutter or Alan Robertson would be in the best position to run this program and identify problem data. The time period between November 1 to March 31, 1992 could be run and reviewed

even before the diversion data have been entered. It is relatively easy to run the reach gains program but it might require several days to review and evaluate the data for errors. When errors are found in the USGS data (and we have always found data errors whenever the REACH GAINS PROGRAM has been run and the data reviewed) the problem data are sent back to the USGS for correction. Since the river and reservoir data are large in comparison to the diversions, a small change in USGS data can have a substantial effect on the distribution of natural flow and storage. Unfortunately it is not likely that we will receive corrected USGS data in less than three weeks after the problem has been identified.

(STEP D) TO (STEP F)

After correcting the data, the REACH GAINS PROGRAM needs to be re-run and the daily gains again reviewed for errors. Once the gains appear to be satisfactory we are ready to start running the final accounting (Step F). However, prior to running the accounting we must check to assure that the water rights portion of the accounting correctly reflects all water rights and the changes that have been approved since the last year. The storage allocations also need to be entered for all diversions, including pumps. This process can normally be completed in one to two man-days. This year there will be some additional changes that will have to be made to the accounting parameters before the months of August and September can be run. Arrangements facilitated under House Bill 4 will have to be included. These are changes that can best be made by Bob Sutter and will probably require an additional day before the final accounting run can be made available.

If I add up the time requirements to get us from Step A to Step F I am estimating 71 man days of effort. If we subtract from that the time that has been spent on the pump data we are still 68 man-days away from a final accounting if we continued on at the current rate.

This evaluation might lead someone to believe that if one man were to work full time on the items outlined in this memo the final water use numbers for 1992 could be available by mid-November. It is important to understand that there are certain built in restraints that limit our ability to accomplish certain tasks. For example, the main data base for the accounting program is referred to as the HISTORY. This file will contain about 500,000 records for one accounting year. While we do make changes in the HISTORY file throughout the year, it has to be done when it is not needed for the daily accounting runs. Because of the limitations on access to this file we normally wait until the end of the irrigation season to make changes. Access could be provided by creating a second "dummy" history file which could be updated with the final data as they become available. However, because of the memory requirements of the HISTORY FILE it is unlikely that we would be able to maintain two files of this size. Clearly WD 01 does not have the space allocated to allow this to be done.

TO:BOISE

SEP-10-'92 THU 13:33 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P06

13010500 JACKSON LAKE NR MORAN, WY  
13032450 PALISADES RESERVOIR NR IRWIN, ID  
13039000 HENRYS LAKE NR LAKE, ID  
13042000 ISLAND PARK RESERVOIR NR ISLAND PARK, ID  
13046500 GRASSY LAKE RESERVOIR  
13057950 RIRIE RESERVOIR NR RIRIE, ID  
13076500 AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, ID  
13081000 LAKE WALCOTT NR MINIDOKA, ID  
13087900 MILNER RESERVOIR AT MILNER, ID

*RE SERVOIRS*

TO: BOISE

SEP-10-'92 THU 13:34 ID: IDWR EASTERN REGION TEL NO: (208) 525-7177

#027 P07

13011000 SNAKE RIVER NR MORAN  
13022500 SNAKE RIVER ABV RESERVOIR, NR ALPINE  
13023000 GREYS RIVER ABV RESERVOIR, NR ALPINE  
13027500 SALT RIVER ABV RESERVOIR, NR ETNA  
13032500 SNAKE RIVER NR IRWIN  
13037500 SNAKE RIVER NR HEISE  
13037977 EAGLE ROCK CANAL ABV WILLOW CREEK  
13038000 DRY BED SNAKE RIVER NR RIRIE  
13038500 SNAKE RIVER AT LORENZO  
13039500 HENRYS FORK NR LAKE  
13042500 HENRYS FORK NR ISLAND PARK  
13046023 HENRYS FORK NR ASHTON  
13046510 FALLS RIVER AT GRASSY LAKE  
13047500 FALLS RIVER NR SQUIRREL  
13049500 FALLS RIVER NR CHESTER  
13050016 CROSSCUT CANAL BLW DIVERSIONS  
13050018 CROSSCUT CANAL ABV TETON RIVER  
13050500 HENRYS FORK AT ST ANTHONY  
13055000 TETON RIVER NR ST ANTHONY  
13056500 HENRYS FORK NR REXBURG  
13057155 SNAKE RIVER NR IDAHO FALLS  
13057940 WILLOW CREEK BLW TEX CREEK  
13058000 WILLOW CREEK NR RIRIE  
13058510 SAND CREEK ABOVE WILLOW CREEK  
13058520 WILLOW CREEK FLOODWAY NR UCON  
13058530 WILLOW CREEK BELOW FLOODWAY NR UCON  
13060000 SNAKE RIVER NR SHELLEY  
13062500 SNAKE RIVER AT BLACKFOOT  
13069500 SNAKE RIVER NR BLACKFOOT  
13077000 SNAKE RIVER AT NEELEY  
13081500 SNAKE RIVER NR MINIDOKA  
13088000 SNAKE RIVER AT MILNER

*River Gages (flows)*  
*PT 370*

TO:BOISE

SEP-10-'92 THU 13:35 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P08

- 13032510 MRS. PAUL BYRD
- 13033643 J FLEMING PUMP
- 13033646 T LOTT #1 PUMP
- 13033650 WEEKS, JAY
- 13033670 R JACOBSON PUMP (BEASLEY)
- 13033690 T LOTT #2 PUMP
- 13034460 JACOBSON, LLOYD
- 13034480 W XXXXXX PUMP
- 13037305 I SPAULDING PUMP
- 13037475 RILEY CANAL ✓
- 13037490 B FOSTER PUMP
- ✓13037505 ANDERSON CANAL ✓
- 13037510 M & M CATTLE CO. (S) PUMP
- 13037515 M & M CATTLE CO. (N) PUMP
- 13037855 M NEWBY #1 PUMP
- 13037860 M NEWBY #2 PUMP
- 13037880 M NEWBY #3 PUMP
- ✓13037975 EAGLE ROCK CANAL
- ✓13037980 FARMERS FRIEND CANAL
- 13037985 ENTERPRISE CANAL ✓
- 13037997 C HICKMAN PUMP
- 13038025 BUTLER ISLAND CANAL ✓
- 13038030 ROSS AND RAND CANAL ✓
- 13038050 STEELE CANAL ✓
- 13038055 HARRISON CANAL ✓
- 13038065 CHENEY CANAL ✓
- 13038080 BUTLER ISL #2 CANAL ✓
- 13038085 RUDY CANAL ✓
- 13038090 LOWDER SLOUGH CANAL ✓
- ✓13038095 BOOMER CANAL
- 13038098 KITE & NORD CANAL ✓
- 13038110 BURGESS CANAL ✓
- 13038113 M H HILL PUMP
- ✓13038115 CLARK & EDWARDS CANAL
- 13038145 CROFT DITCH ✓
- 13038150 EAST LABELLE CANAL ✓
- 13038179 RIGBY LATERAL ✓
- 13038180 RIGBY CANAL ✓
- 13038201 WHITE ISLAND PUMP
- 13038205 DILTS CANAL ✓
- ✓13038210 ISLAND CANAL
- 13038225 WEST LABELLE & LONG ISLAND CANAL ✓
- 13038305 PARKS & LEWISVILLE CANAL ✓
- 13038315 NORTH RIGBY CANAL ✓
- 13038331 JEFF HILLS ELEC PUMP
- 13038332 JEFF HILLS ENG PUMP
- 13038340 WHITE DITCH ✓
- 13038352 J W JONES #1 PUMP
- 13038360 BRAMWELL CANAL ✓
- 13038362 ELLIS CANAL ✓
- 13038371 J T JONES PUMP
- 13038373 N TAYLOR PUMP
- 13038382 W DABELL PUMP (HUNTER)
- 13038383 FRESH PAK PUMP
- 13038384 D STOKER PUMP (HUNTER)
- 13038386 J N ERICKSON PUMP
- 13038387 NELSON CANAL ✓
- 13038388 MATTSON-CRAIG CANAL ✓
- 13038392 SUNNYDELL CANAL
- 13038393 B COVINGTON PUMP ✓

13033010 PALZADES CANAL

SNK DIJ. TTL

77-022552

TO:BOISE

SEP-10-'92 THU 13:36 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P09

13038398 ARNSBERGER PUMP  
13038405 T PARKINSON PUMP  
13038410 R GROVER PUMP  
13038416 THERON CHENEY  
13038417 M CHENEY PUMP  
13038422 LYLE ROBISON  
13038426 LENROOT CANAL ✓  
13038428 R BURNS PUMP  
13038431 REID CANAL ✓  
13038434 TEXAS & LIBERTY CANAL ✓  
13038435 BANNOCK JIM SLOUGH ✓  
13038436 HILL PETTINGER CANAL ✓  
13038437 NELSON COREY CANAL ✓  
13038438 R ROTH PUMP  
13045655 G MAROTZ PUMP  
13045675 L CHERRY PUMP  
13045705 F HOWELL PUMP  
13045710 D WOODRUFF PUMP  
13045721 E G HOWELL #1 PUMP  
13045724 E G HOWELL #2 PUMP  
13045727 E G HOWELL #3 PUMP  
13045755 T HOLCOMB PUMP  
13045780 R LEE PUMP  
13045805 Z J EGBERT #1 PUMP  
13045807 R RITCHEY PUMP  
13045810 R STEWART #2 PUMP  
13045811 R STEWART #1 PUMP  
13045813 Z J EGBERT #2 PUMP  
13045823 R D BAKER #2 PUMP  
13045829 D LARSON PUMP  
13045849 D SEELEY PUMP  
13045860 Z J EGBERT #3 PUMP  
13045880 Z J EGBERT #4 PUMP  
13045930 Z J EGBERT #5 PUMP  
13045940 G NEDROW PUMP  
13045950 R D BAKER #1 PUMP  
13045960 H STEINMAN #1 PUMP  
13046015 R & C BAUM PUMP  
13046020 J MCCULLOCH PUMP  
13046025 H STEINMAN #2 PUMP  
13046030 E LENZ (R HESS) PUMP  
13046070 A NEDROW #1 PUMP  
13046072 A NEDROW #2 PUMP  
13046075 J NEDROW PUMP  
13046080 E & S CLARK PUMP  
13046083 V & D KIRKHAM PUMP  
13046084 D NEDROW PUMP  
13046086 D FRANSEN PUMP  
13046090 L BRATT PUMP  
13046095 L LOOSLI #1 PUMP  
13046310 DEWEY CANAL  
13046315 J SEELEY PUMP  
13047305 YELLOWSTONE CANAL  
13047475 MARYSVILLE CANAL  
13047510 E GRIFFEL PUMP  
13047515 F & L GRIFFEL PUMP  
13047565 R BAUM PUMP  
13047570 G /6 CORP PUMP (GRIFFEL)  
13047575 FARMERS OWN CANAL  
13047605 W SCAFE PUMP (REINKE)

TO:BOISE

SEP-10-'92 THU 13:37 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P10

13047610 E HESSMAN #1 PUMP  
13047616 R STURM PUMP  
13047625 M GRIFFEL PUMP  
13047635 C LOOSLI #1 PUMP  
13047681 CONANT CREEK CANAL  
13047710 K NYBORG PUMP  
13047900 BOOM CREEK CANAL  
13048025 SQUIRREL CREEK CANAL  
13048050 ORME CANAL  
13048080 D HARSHBARGER PUMP  
13048265 D ZUNDELL PUMP  
13048275 L LOOSLI #2 PUMP  
13048280 C & L LOOSLI PUMP  
13048290 C LOOSLI #2 PUMP  
13048350 J HILL PUMP  
13048430 D REYNOLDS PUMP  
13048440 C LOOSLI #3 PUMP  
13048470 T POTTER PUMP  
13048475 ENTERPRISE CANAL  
13048480 L MARTINDALE #2 PUMP  
13048485 R D MILLER PUMP  
13048551 L MARTINDALE #1 PUMP  
13048560 FALL RIVER CANAL  
13048705 CHESTER CANAL  
13049008 MCBEE CANAL  
13049010 SILKEY CANAL  
13049015 CURR CANAL  
13049490 L LOOSLI #3 PUMP  
13049495 G BLANCHARD PUMP  
13049550 LAST CHANCE CANAL  
13049560 CROSSCUT CANAL  
13049705 FARMERS FRIEND CANAL  
13049710 TWIN GROVES CANAL  
13049725 ST ANTHONY UNION CANAL  
13049805 SALEM UNION CANAL  
13050525 EGIN CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13050535 INDEPENDENT CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13053951 TETON PIPELINE #4 PUMP ✓  
13053971 J RICKS PUMP  
13054031 TETON PIPELINE #3 PUMP ✓  
13054041 TETON PIPELINE #2 PUMP ✓  
13054043 TETON PIPELINE #1 PUMP ✓  
13054046 K J ARNOLD #1 PUMP  
13054111 R & J BROWN PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13054391 PARKINSON & KERBS PUMP  
13054397 K J ARNOLD #2 PUMP  
13054420 B PARKINSON PUMP  
13054515 CANYON CREEK CANAL ✓  
13054577 G CRAPO PUMP  
13054590 R STEVENS PUMP ✓  
13054705 V SCHWENDIMAN PUMP  
13054708 C M OLSEN PUMP  
13054762 R R RICKS PUMP ✓  
13054772 R. BRENT RICKS ✓  
13054801 CANYON CREEK LATERAL PUMP ✓  
13054850 SIDDOWNAY SHEEP PUMP

13054940 H BISCHOPF PUMP  
Q 13055030 WILFORD CANAL ✓  
13055040 TETON IRRIGATION CANAL ✓  
13055042 SIDDOWAY CANAL ✓  
13055050 PIONEER CANAL  
13055060 STEWART CANAL 55041  
13055193 N BIRCH PUMP  
13055195 B LEAVITT PUMP  
K 13055205 PINCOCK-BYINGTON CANAL  
K 13055206 HOLLIST, BOYD  
K 13055210 TETON ISLAND FEEDER CANAL ✓  
K 13055245 NORTH SALEM CANAL ✓  
K 13055263 J HARRIS PUMP  
K 13055275 ROXANA CANAL ✓  
Q 13055280 ISLAND WARD CANAL ✓  
K 13055295 SAUREY CANAL  
Q 13055306 MCCORMICK-ROWE CANAL  
13055311 PINCOCK-GARNER CANAL  
13055313 E GARDNER PUMP ✓  
13055314 BIGLER SLOUGH CANAL  
13055315 WOODMANSEE-JOHNSON CANAL  
13055319 R O WILDING PUMP  
13055323 CITY OF REXBURG CANAL ✓  
13055325 T BRUNSON PUMP  
13055327 J S WRIGHT PUMP  
✓ 13055331 R & K WALKER PUMP  
O 13055334 REXBURG IRRIGATION CANAL ✓  
13057012 HARTERT L.A.  
13057013 A GUNDERSON PUMP  
13057014 R & C MILLER PUMP  
13057015 R MILLER PUMP  
13057018 BOYLE & S #1 PUMP  
13057021 BOYLE & SONS #2 PUMP  
13057025 BUTTE & MARKET LAKE CANAL ✓  
13057030 BEAR TRAP CANAL ✓  
13057038 O ELLSWORTH PUMP  
13057046 H TOMCHAK PUMP  
13057097 N FULLMER PUMP  
13057105 D BOYCE PUMP  
13057106 B TOMCHAK #1 PUMP  
13057107 C BOYCE PUMP  
13057114 STIENKE-MURDOCK PUMP  
13057115 L CARLSON NORTH PUMP  
13057116 B TOMCHAK #2 PUMP  
13057117 L CARLSON SOUTH PUMP  
13057118 L BROWN PUMP  
13057119 L HANSEN WEST  
13057120 ARRINGTON NORTH PUMP  
13057121 G OFFUTT PUMP (MARTIN)  
13057122 ARRINGTON SOUTH PUMP  
13057123 BEAR ISLAND N PUMP (ANDRUS)  
13057125 OSGOOD CANAL ✓  
13057126 CLEMENTS CANAL  
13057130 KENNEDY CANAL ✓  
✓ 13057135 GREAT WESTERN CANAL ✓  
13057139 BEAR ISLAND E PUMP ✓  
13057140 L HANSEN EAST PUMP  
13057141 J GAY PUMP  
13057142 L HANSEN MACKAY PUMP  
13057143 YORGENSON PUMP

TO:BOISE

SEP-10-'92 THU 13:38 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P12

- 13057145 IDAHO CANAL ✓
- 13057154 W WARD PUMP
- 13057171 A BUTIKOFER PUMP
- 13057250 PORTER CANAL ✓
- 13057938 LOERTSCHER CANAL
- 13058090 B JOHNSON PUMP
- 13058105 LOVELL PUMP
- 13058125 FERGUSON CANAL ✓
- 13058145 LOVELL # 2 PUMP
- 13058165 WALLACE REED PUMP
- 13058210 SARGENT & SUMMERS CANAL ✓
- 13058230 DURTSCHI PUMPS
- 13058250 REED PUMPS
- 13058270 SPERRY PUMP
- 13058290 ORVAL AVERY CANAL ✓
- ✓13058310 ROY AVERY CANAL
- 13058330 STUCKI PUMPS
- 13058350 ORVAL AVERY PUMP
- ✓13058370 ROY COOPER SAND CR CANAL
- ✓13058380 ROY COOPER WILLOW CREEK CANAL
- 13058510 SAND CREEK ABV WILLOW CREEK DIVERSION
- ✓13058512 BEAN CANAL
- ✓13058514 W & O COOPER CANAL
- 13058515 SAND CREEK DELIVERY TO IDAHO CANAL COMPANY ✓
- 13058530 WILLOW CREEK BELOW FLOOD CHANNEL
- 13058532 DEMICK CANAL
- 13059486 MONROC LARGE
- 13059490 IF MONROC #3 PUMP
- 13059505 WOODVILLE CANAL
- 13059525 SNAKE RIVER VALLEY CANAL
- 13060005 A M CANNON PUMP
- 13060055 P HILL PUMP
- ✓13060500 RESERVATION CANAL ✓
- 13061430 BLACKFOOT CANAL
- 13061520 NEW LAVA SIDE CANAL
- 13061521 CHET ADAMS PROPANE
- 13061522 R C ADAMS PUMP
- 13061525 PEOPLES CANAL
- 13061610 ABERDEEEN CANAL ✓
- 13061650 CORBETT CANAL
- 13061670 NIELSON-HANSEN CANAL
- 13061677 R LAMBERT PUMP
- 13061685 K CHRISTENSEN PUMP
- 13061705 RIVERSIDE CANAL
- ✓13061995 DANSKIN CANAL
- 13062050 TREGO CANAL
- 13062447 HOPKINS PACKING PUMP
- 13062502 BLACKFOOT MONROC
- 13062503 WEARYRICK CANAL
- 13062505 J WADSWORTH PUMP
- 13062506 WATSON CANAL
- ✓13062507 PARSONS CANAL
- 13063507 SHRADER, LARK
- 13075900 FT HALL MICHAUD CANAL
- 13076400 FALLS IRRIGATION PUMP
- 13077652 OSBORN PUMP
- 13077755 CALL FARMS PUMP (BARKDULL)
- 13077775 M KUWANA PUMP
- 13080000 MINIDOKA NORTH SIDE CANAL
- 13080500 MINIDOKA SOUTH SIDE CANAL

TO:BOISE

SEP-10-92 THU 13:39 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P13

13047625 M GRIFFEL PUMP  
13047635 C LOOSLI #1 PUMP  
13047681 CONANT CREEK CANAL  
13047710 K NYBORG PUMP  
13047900 BOOM CREEK CANAL  
13048025 SQUIRREL CREEK CANAL  
13048050 ORME CANAL  
13048080 D HARSHBARGER PUMP  
13048265 D ZUNDELL PUMP  
13048275 L LOOSLI #2 PUMP  
13048280 C & L LOOSLI PUMP  
13048290 C LOOSLI #2 PUMP  
13048350 J HILL PUMP  
13048430 D REYNOLDS PUMP  
13048440 C LOOSLI #3 PUMP  
13048470 T POTTER PUMP  
13048475 ENTERPRISE CANAL  
13048480 L MARTINDALE #2 PUMP  
13048485 R D MILLER PUMP  
13048551 L MARTINDALE #1 PUMP  
13048560 FALL RIVER CANAL  
13048705 CHESTER CANAL  
13049008 MCBEE CANAL  
13049010 SILKEY CANAL  
13049015 CURR CANAL  
13049490 L LOOSLI #3 PUMP  
13049495 G BLANCHARD PUMP  
13049550 LAST CHANCE CANAL  
13049560 CROSSCUT CANAL  
13049705 FARMERS FRIEND CANAL  
13049710 TWIN GROVES CANAL  
13049725 ST ANTHONY UNION CANAL  
13049805 SALEM UNION CANAL  
13050525 EGIN CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13050535 INDEPENDENT CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13053951 TETON PIPELINE #4 PUMP ✓  
13053971 J RICKS PUMP  
13054031 TETON PIPELINE #3 PUMP ✓  
13054041 TETON PIPELINE #2 PUMP ✓  
13054043 TETON PIPELINE #1 PUMP ✓  
13054046 K J ARNOLD #1 PUMP  
13054111 R & J BROWN PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13054391 PARKINSON & KERBS PUMP  
13054397 R J ARNOLD #2 PUMP  
13054420 B PARKINSON PUMP  
13054515 CANYON CREEK CANAL ✓  
13054577 G CRAPO PUMP  
13054590 R STEVENS PUMP ✓  
13054705 V SCHWENDIMAN PUMP  
13054708 C M OLSEN PUMP  
13054762 R R RICKS PUMP ✓  
13054772 R. BRENT RICKS ✓  
13054801 CANYON CREEK LATERAL PUMP ✓  
13054850 SIDDOWNAY SHEEP PUMP

TO: BOISE

SEP-10-'92 THU 13:39 ID: IDWR EASTERN REGION TEL NO: (208) 525-7177

#027 P14

- 13038047 COVINGTON BROS EXCHANGE WELL
- 13048549 L LOOSLI EXCHANGE WELL
- 13050570 USBR #2 EXCHANGE WELL
- 13051281 G NELSON EXCHANGE WELL
- 13054048 STEVECO CANYON EXCHANGE WELL
- 13055041 CANYON CREEK LATERAL EXCHANGE WELL ✓ 0
- 13055043 B PARKINSON EXCHANGE WELL 0
- 13055044 V SCHWENDIMAN EXCHANGE WELL 0
- 13055045 M PARKINSON EXCHANGE WELL 0
- 13055049 M & M RAMMEL EXCHANGE WELL
- 13055198 D BOTT EXCHANGE WELL
- 13055199 C HOOPES EXCHANGE WELL
- 13055304 USBR #5 EXCHANGE WELL
- 13055316 HOOPES BROTHERS EXCHANGE WELL 0
- 13055317 R RICKS EXHCANGE WELL ✓ 0
- 13055318 EHCO RANCH EXCHANGE WELL 0
- 13055324 D, L, & R ARD EXCHANGE WELL 0
- 13055326 HINK INC. EXCHANGE WELL
- 13055329 R & J BROWN EXCHANGE WELL ✓ 0
- 13055343 USBR #3 EXCHANGE WELL
- 13056505 USBR #1 EXCHANGE WELL

*EXCHANGE PUMPS*

13085500 A & B IRRIGATION DISTRICT PUMPS  
 13057171 A BUTIKOFER PUMP  
 13057013 A GUNDERSON PUMP  
 13060005 A M CANNON PUMP  
 13046070 A NEDROW #1 PUMP  
 13046072 A NEDROW #2 PUMP  
 13061610 ABERDEEN CANAL  
 13037505 ANDERSON CANAL  
 13038398 ARNSBERGER PUMP (P. BLAKELY)  
 13057120 ARRINGTON NORTH PUMP  
 13057122 ARRINGTON SOUTH PUMP  
 13038393 B COVINGTON PUMP  
 13037490 B FOSTER PUMP  
 13058090 B JOHNSON PUMP  
 13055195 B LEAVITT PUMP  
 13054420 B PARKINSON PUMP  
 13057106 B TOMCHAK #1 PUMP  
 13057116 B TOMCHAK #2 PUMP  
 13038435 BANNOCK JIM SLOUGH  
 13058512 BEAN CANAL  
 13057139 BEAR ISLAND E PUMP  
 13057123 BEAR ISLAND N PUMP (ANDRUS)  
 13057030 BEAR TRAP CANAL  
 13055314 BIGLER SLOUGH CANAL  
 13061430 BLACKFOOT CANAL  
 13062502 BLACKFOOT MONROC  
 13047900 BOOM CREEK CANAL  
 13038095 BOOMER CANAL  
 13057018 BOYLE & S #1 PUMP  
 13057021 BOYLE & SONS #2 PUMP  
 13038360 BRAMWELL CANAL  
 13038110 BURGESS CANAL  
 13038080 BUTLER ISL #2 CANAL  
 13038025 BUTLER ISLAND CANAL  
 13057025 BUTTE & MARKET LAKE CANAL  
 13048280 C & L LOOSLI PUMP  
 13057107 C BOYCE PUMP  
 13037997 C HICKMAN PUMP  
 13047635 C LOOSLI #1 PUMP  
 13048290 C LOOSLI #2 PUMP  
 13048440 C LOOSLI #3 PUMP  
 13054708 C M OLSEN PUMP  
 13077755 CALL FARMS PUMP (BARKDULL)  
 13054515 CANYON CREEK CANAL  
 13054801 CANYON CREEK LATERAL PUMP  
 13038065 CHENEY CANAL  
 13048705 CHESTER CANAL  
 13061521 CHET ADAMS PROPANE  
 13084650 CITY OF BURLEY PUMP  
 13055323 CITY OF REXBURG CANAL  
 13038115 CLARK & EDWARDS CANAL  
 13057126 CLEMENTS CANAL  
 13047681 CONANT CREEK CANAL  
 13050545 CONSOLIDATED FARMERS CANAL  
 13061650 CORBETT CANAL  
 13038145 CROFT DITCH  
 13049560 CROSSCUT CANAL  
 13049015 CURR CANAL  
 13057105 D BOYCE PUMP  
 13046086 D FRANSEN PUMP

1800 9.1.92  
 SNKDEV.TTL

↓  
 EB SORT/KEY=(POSITION=10, SIZE=42)

→ SNKDEV.TTL → ~~SNKDIUSRT.TTL~~

↓  
 DIUSRT.TTL

Sorts rows in SNKDIU.TTL  
 (which is sorted by number)  
 and and puts into named file  
 (DIUSRT.TTL).

- 13048080 D HARSHBARGER PUMP
- 13045829 D LARSON PUMP
- 13046084 D NEDROW PUMP
- 13048430 D REYNOLDS PUMP
- 13045849 D SEELEY PUMP
- 13038384 D STOKER PUMP (HUNTER)
- 13045710 D WOODRUFF PUMP
- 13048265 D ZUNDELL PUMP
- 13061995 DANSKIN CANAL
- 13058532 DEMICK CANAL
- 13046310 DEWEY CANAL
- 13038205 DILTS CANAL
- 13058230 DURTSCHI PUMPS
- 13046080 E & S CLARK PUMP
- 13045721 E G HOWELL #1 PUMP
- 13045724 E G HOWELL #2 PUMP
- 13045727 E G HOWELL #3 PUMP
- 13055313 E GARDNER PUMP
- 13047510 E GRIFFEL PUMP
- 13047610 E HESSMAN #1 PUMP
- 13046030 E LENZ (R HESS) PUMP
- 13037975 EAGLE ROCK CANAL
- 13038150 EAST LABELLE CANAL
- 13050525 EGIN CANAL
- 13038362 ELLIS CANAL
- 13037985 ENTERPRISE CANAL
- 13048475 ENTERPRISE CANAL
- 13047515 F & L GRIFFEL PUMP
- 13045705 F HOWELL PUMP
- 13048560 FALL RIVER CANAL
- 13076400 FALLS IRRIGATION PUMP
- 13037980 FARMERS FRIEND CANAL
- 13049705 FARMERS FRIEND CANAL
- 13047575 FARMERS OWN CANAL
- 13058125 FERGUSON CANAL
- 13038383 FRESH PAK PUMP
- 13075900 FT HALL MICHAUD CANAL
- 13047570 G /6 CORP PUMP (GRIFFEL)
- 13049495 G BLANCHARD PUMP
- 13054577 G CRAPO PUMP
- 13045655 G MAROTZ PUMP
- 13045940 G NEDROW PUMP
- 13057121 G OFFUTT PUMP (MARTIN)
- 13086130 GLENDALE FARMS
- 13057135 GREAT WESTERN CANAL
- 13054940 H BISCHOFF PUMP
- 13045960 H STEINMAN #1 PUMP
- 13046025 H STEINMAN #2 PUMP
- 13057046 H TOMCHAK PUMP
- 13038055 HARRISON CANAL
- 13057012 HARTERT L.A.
- 13038436 HILL PETTINGER CANAL
- 13055206 HOLLIST, BOYD
- 13062447 HOPKINS PACKING PUMP
- 13037305 I SPAULDING PUMP
- 13057145 IDAHO CANAL
- 13059490 IF MONROC #3 PUMP
- 13050535 INDEPENDENT CANAL
- 13038210 ISLAND CANAL
- 13055280 ISLAND WARD CANAL

PAID ZUNDELL

c/o ZUNDELL BROS INC.  
RT 2 BOX 18  
ASHTON

159 S.P.

7000GAM 40ARS

June 9-10

13033643 J FLEMING PUMP  
13057141 J GAY PUMP  
13055263 J HARRIS PUMP  
13048350 J HILL PUMP  
13046020 J MCCULLOCH PUMP  
13038386 J N ERICKSON PUMP  
13046075 J NEDROW PUMP  
13053971 J RICKS PUMP  
13055327 J S WRIGHT PUMP  
13046315 J SEELEY PUMP  
13038371 J T JONES PUMP  
13038352 J W JONES #1 PUMP  
13062505 J WADSWORTH PUMP  
13034460 JACOBSON, LLOYD  
13038331 JEFF HILLS ELEC PUMP  
13038332 JEFF HILLS ENG PUMP  
13061685 K CHRISTENSEN PUMP  
13054046 K J ARNOLD #1 PUMP  
13054397 K J ARNOLD #2 PUMP  
13047710 K NYBORG PUMP  
13057130 KENNEDY CANAL  
13038098 KITE & NORD CANAL  
13046090 L BRATT PUMP  
13057118 L BROWN PUMP  
13057115 L CARLSON NORTH PUMP  
13057117 L CARLSON SOUTH PUMP  
13045675 L CHERRY PUMP  
13057140 L HANSEN EAST PUMP  
13057142 L HANSEN MACKAY PUMP  
13057119 L HANSEN WEST  
13046095 L LOOSLI #1 PUMP  
13048275 L LOOSLI #2 PUMP  
13049490 L LOOSLI #3 PUMP  
13048551 L MARTINDALE #1 PUMP  
13048480 L MARTINDALE #2 PUMP  
13049550 LAST CHANCE CANAL  
13038426 LENROOT CANAL  
13057938 LOERTSCHER CANAL  
13058145 LOVELL # 2 PUMP  
13058105 LOVELL PUMP  
13038090 LOWDER SLOUGH CANAL  
13038422 LYLE ROBISON  
13037515 M & M CATTLE CO. (N) PUMP  
13037510 M & M CATTLE CO. (S) PUMP  
13038417 M CHENEY PUMP  
13047625 M GRIFFEL PUMP  
13038113 M H HILL PUMP  
13077775 M KUWANA PUMP  
13037855 M NEWBY #1 PUMP  
13037860 M NEWBY #2 PUMP  
13037880 M NEWBY #3 PUMP  
13047475 MARYSVILLE CANAL  
13038388 MATTSON-CRAIG CANAL  
13049008 MCBEE CANAL  
13055306 MCCORMICK-ROWE CANAL  
13086000 MILNER LOW LIFT PUMP  
13080000 MINIDOKA NORTH SIDE CANAL  
13080500 MINIDOKA SOUTH SIDE CANAL  
13059486 MONROC LARGE  
13032510 MRS. PAUL BYRD

13055193 N BIRCH PUMP  
13057097 N FULLMER PUMP  
13038373 N TAYLOR PUMP  
13038387 NELSON CANAL  
13038437 NELSON COREY CANAL  
13061520 NEW LAVA SIDE CANAL  
13061670 NIELSON-HANSEN CANAL  
13038315 NORTH RIGBY CANAL  
13055245 NORTH SALEM CANAL  
13086510 NORTHSIDE 'A' LATERAL CANAL  
13086520 NORTHSIDE CROSSCUT GOODING CANAL  
13087000 NORTHSIDE TWIN FALLS CANAL  
13057038 O ELLSWORTH PUMP  
13048050 ORME CANAL  
13058290 ORVAL AVERY CANAL  
13058350 ORVAL AVERY PUMP  
13077652 OSBORN PUMP  
13057125 OSGOOD CANAL  
13060055 P HILL PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13085800 PA LATERAL PUMP  
13054391 PARKINSON & KERBS PUMP  
13038305 PARKS & LEWISVILLE CANAL  
13062507 PARSONS CANAL  
13061525 PEOPLES CANAL  
13055205 PINCOCK-BYINGTON CANAL  
13055311 PINCOCK-GARNER CANAL  
13055050 PIONEER CANAL  
13057250 PORTER CANAL  
13046015 R & C BAUM PUMP  
13057014 R & C MILLER PUMP  
13054111 R & J BROWN PUMP  
13055331 R & K WALKER PUMP  
13047565 R BAUM PUMP  
13084725 R BLEI PUMP  
13038428 R BURNS PUMP  
13061522 R C ADAMS PUMP  
13045950 R D BAKER #1 PUMP  
13045823 R D BAKER #2 PUMP  
13048485 R D MILLER PUMP  
13038410 R GROVER PUMP  
13033670 R JACOBSON PUMP (BEASLEY)  
13061677 R LAMBERT PUMP  
13045780 R LEE PUMP  
13057015 R MILLER PUMP  
13055319 R O WILDING PUMP  
13054762 R R RICKS PUMP  
13045807 R RITCHEY PUMP  
13038438 R ROTH PUMP  
13054590 R STEVENS PUMP  
13045811 R STEWART #1 PUMP  
13045810 R STEWART #2 PUMP  
13047616 R STURM PUMP  
13054772 R. BRENT RICKS  
13058250 REED PUMPS  
13038431 REID CANAL  
13060500 RESERVATION CANAL  
13086530 RESERVOIR DISTRICT #2 CANAL  
13055334 REXBURG IRRIGATION CANAL

TO:BOISE

SEP-10-'92 THU 13:42 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P19

13038180 RIGBY CANAL  
13038179 RIGBY LATERAL  
13037475 RILEY CANAL  
13061705 RIVERSIDE CANAL  
13038030 ROSS AND RAND CANAL  
13055275 ROXANA CANAL  
13058310 ROY AVERY CANAL  
13058370 ROY COOPER SAND CR CANAL  
13058380 ROY COOPER WILLOW CREEK CANAL  
13038085 RUDY CANAL  
13049805 SALEM UNION CANAL  
13058510 SAND CREEK ABV WILLOW CREEK DIVERSION  
13058515 SAND CREEK DELIVERY TO IDAHO CANAL COMPANY  
13058210 SARGENT & SUMMERS CANAL  
13055295 SAUREY CANAL  
13063507 SHRADER, LARK  
13055042 SIDDOWNAY CANAL  
13054850 SIDDOWNAY SHEEP PUMP  
13049010 SILKEY CANAL  
13085275 SIMPLOT #1 PUMP  
13085300 SIMPLOT #2 PUMP  
13059525 SNAKE RIVER VALLEY CANAL  
13058270 SPERRY PUMP  
13048025 SQUIRREL CREEK CANAL  
13049725 ST ANTHONY UNION CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13038050 STEELE CANAL  
13055060 STEWART CANAL  
13057114 STIENKE-MURDOCK PUMP  
13058330 STUCKI PUMPS  
13038392 SUNNYDELL CANAL  
13055325 T BRUNSON PUMP  
13045755 T HOLCOMB PUMP  
13033646 T LOTT #1 PUMP  
13033690 T LOTT #2 PUMP  
13038405 T PARKINSON PUMP  
13048470 T POTTER PUMP  
13055040 TETON IRRIGATION CANAL  
13055210 TETON ISLAND FEEDER CANAL  
~~13054043 TETON PIPELINE #1 PUMP~~  
13054043 TETON PIPELINE #2 PUMP *CLERMONTVILLE*  
13054031 TETON PIPELINE #3 PUMP *BOELKE*  
13053951 TETON PIPELINE #4 PUMP *SOUTH PIPE*  
13038434 TEXAS & LIBERTY CANAL  
13038416 THERON CHENEY  
13062050 TREGO CANAL  
13087500 TWIN FALLS SOUTHSIDE CANAL  
13049710 TWIN GROVES CANAL  
13046083 V & D KIRKHAM PUMP  
13085400 V HOBSON PUMP  
13054705 V SCHWENDIMAN PUMP  
13058514 W & O COOPER CANAL  
13038382 W DABELL PUMP (HUNTER)  
13047605 W SCAPE PUMP (REINKE)  
13057154 W WARD PUMP  
13034480 W XXXXXX PUMP  
13058165 WALLACE REED PUMP  
13062506 WATSON CANAL  
13062503 WEARYRICK CANAL  
13033650 WEEKS, JAY

TO:BOISE

SEP-10-'92 THU 13:43 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P20

13038225 WEST LABELLE & LONG ISLAND CANAL  
13038340 WHITE DITCH  
13038201 WHITE ISLAND PUMP  
13055030 WILFORD CANAL  
13058530 WILLOW CREEK BELOW FLOOD CHANNEL  
13055315 WOODMANSEE-JOHNSON CANAL  
13059505 WOODVILLE CANAL  
13047305 YELLOWSTONE CANAL  
13057143 YORGENSON PUMP  
13045805 Z J EGBERT #1 PUMP  
13045813 Z J EGBERT #2 PUMP  
13045860 Z J EGBERT #3 PUMP  
13045880 Z J EGBERT #4 PUMP  
13045930 Z J EGBERT #5 PUMP

TO:BOISE

SEP-10-'92 THU 13:43 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P21

13084650 CITY OF BURLEY PUMP  
13084725 R BLEI PUMP  
13085275 SIMPLOT #1 PUMP  
13085300 SIMPLOT #2 PUMP  
13085400 V HOBSON PUMP  
13085500 A & B IRRIGATION DISTRICT PUMPS  
13085800 PA LATERAL PUMP  
13086000 MILNER LOW LIFT PUMP  
13086130 GLENDALE FARMS  
13086510 NORTHSIDE 'A' LATERAL CANAL  
13086520 NORTHSIDE CROSSCUT GOODING CANAL  
13086530 RESERVOIR DISTRICT #2 CANAL  
13087000 NORTHSIDE TWIN FALLS CANAL  
13087500 TWIN FALLS SOUTHSIDE CANAL

REACH	FLows IN CFS	ACTUAL DATE	NATURAL FLOW	ACTUAL FLOW	RMAlNING NAT FLOW	POWER FLOW	STORed FLOW	RESRVOIR EVAP	NATURAL FLOW DIV	TOTAL RCH DIV	REACH GAIN	LAST RIGHT
1	TO MORAN	SEP 9	445.	2480.	445.	0.	2035.	0.	0.	0.	445.	18900712
33	MORAN TO ALPINE	SEP 9	2131.	4166.	2131.	0.	2035.	0.	0.	0.	1686.	18900712
34	SALT RIVER ABV RES	SEP 9	397.	397.	397.	0.	0.	0.	0.	0.	397.	18900712
35	GREYS RIVER ABV RES	SEP 9	220.	220.	220.	0.	0.	0.	0.	0.	220.	18900712
2	ALPINE TO IRWIN	SEP 10	2614.	5930.	2614.	0.	3317.	19.	0.	0.	-135.	18900712
3	IRWIN TO HEISE	SEP 10	2477.	5790.	2474.	0.	3317.	0.	3.	3.	-137.	18900712
4	HEISE TO BLW DRY BED	* SEP 10	2477.	3042.	268.	0.	2774.	0.	2206.	2316.	0.	18900712
32	BLW DRY BED TO LORENZO	SEP 10	2551.	2817.	88.	0.	2729.	0.	254.	263.	74.	18900712
11	TO HENRYS LAKE	SEP 7	48.	4.	48.	0.	-44.	0.	0.	0.	48.	18900712
12	HENRYS L TO ISLAND PARK	SEP 8	733.	1012.	733.	0.	279.	0.	0.	0.	685.	18900712
13	ISLAND PARK TO ASHTON	SEP 9	1502.	1781.	1502.	0.	279.	0.	0.	0.	769.	18900712
30	ASHTON TO AB FALLS RIVER	* SEP 9	1502.	1781.	1502.	0.	279.	0.	0.	0.	0.	18900712
14	TO GRASSY LAKE	SEP 9	0.	0.	0.	0.	0.	0.	0.	0.	0.	18900712
15	GRASSY LAKE TO SQUIRREL	SEP 9	421.	386.	421.	0.	-35.	0.	0.	35.	421.	18900712
16	SQUIRREL TO CHESTER	SEP 9	471.	357.	444.	0.	-87.	0.	27.	79.	49.	18900712
17	AB FALLS R TO ST ANTHONY	SEP 9	1960.	1492.	1664.	0.	-173.	0.	269.	550.	-13.	18900712
10	ST ANTHONY TO AB NF TETM	* SEP 9	1960.	1206.	1362.	0.	-156.	0.	302.	302.	0.	18900712
18	AB S LEIGH TO ST ANTHONY	SEP 9	413.	624.	413.	0.	212.	0.	0.	25.	413.	18850601
19	ST ANTHONY TO TETON MTH	* SEP 9	413.	163.	0.	0.	163.	0.	413.	471.	0.	18850601
20	AB NF TETM TO REXBURG	SEP 10	2719.	1829.	1708.	0.	121.	0.	0.	0.	346.	18900712
21	LORENZO TO MENAN	* SEP 10	5269.	4437.	1793.	0.	2644.	0.	2.	231.	0.	18900712
5	MENAN TO NR IDAHO FALLS	SEP 10	5818.	3966.	1421.	0.	2545.	0.	921.	964.	549.	18900712
36	NR ID FALLS TO AB WLW CR	* SEP 10	5818.	3734.	1421.	0.	2313.	0.	0.	232.	0.	18900712
23	WILLOW CRK BLW TEX CREEK	SEP 10	7.	5.	5.	0.	0.	0.	2.	2.	7.	18800401
24	BLW TEX CREEK TO NR RIRI	SEP 10	7.	30.	5.	0.	25.	3.	0.	0.	0.	18800401
25	NR RIRIE TO FDWY NR UCON	SEP 10	6.	0.	0.	0.	0.	0.	5.	510.	0.	18800401
28	FDWY NR UCON TO END	* SEP 10	6.	0.	0.	0.	0.	0.	0.	0.	0.	18800401
31	WILLOW CRK TO SHELLEY	SEP 11	5818.	3942.	1215.	0.	2727.	0.	200.	327.	-7.	18900712
6	SHELLEY TO AT BLACKFOOT	SEP 11	5490.	2081.	456.	0.	1624.	0.	430.	1440.	-328.	18900712
22	AT BLKFOOT TO BLW BLKFT	* SEP 11	5490.	1947.	323.	0.	1624.	0.	133.	133.	0.	18900712
38	BLW BLKFT TO NR BLKFOOT	SEP 12	5167.	1691.	0.	0.	1691.	0.	0.	0.	-323.	18900712
39	PORTNUEF R AT POCATELLO	SEP 12	35.	35.	35.	0.	0.	0.	0.	0.	35.	19030326
7	NR BLACKFOOT TO NEELEY	SEP 13	7587.	7062.	2420.	0.	4641.	42.	0.	157.	2385.	19030326
8	NEELEY TO MINIDOKA	SEP 13	7322.	5580.	2105.	0.	3475.	39.	50.	847.	-265.	19030326
9	MINIDOKA TO MILNER	SEP 14	7322.	97.	0.	0.	97.	0.	2105.	5607.	0.	19030326

\* - INDICATES FLOW ESTIMATED, NOT MEASURED

TOTALS 7322. 14492. 7322.

RESERVOIR	PREVIOUS AF	CURRNT AF	CHNG CFS	ACCRD CFS	TOTAL AF	EVAP AF	PRIORITY	RESERVOIR	AF RIGHT	AF STORed	
1	JACKSON LAKE	214990.0	210770.0	-2127.6	0.0	0.0	0.0	1	JACKSON LAKE	298981.0	0.0
2	PALISADES	185312.0	182753.0	-1290.1	0.0	0.0	14086.3	2	LAKE WALCOTT	97000.0	4940.2
3	HENRYS LAKE	50705.0	50587.0	-59.5	0.0	0.0	0.0	3	JACKSON LAKE	138829.0	0.0
4	ISLAND PARK	3595.7	2894.0	-353.8	0.0	0.0	6475.5	4	JACKSON LAKE	409190.0	0.0
5	GRASSY LAKE	14286.0	14285.0	-0.5	0.0	0.0	0.0	5	HENRYS LAKE	79350.0	0.0
6	RIRIE	19464.0	19442.0	-11.1	0.0	0.0	2008.0	6	PALISADES	259600.0	0.0
7	AMERICAN FALLS	139007.0	134292.0	-2377.1	0.0	0.0	16098.4	7	ISLAND PARK	45000.0	0.0
8	LAKE WALCOTT	32372.0	33843.0	741.6	0.0	4940.2	19380.4	8	AMERICAN FALLS	156830.0	0.0
9	LAKE MILNER	35789.0	36080.0	146.7	0.0	0.0	0.0	9	AMERICAN FALLS	1399654.0	0.0
	TOTAL	695520.7	684946.0	-5331.4	0.0	4940.2	58048.6	10	ISLAND PARK	90000.0	0.0
								11	GRASSY LAKE	15204.0	0.0
								12	PALISADES	899502.0	0.0
								13	HENRYS LAKE	10650.0	0.0
								14	RIRIE	80000.0	0.0
								15	AMERICAN FALLS	116106.0	0.0
								16	PALISADES	40898.0	0.0
YEAR-TO-DATE AF	-2610148.9	2692713.1	2487.2	3317959.6	98682.3	639.5					

DIVERSION DATA - SEP 14, 1992

DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG
1 P BIRD	0	0	0	4	105 A NEDROW #2	0	0	0	0	209 BOYLE & SONS #2	0	0	0	0
2 PALISADES CANAL	3	0	721	-412	106 J NEDROW	0	0	0	151	210 BUTTE & MARKET L	231	228	27564	21030
3 J FLEMING	0	0	0	0	107 E & S CLARK	0	0	0	0	211 BEAR TRAP	7	4	475	234
4 T LOTT #1	0	0	0	0	108 V & D KIRKHAM	0	0	0	74	212 O ELLSWORTH	0	0	0	0
5 J WEEKS	0	0	0	0	109 D NEDROW	0	0	0	74	213 H TOMCHAK	0	0	0	28
6 R JACOBSON	0	0	0	0	110 D FRANSEN	0	0	0	76	214 N FULLMER	0	0	0	0
7 T LOTT #2	0	0	0	0	111 L BRATT	0	0	0	0	215 D BOYCE	0	0	0	0
8 L JACOBSON	0	0	0	0	112 L LOOSLI #1	0	0	0	0	216 B TOMCHAK #1	0	0	0	0
9 W BITTON	0	0	0	0	113 DEWEY	0	0	998	-480	217 C BOYCE	0	0	0	235
10 I SPAULDING (TR)	0	0	0	130	114 J SEELEY	0	0	0	0	218 STIENKE-MURDOCK	0	0	0	105
11 RILEY	0	0	3416	-48	115 YELLOWSTONE	3	3	1391	-496	219 L CARLSON NTH	0	0	0	0
12 WHEELER-RAINBOW	0	0	0	0	116 MARYSVILLE	32	32	11715	-2640	220 B TOMCHAK #2	0	0	0	0
13 B FOSTER	0	0	0	225	117 F & L GRIFFEL	0	0	0	98	221 L CARLSON STH	0	0	0	0
14 ANDERSON	62	0	28462	16896	118 R BAUM	0	0	0	0	222 H BROWN	0	0	0	78
15 M & M CATTLE (S)	0	0	0	47	119 H GRIFFEL	0	0	0	17	223 L HANSEN WEST	0	0	0	0
16 M & M CATTLE (N)	0	0	0	0	120 FARMERS OWN	0	0	4661	-850	224 ARRINGTON NTH	0	0	0	47
17 M NEWBY #1	0	0	0	219	121 W SCAFE	0	0	0	49	225 G OFFUT	0	0	0	0
18 M NEWBY #2	0	0	0	10	122 R STURM #2 (10)	0	0	0	59	226 ARRINGTON STH	0	0	0	4
19 M NEWBY #3	0	0	0	2	123 R STURM #1 (10)	0	0	0	21	227 BEAR ISL NORTH	0	0	0	293
20 EAGLE ROCK (1)	651	0	0	0	124 M GRIFFEL	0	0	0	0	228 BEAR ISL WEST	0	0	0	0
21 FARMERS FRIEND	318	0	6405	-7	125 C LOOSLI #1	0	0	0	0	229 OSGOOD	27	16	7239	4423
22 ENTERPRISE	0	0	21031	290	126 CONANT CR CANAL	0	0	1529	-496	230 CLEMENTS	3	3	336	134
23 C HICKMAN	0	0	0	0	127 K NYBORG	0	0	0	113	231 KENNEDY	1	0	99	1189
24 BUTLER ISLAND	26	0	152	186	128 BOOM CR CANAL	0	0	393	30	232 GREAT WESTERN	233	20	11506	35326
25 ROSS AND RAND	4	0	105	-73	129 SQUIRREL CR CNL	4	4	635	-517	233 L HANSEN EAST	0	0	0	0
26 STEELE	0	0	363	-88	130 ORME	0	0	40	9	234 J GAY	0	0	0	0
27 HARRISON	188	110	36424	3262	131 D HARSHBARGER	0	0	0	98	235 L HANSEN MACKAY	0	0	0	0
28 CHENEY (11)	0	0	0	60	132 D ZUNDELL	0	0	0	168	236 YORGENSON	0	0	0	0
29 BUTLER ISL #2	0	0	389	300	133 L LOOSLI #2	0	0	0	60	237 IDAHO	693	0	13921	61111
30 RUDY	0	0	12356	4780	134 C & L LOOSLI	0	0	0	0	238 W WARD	0	0	0	14
31 LOWDER SLOUGH	0	0	1416	14	135 C LOOSLI #2	0	0	0	0	239 A BUTIKOFER	0	0	0	0
32 BOOMER (2)	9	0	0	0	136 J HILL	0	0	0	10	240 PORTER	232	232	23696	-23696
33 KITE & NORD	0	0	210	-75	137 D REYNOLDS	0	0	0	187	241 LOERTSCHER	2	0	0	0
34 BURGESS	197	0	36481	425	138 C LOOSLI #3	0	0	0	89	242 BOYD FOSTER	5	5	610	-610
35 M H HILL	0	0	0	0	139 T POTTER	0	0	0	30	243 B JOHNSON	0	0	0	0
36 CLARK & EDWARDS	57	0	282	363	140 ENTERPRISE	48	48	17012	3727	244 LOVELL # 1	0	0	0	0
37 CROFT	0	0	109	18	141 L MARTINDALE #2	0	0	0	138	245 FERGUSON	14	0	0	0
38 EAST LABELLE	95	0	127	655	142 R D MILLER	0	0	0	93	246 LOVELL # 2	1	0	0	0
39 RIGBY LATERL (3)	0	0	0	0	143 L MARTINDALE #1	0	0	0	49	247 WALLACE REID	7	0	0	0
40 RIGBY	37	0	1598	1656	144 FALL RIVER CANAL	0	0	1334	2337	248 SARGENT & SUMMRS	0	0	0	0
41 WHITE ISLAND	0	0	0	93	145 CHESTER	0	0	757	57	249 DURTSCHI PUMPS	0	0	0	0
42 DILTS	0	0	1440	147	146 MCBEE	0	0	0	0	250 REED PUMPS	2	0	0	0
43 ISLAND	73	0	2924	686	147 SILKEY	0	0	264	-50	251 SPERRY	3	0	0	0
44 W LABELLE & LG I	361	0	1226	3798	148 CURR	27	0	59	-36	252 ORVAL AVERY	1	0	0	0
45 PARKS & LEWSVLLE	192	0	2233	3025	149 L LOOSLI #3	0	0	0	1	253 ROY AVERY	2	0	0	0
46 NORTH RIGBY	44	0	286	861	150 G BLANCHARD	0	0	0	3	254 STUCKI PUMPS	0	0	0	0
47 JEFF HILLS ELEC	0	0	0	0	151 LAST CHANCE	4	4	6319	-951	255 ORVAL AVERY PUMP	0	0	0	0
48 JEFF HILLS ENG	0	0	0	88	152 CROSSCUT TO TETN	277	41	17303	-17303	256 ROY COOPER SAND	5	0	0	0
49 WHITE DITCH (3A)	0	0	0	352	153 CROSSCUT TO FL R	29	0	2685	-2685	257 ROY COOPER WILL	0	0	0	0
50 J W JONES #1	0	0	0	47	154 FARMERS FRIEND	0	0	3775	-653	258 PROGRESSIVE SAND	390	0	3481	-3481
51 BRAMWELL	0	0	207	-207	155 TWIN GROVES	0	0	3483	-676	259 BEAN	2	0	0	0
52 ELLIS (12)	0	0	0	0	156 ST ANTHONY UNION	240	0	0	7904	260 W & O COOPER	0	0	0	0
53 J T JONES	0	0	0	0	157 SALEM UNION	0	0	11921	-996	261 IDAHO FR SAND CK	0	0	899	-899
54 N TAYLOR	0	0	0	0	158 EGIN	176	0	1259	6021	262 PROGRESSIVE WILL	78	18	7162	-7162
55 W DABELL	0	0	0	0	159 ST ANTHONY U FDR	127	0	538	-538	263 DEMICK	0	0	0	0
56 FRESH PAC	0	0	0	0	160 INDEPENDENT	0	0	23648	-4603	264 IF MONROC LARGE	0	0	2	-2
57 D STOKER	0	0	0	229	161 CONSOLIDATED FR	0	0	9447	46	265 IF MONROC LYONS	0	0	0	0
58 J N ERICKSON	0	0	0	1588	162 SOUTH PIPE	0	0	2110	-1988	266 WOODVILLE	26	26	6746	8035
59 NELSON	0	0	23	254	163 J RICKS	0	0	0	0	267 SNAKE RIVER VY	300	101	46621	5254
60 MATTSOON-CRAIG	2	0	117	108	164 BOELKE	0	0	784	-709	268 A M CANNON	0	0	0	0
61 SUNNYDELL	0	0	10559	1083	165 CLEMENTSVILLE	0	0	4411	-4233	269 P HILL	0	0	0	0

62 B COVINGTON	0	0	0	0	166 R & J BROWN	0	0	369	-313 270 RESERVATION	0	0	41711	-41711
63 D BLAKELY	0	0	0	141	167 P L STOTT #1	0	0	0	6 271 BLACKFOOT	0	0	15586	8050
64 T PARKINSON	0	0	0	676	168 PARKINSON & KRBS	0	0	0	0 272 NEW LAVA SIDE	66	0	2917	8191
65 R GROVER	0	0	0	676	169 K J ARNOLD #2	0	0	0	0 273 R C ADAMS #1 (5)	0	0	0	0
66 T CHENEY	0	0	0	0	170 B PARKINSON	11	11	2329	-2301 274 R C ADAMS #2 (5)	0	0	0	0
67 M CHENEY	0	0	0	14	171 CANYON CR CANAL	0	0	1032	-251 275 PEOPLES	221	197	43357	24636
68 L ROBINSON	0	0	0	31	172 G CRAPO	0	0	0	0 276 ABERDEEEN	812	812	160709	28939
69 LENROOT	33	0	14212	275	173 P STEVENS	0	0	958	-958 277 CORBETT	92	0	3670	7442
70 R BURNS	0	0	0	0	174 V SCHWENDIMAN	0	0	4625	-4625 278 NIELSON-HANSEN	7	0	373	-373
71 REID	39	0	5317	1640	175 RR RICKS	0	0	0	108 279 R LAMBERT	0	0	0	0
72 TEXAS & LIBRTY P	175	0	631	3905	176 RB RICKS	0	0	966	-966 280 K CHRISTENSEN(6)	0	0	0	0
73 BANNOCK JIM	1	0	786	-32	177 CANYON CR LAT	14	14	2371	-2371 281 RIVERSIDE	53	0	880	572
74 HILL PETTINGER	0	0	370	-134	178 SIDDOWNAY SHEEP	0	0	0	0 282 DANSKIN	146	0	8	2280
75 NELSON COREY	15	9	205	35	179 H BISCHOFF	0	0	0	30 283 TREGO	43	0	3933	1117
76 R ROTH	0	0	0	197	180 WILFORD	59	0	1627	21 284 HOPKINS PKNG (7)	0	0	0	0
77 G MAROTZ	0	0	0	10	181 TETON IRRIGATION	55	0	106	635 285 MONROC BLACKFOOT	0	0	0	0
78 L CHERRY	0	0	0	3	182 SIDDOWNAY	2	0	517	-306 286 WEARYRICK	32	0	2	583
79 F HOWELL	0	0	0	0	183 PIONEER	4	0	45	27 287 J WADSWORTH	0	0	0	0
80 D WOODRUFF	0	0	0	49	184 STEWART	3	0	5	236 288 WATSON	71	0	277	924
81 E G HOWELL #1	0	0	0	21	185 N BIRCH	0	0	0	15 289 PARSONS	30	0	781	0
82 E G HOWELL #2	0	0	0	7	186 B LEAVITT	0	0	0	44 290 L SHRADER	0	0	0	0
83 E G HOWELL #3	0	0	0	21	187 PINCOCK-BYINGTON	3	0	101	32 291 FT HALL MICHAUD	120	120	46630	45261
84 T HOLCOMB	0	0	0	0	188 TETON ISLAND FDR	218	49	7067	-2735 292 FALLS IRRIGATION	37	37	24530	15897
85 R LEE	0	0	0	20	189 NORTH SALEM	0	0	6	-6 293 M OSBORN	0	0	0	0
86 Z J EGBERT #5	0	0	0	26	190 J HARRIS	0	0	0	22 294 CALL FARMS	0	0	0	704
87 R RITCHEY	0	0	0	54	191 ROXANA	9	6	926	-536 295 M KUWANA	0	0	0	0
88 R STEWART #2	0	0	0	64	192 ISLAND WARD	0	0	2541	-820 296 MINIDOKA NTH S	399	659437554	-174214	
89 R STEWART #1	0	0	0	31	193 SAUREY	3	3	1370	-1305 297 MINIDOKA STH (8)	448	0	0	212458
90 Z J EGBERT #3	0	0	0	40	194 MCCORMICK-ROWE	0	0	14	40 298 CITY OF BURLEY	0	0	0	0
91 R D BAKER #2	0	0	0	0	195 PINCOCK-GARNER	9	0	26	169 299 R BLEI	0	0	0	0
92 D LARSON	0	0	0	118	196 E GARDNER	0	0	0	30 300 SIMPLOT #1	0	0	0	172
93 D SEELEY	0	0	0	0	197 BIGLER SLOUGH	1	1	97	-49 301 SIMPLOT #2	0	0	0	1032
94 Z J EGBERT #2	0	0	0	0	198 WOODMANSEE-JSN	0	0	160	473 302 V HOBSON	0	0	0	207
95 Z J EGBERT #4	0	0	0	8	199 R O WILDING	0	0	0	0 303 A & B IRR DIST	91	91	57323	71623
96 Z J EGBERT #1	0	0	0	0	200 CITY OF REXBURG	13	0	3	-3 304 PA LATERAL (9)	42	0	0	0
97 G NEDROW	0	0	0	0	201 T BRUNSON	0	0	0	41 305 MILNER LOW LIFT	84	84	55080	28128
98 R D BAKER #1	0	0	0	150	202 J S WRIGHT	0	0	0	15 306 A LATERAL (9)	43	0	0	0
99 H STEINMAN #1	0	0	0	14	203 REXBURG IRRIG	92	0	2147	153 307 NS X CUT GDNG (9)	431	0	0	0
100 R & C BAUM	0	0	0	49	204 L A HARTERT	0	0	0	0 308 RES DIST #2	1132	1132372254	13590	
101 J MCCULLOCH	0	0	0	0	205 A GUNDERSON	0	0	0	0 309 NORTHSIDE TWIN F 2078	2194722062	48222		
102 H STEINMAN #2	0	0	0	104	206 R & C MILLER (4)	0	0	0	0 310 TWIN FALLS SOUTH 1705	0204259	7573		
103 C LENZ (R HESS)	0	0	0	0	207 R MILLER (4)	0	0	0					
104 A NEDROW #1	0	0	0	0	208 BOYLE & S #1 (4)	0	0	0					

STORAGE USED COMBINED WITH (1)ANDERSON, (2)RUDY, (3)RIGBY, (3A)W LABL & LI, (4)BUTTE & MARKET L, (5)PEOPLES, (6)NEW LAVA SIDE, (7)RIVERSIDE, (8)MINIDOKA NTH S, (9)NORTHSIDE TWIN F, (10)MARYSVILLE, (11)STEELE, AND (12)BRAMELL CANALS.

CROSSCUT AT TETON CFS 236. EAGLE ROCK DUMP CFS 519. DRY BED CFS 1715.

MINIDOKA PROJECT RETURN FLOW CREDIT

DAILY TOTALS	CFS DIVN	CFS NAT	CFS STOR	AF STOR	AF USED	AF REM
	14492.	7941.	6314.	12524.	2692713.	427634.

CFS GAIN	CFS CREDIT	AF TOTAL
137.4	137.4	39985.0

RIRIE RESVR LOSS:	CFS	AF TOTAL
	17.	-886.7

WILLOW CREEK LOSS:	CFS	AF TOTAL
	-2.	-1569.8

EAGLE ROCK CREDIT:	CFS	AF TOTAL
	482.	141608.5

## EXCHANGE PUMP DATA - SEP 14, 1992

EXCHANGE PUMP	CFS PUMPED	AF YR TOTAL	EXCHANGE PUMP	CFS PUMPED	AF YR TOTAL	EXCHANGE PUMP	CFS PUMPED	AF YR TOTAL
1 COVINGTON BROS	0.	0.0	8 V SCHWENDIMAN	0.	4665.9	15 RICKS, R.	0.	1102.9
2 L LOOSLI	0.	0.0	9 M PARKINSON	0.	0.0	16 EHCO RANCH	0.	1290.0
3 USBR 2	16.	4954.0	10 M & M RAMMEL	0.	0.0	17 D, L, & R ARD	0.	1923.2
4 G NELSON	0.	0.0	11 D BOTT	0.	1569.6	18 HINK, INC.	0.	1744.0
5 STEVECO CANYON	0.	722.8	12 C HOOPES	0.	939.6	19 R & J BROWN	0.	171.3
6 CANYON CR LAT	0.	4848.2	13 USBR 5	0.	0.0	20 USBR 3	9.	2876.3
7 B PARKINSON	0.	3556.3	14 HOOPES BROS	0.	1903.6	21 USBR 1	22.	4315.1

Filling part of June 10, 1888 priority water rights on the Snake River above Lorenzo.

Filling April 6, 1889 priority water rights on the Henrys Fork and Snake River from Lorenzo to Blackfoot.

Filling June 1, 1884 priority water rights on the Teton River.

Filling a small portion of the March 26, 1903 priority water rights from Blackfoot to Milner.

**WATER DISTRICT NO. 1**  
150 Shoup Ave. #15  
Idaho Falls, Idaho 83402



**R KEITH HIGGINSON DIR**  
**STATE WATER RESOURCES**  
**1301 N ORCHARD**  
**ROISE ID 83706-2337**

M E M O R A N D U M

DATE: SEPTEMBER 14, 1992

TO: NORM YOUNG *RDC*

FROM: RON CARLSON

RE: RESOURCES FOR FINAL WATER DISTRICT 1 ACCOUNTING

At your request we have attempted to identify the tasks and additional personnel resources needed for getting the final 1992 Water District Accounting run through July by the first of November. This schedule takes into consideration work that has already been accomplished toward this goal.

WEEK 1 - The hydrology staff in Boise will get the preliminary USGS data transferred, reviewed and entered into the HISTORY FILE. This will require correcting the reservoir data to the necessary precision and reducing the contents of Palisades by 201,000 AF. During this same time period someone from water allocations section will work on generating necessary daily pumping records for each pump diversion.

WEEK 2 - Between 100 and 150 small pumps have been located between Minidoka and Milner. These need to be included in the accounting although we may not wish to include them individually. One possibility would be to sum the daily pumping data for these pumps and treat them as a single MISC PUMP diversion in the Minidoka to Milner reach. However these are handled, Bob Sutter will need to do the necessary programming. In addition to having someone work up the Milner Pump data during this time period, water district personnel will enter the shift data.

WEEK 3 - Water District personnel will review the exchange well data for the year. Boise staff will digitize recorder charts for the non-automated canals for the time period April 1- July 1, compare digitized data with preliminary data for these canals and enter data.

WEEK 4 - Water district personnel will complete the review of daily canal data. John Lindgren will run the INTERP PROGRAM to interpolate the shifts for all of the canals that do not have measuring devices.

WEEK 5 - Hydrology will update the HISTORY file, run the reach gains program and check the reach gains for possible data errors. The USGS will be notified of errors and provided with copies of the reach gains for these time periods. The next step will be dependent upon the USGS reviewing its data and providing us with corrections. (This typically takes more than a week.)

WEEK 6 - Hydrology will enter the corrected USGS data and re-run the reach gains program. Water District personnel will update the ALLOCATIONS file.

WEEK 7 - Hydrology and water district personnel will run the 1992 accounting through July 31.

## M E M O R A N D U M

DATE: SEPTEMBER 4, 1992

TO: NORM

FROM: RON *RJC*

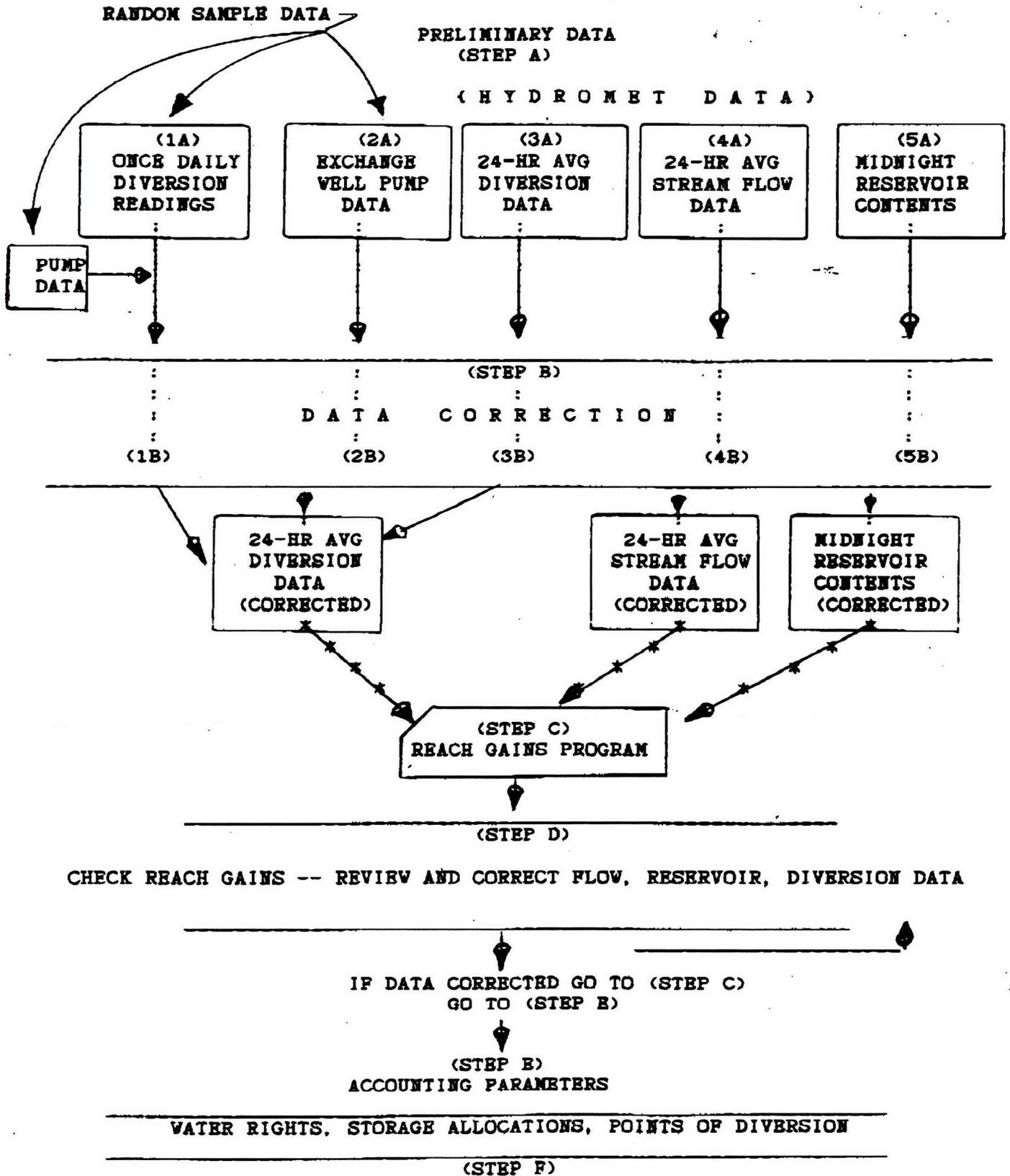
RE: WATER DISTRICT 1 DATA CORRECTION &amp; FINAL ACCOUNTING RUN

In previous memos I have attempted to identify the work that needs to be accomplished before we can make a final accounting run. In these memos I indicated that the state office hydrology staff could provide assistance in accomplishing some of the steps necessary before we can make a final accounting run for 1992. I identified some things that hydrology has done before and could assist us with again. Apparently hydrology is not involved at this point. You, however are still asking me to tell you how the state office can help get the final accounting done. This memo has been prepared in an effort to identify, in some detail, the data review process and associated steps we go through each year prior to making the final accounting run. I have prepared a schematic that illustrates the steps that must be taken to assure that the data used are correct. In this memo I will be referring to the diagram. The diagram indicates a six (6) step process. The memo attempts to identify groups of data at various stages of review and will refer to the Step (eg. Step A) and the Element (eg. (3A)) in discussing the details of data collection, review and correction process.

PRELIMINARY DATA  
(STEP A) to (STEP B)

The Water District 1 accounting process must have reliable daily flow, reservoir, diversion and evaporation data to compute the reach gains that are required before the daily water right cuts can be determined. The tables attached to this memo provide a listing of the sites for which daily data are required in order to run the accounting program. A variety of processes have been employed to acquire these data each day. The data for diversions that are not on the HYDROMET system are collected manually by field personnel and hand entered each day. Those gaging sites that can be "sampled" once daily with some assurance that the observed data point is representative of the day's diversion are hand entered daily. Pump diversions are unpredictable and are generally not included in the preliminary accounting runs. However, these data are collected periodically through out the summer by field personnel. In addition we ask each pump owner to keep a record of his daily diversions each month and mail

WATER DISTRICT 1 DATA CORRECTION PROCESS



them in on a stamped and addressed form that is mailed to each pumper every month. At the end of the year we have a collection of field data which include the crop being grown, acreage served, horsepower of the pump, description of the irrigation system, flow meter readings, and power meter readings. At the end of the season all of the available data for each pump are reviewed and a pumping schedule and appropriate diversion rates for each pump are determined and entered into the VAX. This process is time consuming and may be more art than science. The computation of pump data and the entry of these data is something that can be delegated. I estimate three man-weeks of effort will go into the computation of pump data. In addition, we have identified over 100 pumps between Minidoka and Milner that will need to be included in the 1992 accounting. Since the majority of these are small systems (lawn & garden) we anticipate computing combined daily diversions and entering them as one or two combined systems. This is something that Bob Sutter will need to be involved in and do the appropriate programming for. I estimate that this year these additional pumps will require another eight man days.

Similarly, there are several exchange wells that discharge water into the river. These are similar to pump diversions but because they are more predictable they are normally included in the daily accounting program. The primary source of these data is the records of the water district field personnel. Corrections made at the end of the irrigation year may be based upon power meter data, hydrographer notes, measurements made during the year and other information the water district has acquired through out the year. The data review and correction process for exchange well pumpage is normally less complex and time consuming than is required for other types of data. I estimate the review of exchange well data and the associated data entry can be accomplished in two (2) man days. The listing of the exchange pumps in the system are included in the attachments.

While most of the water diverted each day is accounted for through data collected by the HYDROMET system, the majority of the daily diversion data are acquired by simply having someone read the gage. This single-point "sample" normally is not the best indicator of the average daily diversion for a canal. Currently we have eighteen (18) canals that have continuous strip-chart recorders and are not on the HYDROMET system. At the end of the season the data from the charts is "digitized" and replaces the original once-daily readings. We have found that we can accomplish this task by hand as accurately and quickly as it could be done using a digitizer. We believe these data could be prepared by a clerical person after a short training session. This process can be expected to take five (5) man days. However, we would want the data entry done by someone with experience simply to assure the best quality control in this process. I estimate the data entry will not require more than one man-day.

The diversion data that are acquired through the

HYDROMET system also must be reviewed. If the canal is also equipped with a chart recorder these data can be used to fill in missing data that might have been lost because of a malfunction of the data collection platform (DCP). For sites that are not equipped with a strip chart recorder we rely upon gage reader and hydrographer field notes to reconstruct the lost record. In addition the HYDROMET gage heights must be compared with the once-daily gage height readings of our field personnel. It is not uncommon to find that the HYDROMET system will continue to transmit a non-zero gage height after a canal has been shut of. The gage heights and flows for these periods must be corrected. This task requires a printout of the daily gage heights for every location and a corresponding listing of the once-daily readings. While this process is tedious it is not complicated. However, it does require someone to think about the data and to identify unusual patterns in the data. I estimate this process will require one man-week to accomplish.

The majority of the canals within Water District 1 do not have measuring devices. Consequently this requires periodic current meter measurements to assure that accurate stage-discharge relationships are maintained. Because the rating tends to "shift" between measurements we must enter all of the correct shifts and create a smooth transition in the shift adjustments between measurements. The record of the measurement date and the shift must be entered into the data base and the previously entered shifts deleted. In addition the first measured shift must be entered for the first day the canal began diverting, and the last measured shift must be entered on the last day the canal diverted. There are some canals that require special procedures because of irrigation checks, split diversions, new rating tables etc. These canals include: The Bramwell, Ellis, White, Milner-Gooding, Idaho from Sand Creek, Demick, Roy Cooper (Sand Creek), Great Western, North Rigby, Dilts, and Palisades Canal. While most of the shift data could be prepared by someone else, the water district staff will need to make the corrections for these canals. I anticipate the review and entry of shift data to take eight man-days to accomplish.

Once all of the shifts have been computed and entered for those canals that do not have measuring devices the INTERPOLATION PROGRAM can be run. John Lindgren has been involved in portions of this process in the past. Through this program all of the canal discharges are recalculated using a daily shift adjustment that represents the linear average between the entered shifts. Diversion rates thus computed replace the preliminary data. This is included in the data set identified by (Step B), Element (1B). However, additional corrections may still be required before these data are considered to be final. After the interpolation program is run, the diversion data must be rechecked for errors. Frequently we will find that the computed stage results in an erroneous flow because the rating table is not accurate at low flows or gage heights. The interpolated data must again be

checked against the daily discharge readings made by our gage readers. This second review will probably require another two man-days.

Under Step A, elements (4A) and (5A) represent USGS HYDROMET data. The USGS has agreed to provide us essentially final data on a quarterly basis. These data must be transferred from the USGS computer system to the department VAX. The data through September 30 are usually available in early November. Once the quarterly data are available, the USGS provides us with hard copies. While these data have been reviewed by GS personnel they are still classified as provisional and subject to change. The process of transferring them requires someone on this end to get it done. This process has previously required about one man-day to accomplish. However, before these data can be merged with the WD 1 data base they must be reviewed. The reservoir data in particular require a substantial amount of work. The data provided to us is in the format the USGS uses for publishing its data. In the case of Palisades they include 201,000 acre-feet of dead storage which must be subtracted before we can use their data. Similarly, the numbers representing reservoir contents that come from the USGS are only accurate to four (4) significant digits. Since the daily change in storage enters into our computations of the natural flow available each day, we must have greater precision in reservoir data than the electronic data provided by the USGS. (This has long been an area of irritation. We have discussed this problem with the GS on several occasions in the past but change comes hard for them. We believe that the water district has contracted with the USGS for the data we need to allocate and distribute water and if that requires changes in how they do things that is implicit in the contract.) In the past the USGS office in Idaho Falls has sent us daily data for Henry's Lake and Ririe Reservoir which they have estimated to the nearest ten (10) acre-feet. This, of course requires that all of these data be hand entered. The contents of American Falls and Palisades reservoirs have to be corrected to the nearest one-hundred acre-feet (five significant figures instead of four) when their respective contents are over 1,000,000 acre-feet. Since hydrology is intimately familiar with the reservoir data requirements in the Water District 1 accounting program, they could be very helpful in getting the appropriate reservoir data reviewed and transferred or entered into the Water District 1 data base. We normally expect this effort to require about five man-days to complete.

(STEP C)

After the data from Step A have been entered and corrected and the canal shifts interpolated the next process in checking the data is to run the REACH GAINS PROGRAM. Bob Sutter or Alan Robertson would be in the best position to run this program and identify problem data. The time period between November 1 to March 31, 1992 could be run and reviewed

even before the diversion data have been entered. It is relatively easy to run the reach gains program but it might require several days to review and evaluate the data for errors. When errors are found in the USGS data (and we have always found data errors whenever the REACH GAINS PROGRAM has been run and the data reviewed) the problem data are sent back to the USGS for correction. Since the river and reservoir data are large in comparison to the diversions, a small change in USGS data can have a substantial effect on the distribution of natural flow and storage. Unfortunately it is not likely that we will receive corrected USGS data in less than three weeks after the problem has been identified.

(STEP D) TO (STEP F)

After correcting the data, the REACH GAINS PROGRAM needs to be re-run and the daily gains again reviewed for errors. Once the gains appear to be satisfactory we are ready to start running the final accounting (Step F). However, prior to running the accounting we must check to assure that the water rights portion of the accounting correctly reflects all water rights and the changes that have been approved since the last year. The storage allocations also need to be entered for all diversions, including pumps. This process can normally be completed in one to two man-days. This year there will be some additional changes that will have to be made to the accounting parameters before the months of August and September can be run. Arrangements facilitated under House Bill 4 will have to be included. These are changes that can best be made by Bob Sutter and will probably require an additional day before the final accounting run can be made available.

If I add up the time requirements to get us from Step A to Step F I am estimating 71 man days of effort. If we subtract from that the time that has been spent on the pump data we are still 68 man-days away from a final accounting if we continued on at the current rate.

This evaluation might lead someone to believe that if one man were to work full time on the items outlined in this memo the final water use numbers for 1992 could be available by mid-November. It is important to understand that there are certain built in restraints that limit our ability to accomplish certain tasks. For example, the main data base for the accounting program is referred to as the HISTORY. This file will contain about 500,000 records for one accounting year. While we do make changes in the HISTORY file throughout the year, it has to be done when it is not needed for the daily accounting runs. Because of the limitations on access to this file we normally wait until the end of the irrigation season to make changes. Access could be provided by creating a second "dummy" history file which could be updated with the final data as they become available. However, because of the memory requirements of the HISTORY FILE it is unlikely that we would be able to maintain two files of this size. Clearly WD 01 does not have the space allocated to allow this to be done.

TO:BOISE

SEP-10-'92 THU 13:33 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P06

13010500 JACKSON LAKE NR MORAN, WY  
13032450 PALISADES RESERVOIR NR IRWIN, ID  
13039000 HENRYS LAKE NR LAKE, ID  
13042000 ISLAND PARK RESERVOIR NR ISLAND PARK, ID  
13046500 GRASSY LAKE RESERVOIR  
13057950 RIRIE RESERVOIR NR RIRIE, ID  
13076500 AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, ID  
13081000 LAKE WALCOTT NR MINIDOKA, ID  
13087900 MILNER RESERVOIR AT MILNER, ID

*RE RESERVOIRS*

TO: BOISE

SEP-10-'92 THU 13:34 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P07

13011000 SNAKE RIVER NR MORAN  
13022500 SNAKE RIVER ABV RESERVOIR, NR ALPINE  
13023000 GREYS RIVER ABV RESERVOIR, NR ALPINE  
13027500 SALT RIVER ABV RESERVOIR, NR ETNA  
13032500 SNAKE RIVER NR IRWIN  
13037500 SNAKE RIVER NR HEISE  
13037977 EAGLE ROCK CANAL ABV WILLOW CREEK  
13038000 DRY BED SNAKE RIVER NR RIRIE  
13038500 SNAKE RIVER AT LORENZO  
13039500 HENRYS FORK NR LAKE  
13042500 HENRYS FORK NR ISLAND PARK  
13046023 HENRYS FORK NR ASHTON  
13046510 FALLS RIVER AT GRASSY LAKE  
13047500 FALLS RIVER NR SQUIRREL  
13049500 FALLS RIVER NR CHESTER  
13050016 CROSSCUT CANAL BLW DIVERIONS  
13050018 CROSSCUT CANAL ABV TETON RIVER  
13050500 HENRYS FORK AT ST ANTHONY  
13055000 TETON RIVER NR ST ANTHONY  
13056500 HENRYS FORK NR REXBURG  
13057155 SNAKE RIVER NR IDAHO FALLS  
13057940 WILLOW CREEK BLW TEX CREEK  
13058000 WILLOW CREEK NR RIRIE  
13058510 SAND CREEK ABOVE WILLOW CREEK  
13058520 WILLOW CREEK FLOODWAY NR UCON  
13058530 WILLOW CREEK BELOW FLOODWAY NR UCON  
13060000 SNAKE RIVER NR SHELLEY  
13062500 SNAKE RIVER AT BLACKFOOT  
13069500 SNAKE RIVER NR BLACKFOOT  
13077000 SNAKE RIVER AT NEELEY  
13081500 SNAKE RIVER NR MINIDORA  
13088000 SNAKE RIVER AT MILNER

*River Gages (flows)*  
*pp 370*

TO:BOISE

SEP-10-'92 THU 13:35 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P08

13032510 MRS. PAUL BYRD  
13033643 J FLEMING PUMP  
13033646 T LOTT #1 PUMP  
13033650 WEEKS, JAY  
13033670 R JACOBSON PUMP (BEASLEY)  
13033690 T LOTT #2 PUMP  
13034460 JACOBSON, LLOYD  
13034480 W XXXXXX PUMP  
13037305 I SPAULDING PUMP  
13037475 RILEY CANAL ✓  
13037490 B FOSTER PUMP  
✓13037505 ANDERSON CANAL ✓  
13037510 M & M CATTLE CO. (S) PUMP  
13037515 M & M CATTLE CO. (N) PUMP  
13037855 M NEWBY #1 PUMP  
13037860 M NEWBY #2 PUMP  
13037880 M NEWBY #3 PUMP  
✓13037975 EAGLE ROCK CANAL  
✓13037980 FARMERS FRIEND CANAL  
13037985 ENTERPRISE CANAL ✓  
13037997 C HICKMAN PUMP  
13038025 BUTLER ISLAND CANAL ✓  
13038030 ROSS AND RAND CANAL ✓  
13038050 STEELE CANAL ✓  
13038055 HARRISON CANAL ✓  
13038065 CHENEY CANAL ✓  
13038080 BUTLER ISL #2 CANAL ✓  
13038085 RUDY CANAL ✓  
13038090 LOWDER SLOUGH CANAL ✓  
✓13038095 BOOMER CANAL  
13038098 KITE & NORD CANAL ✓  
13038110 BURGESS CANAL ✓  
13038113 M H HILL PUMP  
✓13038115 CLARK & EDWARDS CANAL  
13038145 CROFT DITCH ✓  
13038150 EAST LABELLE CANAL ✓  
13038179 RIGBY LATERAL ✓  
13038180 RIGBY CANAL ✓  
13038201 WHITE ISLAND PUMP  
13038205 DILTS CANAL ✓  
✓13038210 ISLAND CANAL  
13038225 WEST LABELLE & LONG ISLAND CANAL ✓  
13038305 PARKS & LEWISVILLE CANAL ✓  
13038315 NORTH RIGBY CANAL ✓  
13038331 JEFF HILLS ELEC PUMP  
13038332 JEFF HILLS ENG PUMP  
13038340 WHITE DITCH ✓  
13038352 J W JONES #1 PUMP  
13038360 BRAMWELL CANAL ✓  
13038362 ELLIS CANAL ✓  
13038371 J T JONES PUMP  
13038373 N TAYLOR PUMP  
13038382 W DABELL PUMP (HUNTER)  
13038383 FRESH PAK PUMP  
13038384 D STOKER PUMP (HUNTER)  
13038386 J N ERICKSON PUMP  
13038387 NELSON CANAL ✓  
13038388 MATTSON-CRAIG CANAL ✓  
13038392 SUNNYDELL CANAL  
13038393 B COVINGTON PUMP ✓

13033010 PALISSADES CANAL

025  
27-022552  
SNK DIJ. TTL

27-022552

TO:BOISE

SEP-10-'92 THU 13:36 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P09

13038398 ARNSBERGER PUMP  
13038405 T PARKINSON PUMP  
13038410 R GROVER PUMP  
13038416 THERON CHENEY  
13038417 M CHENEY PUMP  
13038422 LYLE ROBISON  
13038426 LENROOT CANAL ✓  
13038428 R BURNS PUMP  
13038431 REID CANAL ✓  
13038434 TEXAS & LIBERTY CANAL ✓  
13038435 BANNOCK JIM SLOUGH ✓  
13038436 HILL PETTINGER CANAL ✓  
13038437 NELSON COREY CANAL ✓  
13038438 R ROTH PUMP  
13045655 G MAROTZ PUMP  
13045675 L CHERRY PUMP  
13045705 F HOWELL PUMP  
13045710 D WOODRUFF PUMP  
13045721 E G HOWELL #1 PUMP  
13045724 E G HOWELL #2 PUMP  
13045727 E G HOWELL #3 PUMP  
13045755 T HOLCOMB PUMP  
13045780 R LEE PUMP  
13045805 Z J EGBERT #1 PUMP  
13045807 R RITCHEY PUMP  
13045810 R STEWART #2 PUMP  
13045811 R STEWART #1 PUMP  
13045813 Z J EGBERT #2 PUMP  
13045823 R D BAKER #2 PUMP  
13045829 D LARSON PUMP  
13045849 D SEELEY PUMP  
13045860 Z J EGBERT #3 PUMP  
13045880 Z J EGBERT #4 PUMP  
13045930 Z J EGBERT #5 PUMP  
13045940 G NEDROW PUMP  
13045950 R D BAKER #1 PUMP  
13045960 H STEINMAN #1 PUMP  
13046015 R & C BAUM PUMP  
13046020 J MCCULLOCH PUMP  
13046025 H STEINMAN #2 PUMP  
13046030 E LENZ (R HESS) PUMP  
13046070 A NEDROW #1 PUMP  
13046072 A NEDROW #2 PUMP  
13046075 J NEDROW PUMP  
13046080 E & S CLARK PUMP  
13046083 V & D KIRKHAM PUMP  
13046084 D NEDROW PUMP  
13046086 D FRANSEN PUMP  
13046090 L BRATT PUMP  
13046095 L LOOSLI #1 PUMP  
13046310 DEWEY CANAL  
13046315 J SEELEY PUMP  
13047305 YELLOWSTONE CANAL  
13047475 MARYSVILLE CANAL  
13047510 E GRIFFEL PUMP  
13047515 F & L GRIFFEL PUMP  
13047565 R BAUM PUMP  
13047570 G /6 CORP PUMP (GRIFFEL)  
13047575 FARMERS OWN CANAL  
13047605 W SCAPE PUMP (REINKE)

TO:BOISE

SEP-10-'92 THU 13:37 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P10

13047610 E HESSMAN #1 PUMP  
13047616 R STURM PUMP  
13047625 M GRIFFEL PUMP  
13047635 C LOOSLI #1 PUMP  
13047681 CONANT CREEK CANAL  
13047710 K NYBORG PUMP  
13047900 BOOM CREEK CANAL  
13048025 SQUIRREL CREEK CANAL  
13048050 ORME CANAL  
13048080 D HARSHBARGER PUMP  
13048265 D ZUNDELL PUMP  
13048275 L LOOSLI #2 PUMP  
13048280 C & L LOOSLI PUMP  
13048290 C LOOSLI #2 PUMP  
13048350 J HILL PUMP  
13048430 D REYNOLDS PUMP  
13048440 C LOOSLI #3 PUMP  
13048470 T POTTER PUMP  
13048475 ENTERPRISE CANAL  
13048480 L MARTINDALE #2 PUMP  
13048485 R D MILLER PUMP  
13048551 L MARTINDALE #1 PUMP  
13048560 FALL RIVER CANAL  
13048705 CHESTER CANAL  
13049008 MCBEE CANAL  
13049010 SILKEY CANAL  
13049015 CURR CANAL  
13049490 L LOOSLI #3 PUMP  
13049495 G BLANCHARD PUMP  
13049550 LAST CHANCE CANAL  
13049560 CROSSCUT CANAL  
13049705 FARMERS FRIEND CANAL  
13049710 TWIN GROVES CANAL  
13049725 ST ANTHONY UNION CANAL  
13049805 SALEM UNION CANAL  
13050525 EGIN CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13050535 INDEPENDENT CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13053951 TETON PIPELINE #4 PUMP ✓  
13053971 J RICKS PUMP  
13054031 TETON PIPELINE #3 PUMP ✓  
13054041 TETON PIPELINE #2 PUMP ✓  
13054043 TETON PIPELINE #1 PUMP ✓  
13054046 K J ARNOLD #1 PUMP  
13054111 R & J BROWN PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13054391 PARKINSON & KERBS PUMP  
13054397 K J ARNOLD #2 PUMP  
13054420 B PARKINSON PUMP  
13054515 CANYON CREEK CANAL ✓  
13054577 G CRAPO PUMP  
13054590 R STEVENS PUMP ✓  
13054705 V SCHWENDIMAN PUMP  
13054708 C M OLSEN PUMP  
13054762 R R RICKS PUMP ✓  
13054772 R. BRENT RICKS ✓  
13054801 CANYON CREEK LATERAL PUMP ✓  
13054850 SIDDOWNAY SHEEP PUMP

TO:BOISE

SEP-10-'92 THU 13:37 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P11

13054940 H BISCHOFF PUMP  
Q 13055030 WILFORD CANAL ✓  
13055040 TETON IRRIGATION CANAL ✓  
13055042 SIDOWAY CANAL ✓  
13055050 PIONEER CANAL  
13055060 STEWART CANAL 55041  
13055193 N BIRCH PUMP  
13055195 B LEAVITT PUMP  
K 13055205 PINCOCK-BYINGTON CANAL  
K 13055206 HOLLIST, BOYD  
K 13055210 TETON ISLAND FEEDER CANAL ✓  
K 13055245 NORTH SALEM CANAL ✓  
K 13055263 J HARRIS PUMP  
M 13055275 ROXANA CANAL ✓  
K 13055280 ISLAND WARD CANAL ✓  
K 13055295 SAUREY CANAL  
Q 13055306 MCCORMICK-ROWE CANAL  
13055311 PINCOCK-GARNER CANAL  
13055313 E GARDNER PUMP ✓  
13055314 BIGLER SLOUGH CANAL  
13055315 WOODMANSEE-JOHNSON CANAL  
13055319 R O WILDING PUMP  
13055323 CITY OF REXBURG CANAL ✓  
13055325 T BRUNSON PUMP  
13055327 J S WRIGHT PUMP  
13055331 R & K WALKER PUMP  
O 13055334 REXBURG IRRIGATION CANAL ✓  
13057012 HARTERT L.A.  
13057013 A GUNDERSON PUMP  
13057014 R & C MILLER PUMP  
13057015 R MILLER PUMP  
13057018 BOYLE & S #1 PUMP  
13057021 BOYLE & SONS #2 PUMP  
13057025 BUTTE & MARKET LAKE CANAL ✓  
13057030 BEAR TRAP CANAL ✓  
13057038 O ELLSWORTH PUMP  
13057046 H TOMCHAK PUMP  
13057097 N FULLMER PUMP  
13057105 D BOYCE PUMP  
13057106 B TOMCHAK #1 PUMP  
13057107 C BOYCE PUMP  
13057114 STIENKE-MURDOCK PUMP  
13057115 L CARLSON NORTH PUMP  
13057116 B TOMCHAK #2 PUMP  
13057117 L CARLSON SOUTH PUMP  
13057118 L BROWN PUMP  
13057119 L HANSEN WEST  
13057120 ARRINGTON NORTH PUMP  
13057121 G OFFUTT PUMP (MARTIN)  
13057122 ARRINGTON SOUTH PUMP  
13057123 BEAR ISLAND N PUMP (ANDRUS)  
13057125 OSGOOD CANAL ✓  
13057126 CLEMENTS CANAL  
13057130 KENNEDY CANAL ✓  
13057135 GREAT WESTERN CANAL ✓  
13057139 BEAR ISLAND E PUMP ✓  
13057140 L HANSEN EAST PUMP  
13057141 J GAY PUMP  
13057142 L HANSEN MACKAY PUMP  
13057143 YORGENSON PUMP

TO:BOISE

SEP-10-'92 THU 13:38 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P12

13057145 IDAHO CANAL ✓  
13057154 W WARD PUMP  
13057171 A BUTIKOFER PUMP  
13057250 PORTER CANAL ✓  
13057938 LOERTSCHER CANAL  
13058090 B JOHNSON PUMP  
13058105 LOVELL PUMP  
13058125 FERGUSON CANAL ✓  
13058145 LOVELL # 2 PUMP  
13058165 WALLACE REED PUMP  
13058210 SARGENT & SUMMERS CANAL ✓  
13058230 DURTSCHI PUMPS  
13058250 REED PUMPS  
13058270 SPERRY PUMP  
13058290 ORVAL AVERY CANAL ✓  
✓13058310 ROY AVERY CANAL  
13058330 STUCKI PUMPS  
13058350 ORVAL AVERY PUMP  
✓13058370 ROY COOPER SAND CR CANAL  
✓13058380 ROY COOPER WILLOW CREEK CANAL  
13058510 SAND CREEK ABV WILLOW CREEK DIVERSION  
✓13058512 BEAN CANAL  
✓13058514 W & O COOPER CANAL  
13058515 SAND CREEK DELIVERY TO IDAHO CANAL COMPANY ✓  
13058530 WILLOW CREEK BELOW FLOOD CHANNEL  
13058532 DEMICK CANAL  
13059486 MONROC LARGE  
13059490 IF MONROC #3 PUMP  
13059505 WOODVILLE CANAL  
13059525 SNAKE RIVER VALLEY CANAL  
13060005 A M CANNON PUMP  
13060055 P HILL PUMP  
✓13060500 RESERVATION CANAL ✓  
13061430 BLACKFOOT CANAL  
13061520 NEW LAVA SIDE CANAL  
13061521 CHET ADAMS PROPANE  
13061522 R C ADAMS PUMP  
13061525 PEOPLES CANAL  
13061610 ABERDEEN CANAL ✓  
13061650 CORBETT CANAL  
13061670 NIELSON-HANSEN CANAL  
13061677 R LAMBERT PUMP  
13061685 K CHRISTENSEN PUMP  
13061705 RIVERSIDE CANAL  
✓13061995 DANSKIN CANAL  
13062050 TREGO CANAL  
13062447 HOPKINS PACKING PUMP  
13062502 BLACKFOOT MONROC  
13062503 WEARYRICK CANAL  
13062505 J WADSWORTH PUMP  
13062506 WATSON CANAL  
✓13062507 PARSONS CANAL  
13063507 SHRADER, LARK  
13075900 FT HALL MICHAUD CANAL  
13076400 FALLS IRRIGATION PUMP  
13077652 OSBORN PUMP  
13077755 CALL FARMS PUMP (BARKDULL)  
13077775 M KUWANA PUMP  
13080000 MINIDOKA NORTH SIDE CANAL  
13080500 MINIDOKA SOUTH SIDE CANAL

TO:BOISE

SEP-10-92 THU 13:39 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P13

13047625 M GRIFFEL PUMP  
13047635 C LOOSLI #1 PUMP  
13047681 CONANT CREEK CANAL  
13047710 K NYBORG PUMP  
13047900 BOOM CREEK CANAL  
13048025 SQUIRREL CREEK CANAL  
13048050 ORME CANAL  
13048080 D HARSHBARGER PUMP  
13048265 D ZUNDELL PUMP  
13048275 L LOOSLI #2 PUMP  
13048280 C & L LOOSLI PUMP  
13048290 C LOOSLI #2 PUMP  
13048350 J HILL PUMP  
13048430 D REYNOLDS PUMP  
13048440 C LOOSLI #3 PUMP  
13048470 T POTTER PUMP  
13048475 ENTERPRISE CANAL  
13048480 L MARTINDALE #2 PUMP  
13048485 R D MILLER PUMP  
13048551 L MARTINDALE #1 PUMP  
13048560 FALL RIVER CANAL  
13048705 CHESTER CANAL  
13049008 MCBEE CANAL  
13049010 SILKEY CANAL  
13049015 CURR CANAL  
13049490 L LOOSLI #3 PUMP  
13049495 G BLANCHARD PUMP  
13049550 LAST CHANCE CANAL  
13049560 CROSSCUT CANAL  
13049705 FARMERS FRIEND CANAL  
13049710 TWIN GROVES CANAL  
13049725 ST ANTHONY UNION CANAL  
13049805 SALEM UNION CANAL  
13050525 EGIN CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13050535 INDEPENDENT CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13053951 TETON PIPELINE #4 PUMP ✓  
13053971 J RICKS PUMP  
13054031 TETON PIPELINE #3 PUMP ✓  
13054041 TETON PIPELINE #2 PUMP ✓  
13054043 TETON PIPELINE #1 PUMP ✓  
13054046 K J ARNOLD #1 PUMP  
13054111 R & J BROWN PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13054391 PARKINSON & KERBS PUMP  
13054397 K J ARNOLD #2 PUMP  
13054420 B PARKINSON PUMP  
13054515 CANYON CREEK CANAL ✓  
13054577 G CRAPO PUMP  
13054590 R STEVENS PUMP ✓  
13054705 V SCHWENDIMAN PUMP  
13054708 C M OLSEN PUMP  
13054762 R R RICKS PUMP ✓  
13054772 R. BRENT RICKS ✓  
13054801 CANYON CREEK LATERAL PUMP ✓  
13054850 SIDDOWAY SHEEP PUMP

TO:BOISE

SEP-10-'92 THU 13:39 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P14

13038047 COVINGTON BROS EXCHANGE WELL  
13048549 L LOOSLI EXCHANGE WELL  
13050570 USBR #2 EXCHANGE WELL  
13051281 G NELSON EXCHANGE WELL  
13054048 STEVECO CANYON EXCHANGE WELL  
13055041 CANYON CREEK LATERAL EXCHANGE WELL ✓ 0  
13055043 B PARKINSON EXCHANGE WELL 0  
13055044 V SCHWENDIMAN EXCHANGE WELL 0  
13055045 M PARKINSON EXCHANGE WELL 0  
13055049 M & M RAMMEL EXCHANGE WELL  
13055198 D BOTT EXCHANGE WELL  
13055199 C HOOPES EXCHANGE WELL  
13055304 USBR #5 EXCHANGE WELL  
13055316 HOOPES BROTHERS EXCHANGE WELL 0  
13055317 R RICKS EXHCANGE WELL ✓ 0  
13055318 EHCO RANCH EXCHANGE WELL 0  
13055324 D, L, & R ARD EXCHANGE WELL 0  
13055326 HINK INC. EXCHANGE WELL  
13055329 R & J BROWN EXCHANGE WELL ✓ 0  
13055343 USBR #3 EXCHANGE WELL  
13056505 USBR #1 EXCHANGE WELL

*EXCHANGE PUMPS*

13085500 A & B IRRIGATION DISTRICT PUMPS  
 13057171 A BUTIKOFER PUMP  
 13057013 A GUNDERSON PUMP  
 13060005 A M CANNON PUMP  
 13046070 A NEDROW #1 PUMP  
 13046072 A NEDROW #2 PUMP  
 13061610 ABERDEEN CANAL  
 13037505 ANDERSON CANAL  
 13038398 ARNSBERGER PUMP (D. BLAKELY)  
 13057120 ARRINGTON NORTH PUMP  
 13057122 ARRINGTON SOUTH PUMP  
 13038393 B COVINGTON PUMP  
 13037490 B FOSTER PUMP  
 13058090 B JOHNSON PUMP  
 13055195 B LEAVITT PUMP  
 13054420 B PARKINSON PUMP  
 13057106 B TOMCHAK #1 PUMP  
 13057116 B TOMCHAK #2 PUMP  
 13038435 BANNOCK JIM SLOUGH  
 13058512 BEAN CANAL  
 13057139 BEAR ISLAND E PUMP  
 13057123 BEAR ISLAND N PUMP (ANDRUS)  
 13057030 BEAR TRAP CANAL  
 13055314 BIGLER SLOUGH CANAL  
 13061430 BLACKFOOT CANAL  
 13062502 BLACKFOOT MONROC  
 13047900 BOOM CREEK CANAL  
 13038095 BOOMER CANAL  
 13057018 BOYLE & S #1 PUMP  
 13057021 BOYLE & SONS #2 PUMP  
 13038360 BRAMWELL CANAL  
 13038110 BURGESS CANAL  
 13038080 BUTLER ISL #2 CANAL  
 13038025 BUTLER ISLAND CANAL  
 13057025 BUTTE & MARKET LAKE CANAL  
 13048280 C & L LOOSLI PUMP  
 13057107 C BOYCE PUMP  
 13037997 C HICKMAN PUMP  
 13047635 C LOOSLI #1 PUMP  
 13048290 C LOOSLI #2 PUMP  
 13048440 C LOOSLI #3 PUMP  
 13054708 C M OLSEN PUMP  
 13077755 CALL FARMS PUMP (BARKDULL)  
 13054515 CANYON CREEK CANAL  
 13054801 CANYON CREEK LATERAL PUMP  
 13038065 CHENEY CANAL  
 13048705 CHESTER CANAL  
 13061521 CHET ADAMS PROPANE  
 13084650 CITY OF BURLEY PUMP  
 13055323 CITY OF REXBURG CANAL  
 13038115 CLARK & EDWARDS CANAL  
 13057126 CLEMENTS CANAL  
 13047681 CONANT CREEK CANAL  
 13050545 CONSOLIDATED FARMERS CANAL  
 13061650 CORBETT CANAL  
 13038145 CROFT DITCH  
 13049560 CROSSCUT CANAL  
 13049015 CURR CANAL  
 13057105 D BOYCE PUMP  
 13046086 D FRANSEN PUMP

1800 9:00  
 SNK DIV. TTL

↓  
 E& SORT/KEY=(POSITION=10, SIZE=42)

→ SNK DIV. TTL → SNK DIV. SORT. TTL

↓  
 DIV. SORT. TTL

Sorts done in SNK DIV. TTL  
 (which is sorted by number)  
 and and puts into new file  
 (DIV. SORT. TTL).

TO:BOISE

SEP-10-'92 THU 13:41 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P16

- 13048080 D HARSHBARGER PUMP
- 13045829 D LARSON PUMP
- 13046084 D NEDROW PUMP
- 13048430 D REYNOLDS PUMP
- 13045849 D SEELEY PUMP
- 13038384 D STOKER PUMP (HUNTER)
- 13045710 D WOODRUFF PUMP
- 13048265 D ZUNDELL PUMP
- 13061995 DANSKIN CANAL
- 13058532 DEMICK CANAL
- 13046310 DEWEY CANAL
- 13038205 DILTS CANAL
- 13058230 DURTSCHI PUMPS
- 13046080 E & S CLARK PUMP
- 13045721 E G HOWELL #1 PUMP
- 13045724 E G HOWELL #2 PUMP
- 13045727 E G HOWELL #3 PUMP
- 13055313 E GARDNER PUMP
- 13047510 E GRIFFEL PUMP
- 13047610 E HESSMAN #1 PUMP
- 13046030 E LENZ (R HESS) PUMP
- 13037975 EAGLE ROCK CANAL
- 13038150 EAST LABELLE CANAL
- 13050525 EGIN CANAL
- 13038362 ELLIS CANAL
- 13037985 ENTERPRISE CANAL
- 13048475 ENTERPRISE CANAL
- 13047515 F & L GRIFFEL PUMP
- 13045705 F HOWELL PUMP
- 13048560 FALL RIVER CANAL
- 13076400 FALLS IRRIGATION PUMP
- 13037980 FARMERS FRIEND CANAL
- 13049705 FARMERS FRIEND CANAL
- 13047575 FARMERS OWN CANAL
- 13058125 FERGUSON CANAL
- 13038383 FRESH PAK PUMP
- 13075900 FT HALL MICHAUD CANAL
- 13047570 G /6 CORP PUMP (GRIFFEL)
- 13049495 G BLANCHARD PUMP
- 13054577 G CRAPO PUMP
- 13045655 G MAROTZ PUMP
- 13045940 G NEDROW PUMP
- 13057121 G OFFUTT PUMP (MARTIN)
- 13086130 GLENDALE FARMS
- 13057135 GREAT WESTERN CANAL
- 13054940 H BISCHOFF PUMP
- 13045960 H STEINMAN #1 PUMP
- 13046025 H STEINMAN #2 PUMP
- 13057046 H TOMCHAK PUMP
- 13038055 HARRISON CANAL
- 13057012 HARTERT L.A.
- 13038436 HILL PETTINGER CANAL
- 13055206 HOLLIST, BOYD
- 13062447 HOPKINS PACKING PUMP
- 13037305 I SPAULDING PUMP
- 13057145 IDAHO CANAL
- 13059490 IF MONROC #3 PUMP
- 13050535 INDEPENDENT CANAL
- 13038210 ISLAND CANAL
- 13055280 ISLAND WARD CANAL

PAID ZUNDELL c/o ZUNDELL BROS INC.  
RT 2 BOX 18  
ASHTON

158 S.P.  
7000GAM 40ARS  
June 9-10

TO:BOISE

SEP-10-'92 THU 13:41 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P17

13033643 J FLEMING PUMP  
13057141 J GAY PUMP  
13055263 J HARRIS PUMP  
13048350 J HILL PUMP  
13046020 J MCCULLOCH PUMP  
13038386 J N ERICKSON PUMP  
13046075 J NEDROW PUMP  
13053971 J RICKS PUMP  
13055327 J S WRIGHT PUMP  
13046315 J SEELEY PUMP  
13038371 J T JONES PUMP  
13038352 J W JONES #1 PUMP  
13062505 J WADSWORTH PUMP  
13034460 JACOBSON, LLOYD  
13038331 JEFF HILLS ELEC PUMP  
13038332 JEFF HILLS ENG PUMP  
13061685 K CHRISTENSEN PUMP  
13054046 K J ARNOLD #1 PUMP  
13054397 K J ARNOLD #2 PUMP  
13047710 K NYBORG PUMP  
13057130 KENNEDY CANAL  
13038098 KITE & NORD CANAL  
13046090 L BRATT PUMP  
13057118 L BROWN PUMP  
13057115 L CARLSON NORTH PUMP  
13057117 L CARLSON SOUTH PUMP  
13045675 L CHERRY PUMP  
13057140 L HANSEN EAST PUMP  
13057142 L HANSEN MACKAY PUMP  
13057119 L HANSEN WEST  
13046095 L LOOSLI #1 PUMP  
13048275 L LOOSLI #2 PUMP  
13049490 L LOOSLI #3 PUMP  
13048551 L MARTINDALE #1 PUMP  
13048480 L MARTINDALE #2 PUMP  
13049550 LAST CHANCE CANAL  
13038426 LENROOT CANAL  
13057938 LOERTSCHER CANAL  
13058145 LOVELL # 2 PUMP  
13058105 LOVELL PUMP  
13038090 LOWDER SLOUGH CANAL  
13038422 LYLE ROBISON  
13037515 M & M CATTLE CO. (N) PUMP  
13037510 M & M CATTLE CO. (S) PUMP  
13038417 M CHENEY PUMP  
13047625 M GRIFFEL PUMP  
13038113 M H HILL PUMP  
13077775 M KUWANA PUMP  
13037855 M NEWBY #1 PUMP  
13037860 M NEWBY #2 PUMP  
13037880 M NEWBY #3 PUMP  
13047475 MARYSVILLE CANAL  
13038388 MATTSON-CRAIG CANAL  
13049008 MCBEE CANAL  
13055306 MCCORNICK-ROWE CANAL  
13086000 MILNER LOW LIFT PUMP  
13080000 MINIDOKA NORTH SIDE CANAL  
13080500 MINIDOKA SOUTH SIDE CANAL  
13059486 MONROC LARGE  
13032510 MRS. PAUL BYRD

TO:BOISE

SEP-10-'92 THU 13:42 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P18

13055193 N BIRCH PUMP  
13057097 N FULLMER PUMP  
13038373 N TAYLOR PUMP  
13038387 NELSON CANAL  
13038437 NELSON COREY CANAL  
13061520 NEW LAVA SIDE CANAL  
13061670 NIELSON-HANSEN CANAL  
13038315 NORTH RIGBY CANAL  
13055245 NORTH SALEM CANAL  
13086510 NORTHSIDE 'A' LATERAL CANAL  
13086520 NORTHSIDE CROSSCUT GOODING CANAL  
13087000 NORTHSIDE TWIN FALLS CANAL  
13057038 O ELLSWORTH PUMP  
13048050 ORME CANAL  
13058290 ORVAL AVERY CANAL  
13058350 ORVAL AVERY PUMP  
13077652 OSBORN PUMP  
13057125 OSGOOD CANAL  
13060055 P HILL PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13085800 PA LATERAL PUMP  
13054391 PARKINSON & KERBS PUMP  
13038305 PARKS & LEWISVILLE CANAL  
13062507 PARSONS CANAL  
13061525 PEOPLES CANAL  
13055205 PINCOCK-BYINGTON CANAL  
13055311 PINCOCK-GARNER CANAL  
13055050 PIONEER CANAL  
13057250 PORTER CANAL  
13046015 R & C BAUM PUMP  
13057014 R & C MILLER PUMP  
13054111 R & J BROWN PUMP  
13055331 R & K WALKER PUMP  
13047565 R BAUM PUMP  
13084725 R BLEI PUMP  
13038428 R BURNS PUMP  
13061522 R C ADAMS PUMP  
13045950 R D BAKER #1 PUMP  
13045823 R D BAKER #2 PUMP  
13048485 R D MILLER PUMP  
13038410 R GROVER PUMP  
13033670 R JACOBSON PUMP (BEASLEY)  
13061677 R LAMBERT PUMP  
13045780 R LEE PUMP  
13057015 R MILLER PUMP  
13055319 R O WILDING PUMP  
13054762 R R RICKS PUMP  
13045807 R RITCHEY PUMP  
13038438 R ROTH PUMP  
13054590 R STEVENS PUMP  
13045811 R STEWART #1 PUMP  
13045810 R STEWART #2 PUMP  
13047616 R STURM PUMP  
13054772 R. BRENT RICKS  
13058250 REED PUMPS  
13038431 REID CANAL  
13060500 RESERVATION CANAL  
13086530 RESERVOIR DISTRICT #2 CANAL  
13055334 REXBURG IRRIGATION CANAL

TO:BOISE

SEP-10-'92 THU 13:42 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P19

13038180 RIGBY CANAL  
13038179 RIGBY LATERAL  
13037475 RILEY CANAL  
13061705 RIVERSIDE CANAL  
13038030 ROSS AND RAND CANAL  
13055275 ROXANA CANAL  
13058310 ROY AVERY CANAL  
13058370 ROY COOPER SAND CR CANAL  
13058380 ROY COOPER WILLOW CREEK CANAL  
13038085 RUDY CANAL  
13049805 SALEM UNION CANAL  
13058510 SAND CREEK ABV WILLOW CREEK DIVERSION  
13058515 SAND CREEK DELIVERY TO IDAHO CANAL COMPANY  
13058210 SARGENT & SUMMERS CANAL  
13055295 SAUREY CANAL  
13063507 SHRADER, LARK  
13055042 SIDDOWAY CANAL  
13054850 SIDDOWAY SHEEP PUMP  
13049010 SILKEY CANAL  
13085275 SIMPLOT #1 PUMP  
13085300 SIMPLOT #2 PUMP  
13059525 SNAKE RIVER VALLEY CANAL  
13058270 SPERRY PUMP  
13048025 SQUIRREL CREEK CANAL  
13049725 ST ANTHONY UNION CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13038050 STEELE CANAL  
13055060 STEWART CANAL  
13057114 STIENKE-MURDOCK PUMP  
13058330 STUCKI PUMPS  
13038392 SUNNYDELL CANAL  
13055325 T BRUNSON PUMP  
13045755 T HOLCOMB PUMP  
13033646 T LOTT #1 PUMP  
13033690 T LOTT #2 PUMP  
13038405 T PARKINSON PUMP  
13048470 T POTTER PUMP  
13055040 TETON IRRIGATION CANAL  
13055210 TETON ISLAND FEEDER CANAL  
~~13054043 TETON PIPELINE #1 PUMP~~  
13054042 TETON PIPELINE #2 PUMP *CLEMENSVILLE*  
13054031 TETON PIPELINE #3 PUMP *BOELKE*  
13053951 TETON PIPELINE #4 PUMP *SOUTH PIPE*  
13038434 TEXAS & LIBERTY CANAL  
13038416 THERON CHENEY  
13062050 TREGO CANAL  
13087500 TWIN FALLS SOUTHSIDE CANAL  
13049710 TWIN GROVES CANAL  
13046083 V & D KIRKHAM PUMP  
13085400 V HOBSON PUMP  
13054705 V SCHWENDIMAN PUMP  
13058514 W & O COOPER CANAL  
13038382 W DABELL PUMP (HUNTER)  
13047605 W SCAPE PUMP (REINKE)  
13057154 W WARD PUMP  
13034480 W XXXXXX PUMP  
13058165 WALLACE REED PUMP  
13062506 WATSON CANAL  
13062503 WEARYRICK CANAL  
13033650 WEEKS, JAY

TO:BOISE

SEP-10-'92 THU 13:43 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P20

13038225 WEST LABELLE & LONG ISLAND CANAL  
13038340 WHITE DITCH  
13038201 WHITE ISLAND PUMP  
13055030 WILFORD CANAL  
13058530 WILLOW CREEK BELOW FLOOD CHANNEL  
13055315 WOODMANSEE-JOHNSON CANAL  
13059505 WOODVILLE CANAL  
13047305 YELLOWSTONE CANAL  
13057143 YORGENSON PUMP  
13045805 Z J EGBERT #1 PUMP  
13045813 Z J EGBERT #2 PUMP  
13045860 Z J EGBERT #3 PUMP  
13045880 Z J EGBERT #4 PUMP  
13045930 Z J EGBERT #5 PUMP

**TO:BOISE**

SEP-10-'92 THU 13:43 ID:IDWR EASTERN REGION TEL NO:(208) 525-7177

#027 P21

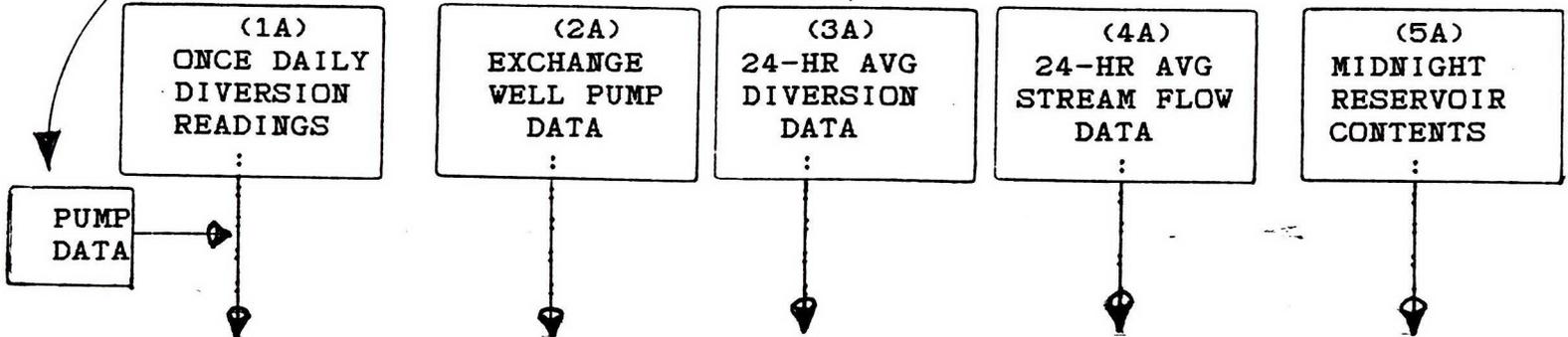
13084650 CITY OF BURLEY PUMP  
13084725 R BLEI PUMP  
13085275 SIMPLOT #1 PUMP  
13085300 SIMPLOT #2 PUMP  
13085400 V HOBSON PUMP  
13085500 A & B IRRIGATION DISTRICT PUMPS  
13085800 PA LATERAL PUMP  
13086000 MILNER LOW LIFT PUMP  
13086130 GLENDALE FARMS  
13086510 NORTHSIDE 'A' LATERAL CANAL  
13086520 NORTHSIDE CROSSCUT GOODING CANAL  
13086530 RESERVOIR DISTRICT #2 CANAL  
13087000 NORTHSIDE TWIN FALLS CANAL  
13087500 TWIN FALLS SOUTHSIDE CANAL

WATER DISTRICT 1 DATA CORRECTION PROCESS

RANDOM SAMPLE DATA

PRELIMINARY DATA  
(STEP A)

( H Y D R O M E T   D A T A )



(STEP B)

D A T A   C O R R E C T I O N

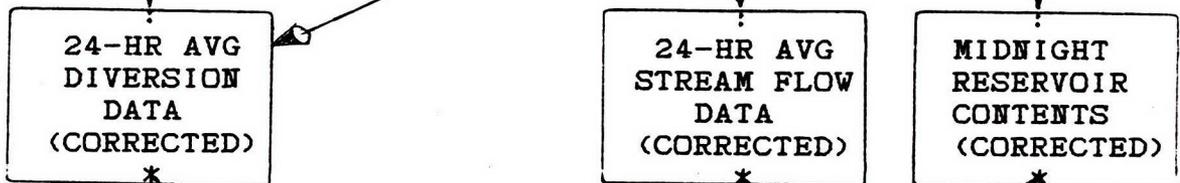
(1B)

(2B)

(3B)

(4B)

(5B)



(STEP C)  
REACH GAINS PROGRAM

(STEP D)

CHECK REACH GAINS -- REVIEW AND CORRECT FLOW, RESERVOIR, DIVERSION DATA

IF DATA CORRECTED GO TO (STEP C)  
GO TO (STEP E)

(STEP E)

ACCOUNTING PARAMETERS

WATER RIGHTS, STORAGE ALLOCATIONS, POINTS OF DIVERSION

(STEP F)

M E M O R A N D U M

DATE: SEPTEMBER 4, 1992

TO: NORM

FROM: RON *RDC*

RE: WATER DISTRICT 1 DATA CORRECTION & FINAL ACCOUNTING RUN

In previous memos I have attempted to identify the work that needs to be accomplished before we can make a final accounting run. In these memos I indicated that the state office hydrology staff could provide assistance in accomplishing some of the steps necessary before we can make a final accounting run for 1992. I identified some things that hydrology has done before and could assist us with again. Apparently hydrology is not involved at this point. You, however are still asking me to tell you how the state office can help get the final accounting done. This memo has been prepared in an effort to identify, in some detail, the data review process and associated steps we go through each year prior to making the final accounting run. I have prepared a schematic that illustrates the steps that must be taken to assure that the data used are correct. In this memo I will be referring to the diagram. The diagram indicates a six (6) step process. The memo attempts to identify groups of data at various stages of review and will refer to the Step (eg. Step A) and the Element (eg. (3A)) in discussing the details of data collection, review and correction process.

PRELIMINARY DATA  
(STEP A) to (STEP B)

The Water District 1 accounting process must have reliable daily flow, reservoir, diversion and evaporation data to compute the reach gains that are required before the daily water right cuts can be determined. The tables attached to this memo provide a listing of the sites for which daily data are required in order to run the accounting program. A variety of processes have been employed to acquire these data each day. The data for diversions that are not on the HYDROMET system are collected manually by field personnel and hand entered each day. Those gaging sites that can be "sampled" once daily with some assurance that the observed data point is representative of the day's diversion are hand entered daily. Pump diversions are unpredictable and are generally not included in the preliminary accounting runs. However, these data are collected periodically through out the summer by field personnel. In addition we ask each pump owner to keep a record of his daily diversions each month and mail

them in on a stamped and addressed form that is mailed to each pumper every month. At the end of the year we have a collection of field data which include the crop being grown, acreage served, horsepower of the pump, description of the irrigation system, flow meter readings, and power meter readings. At the end of the season all of the available data for each pump are reviewed and a pumping schedule and appropriate diversion rates for each pump are determined and entered into the VAX. This process is time consuming and may be more art than science. The computation of pump data and the entry of these data is something that can be delegated. **I estimate three man-weeks of effort will go into the computation of pump data.** In addition, we have identified over 100 pumps between Minidoka and Milner that will need to be included in the 1992 accounting. Since the majority of these are small systems (lawn & garden) we anticipate computing combined daily diversions and entering them as one or two combined systems. This is something that Bob Sutter will need to be involved in and do the appropriate programming for. **I estimate that this year these additional pumps will require another eight man days.**

Similarly, there are several exchange wells that discharge water into the river. These are similar to pump diversions but because they are more predictable they are normally included in the daily accounting program. The primary source of these data is the records of the water district field personnel. Corrections made at the end of the irrigation year may be based upon power meter data, hydrographer notes, measurements made during the year and other information the water district has acquired through out the year. The data review and correction process for exchange well pumpage is normally less complex and time consuming than is required for other types of data. **I estimate the review of exchange well data and the associated data entry can be accomplished in two (2) man days.** The listing of the exchange pumps in the system are included in the attachments.

While most of the water diverted each day is accounted for through data collected by the HYDROMET system, the majority of the daily diversion data are acquired by simply having someone read the gage. This single-point "sample" normally is not the best indicator of the average daily diversion for a canal. Currently we have eighteen (18) canals that have continuous strip-chart recorders and are not on the HYDROMET system. At the end of the season the data from the charts is "digitized" and replaces the original once-daily readings. We have found that we can accomplish this task by hand as accurately and quickly as it could be done using a digitizer. We believe these data could be prepared by a clerical person after a short training session. **This process can be expected to take five (5) man days.** However, we would want the data entry done by someone with experience simply to assure the best quality control in this process. **I estimate the data entry will not require more than one man-day.**

The diversion data that are acquired through the

HYDROMET system also must be reviewed. If the canal is also equipped with a chart recorder these data can be used to fill in missing data that might have been lost because of a malfunction of the data collection platform (DCP). For sites that are not equipped with a strip chart recorder we rely upon gage reader and hydrographer field notes to reconstruct the lost record. In addition the HYDROMET gage heights must be compared with the once-daily gage height readings of our field personnel. It is not uncommon to find that the HYDROMET system will continue to transmit a non-zero gage height after a canal has been shut of. The gage heights and flows for these periods must be corrected. This task requires a printout of the daily gage heights for every location and a corresponding listing of the once-daily readings. While this process is tedious it is not complicated. However, it does require someone to think about the data and to identify unusual patterns in the data. **I estimate this process will require one man-week to accomplish.**

The majority of the canals within Water District 1 do not have measuring devices. Consequently this requires periodic current meter measurements to assure that accurate stage-discharge relationships are maintained. Because the rating tends to "shift" between measurements we must enter all of the correct shifts and create a smooth transition in the shift adjustments between measurements. The record of the measurement date and the shift must be entered into the data base and the previously entered shifts deleted. In addition the first measured shift must be entered for the first day the canal began diverting, and the last measured shift must be entered on the last day the canal diverted. There are some canals that require special procedures because of irrigation checks, split diversions, new rating tables etc. These canals include: The Bramwell, Ellis, White, Milner-Gooding, Idaho from Sand Creek, Demick, Roy Cooper (Sand Creek), Great Western, North Rigby, Dilts, and Palisades Canal. While most of the shift data could be prepared by someone else, the water district staff will need to make the corrections for these canals. **I anticipate the review and entry of shift data to take eight man-days to accomplish.**

Once all of the shifts have been computed and entered for those canals that do not have measuring devices the INTERPOLATION PROGRAM can be run. John Lindgren has been involved in portions of this process in the past. Through this program all of the canal discharges are recalculated using a daily shift adjustment that represents the linear average between the entered shifts. Diversion rates thus computed replace the preliminary data. This is included in the data set identified by (Step B), Element (1B). However, additional corrections may still be required before these data are considered to be final. After the interpolation program is run, the diversion data must be rechecked for errors. Frequently we will find that the computed stage results in an erroneous flow because the rating table is not accurate at low flows or gage heights. The interpolated data must again be

checked against the daily discharge readings made by our gage readers. **This second review will probably require another two man-days.**

Under Step A, elements (4A) and (5A) represent USGS HYDROMET data. The USGS has agreed to provide us essentially final data on a quarterly basis. These data must be transferred from the USGS computer system to the department VAX. The data through September 30 are usually available in early November. Once the quarterly data are available, the USGS provides us with hard copies. While these data have been reviewed by GS personnel they are still classified as provisional and subject to change. The process of transferring them requires someone on this end to get it done. **This process has previously required about one man-day to accomplish.** However, before these data can be merged with the WD 1 data base they must be reviewed. The reservoir data in particular require a substantial amount of work. The data provided to us is in the format the USGS uses for publishing its data. In the case of Palisades they include 201,000 acre-feet of dead storage which must be subtracted before we can use their data. Similarly, the numbers representing reservoir contents that come from the USGS are only accurate to four (4) significant digits. Since the daily change in storage enters into our computations of the natural flow available each day, we must have greater precision in reservoir data than the electronic data provided by the USGS. (This has long been an area of irritation. We have discussed this problem with the GS on several occasions in the past but change comes hard for them. We believe that the water district has contracted with the USGS for the data we need to allocate and distribute water and if that requires changes in how they do things that is implicit in the contract.) In the past the USGS office in Idaho Falls has sent us daily data for Henry's Lake and Ririe Reservoir which they have estimated to the nearest ten (10) acre-feet. This, of course requires that all of these data be hand entered. The contents of American Falls and Palisades reservoirs have to be corrected to the nearest one-hundred acre-feet (five significant figures instead of four) when their respective contents are over 1,000,000 acre-feet. Since hydrology is intimately familiar with the reservoir data requirements in the Water District 1 accounting program, they could be very helpful in getting the appropriate reservoir data reviewed and transferred or entered into the Water District 1 data base. **We normally expect this effort to require about five man-days to complete.**

(STEP C)

After the data from Step A have been entered and corrected and the canal shifts interpolated the next process in checking the data is to run the REACH GAINS PROGRAM. Bob Sutter or Alan Robertson would be in the best position to run this program and identify problem data. The time period between November 1 to March 31, 1992 could be run and reviewed

even before the diversion data have been entered. It is relatively easy to run the reach gains program but it might require several days to review and evaluate the data for errors. When errors are found in the USGS data (and we have always found data errors whenever the REACH GAINS PROGRAM has been run and the data reviewed) the problem data are sent back to the USGS for correction. Since the river and reservoir data are large in comparison to the diversions, a small change in USGS data can have a substantial effect on the distribution of natural flow and storage. Unfortunately it is not likely that we will receive corrected USGS data in less than three weeks after the problem has been identified.

(STEP D) TO (STEP F)

After correcting the data, the REACH GAINS PROGRAM needs to be re-run and the daily gains again reviewed for errors. Once the gains appear to be satisfactory we are ready to start running the final accounting (Step F). However, prior to running the accounting we must check to assure that the water rights portion of the accounting correctly reflects all water rights and the changes that have been approved since the last year. The storage allocations also need to be entered for all diversions, including pumps. **This process can normally be completed in one to two man-days.** This year there will be some additional changes that will have to be made to the accounting parameters before the months of August and September can be run. Arrangements facilitated under House Bill 4 will have to be included. **These are changes that can best be made by Bob Sutter and will probably require an additional day before the final accounting run can be made available.**

If I add up the time requirements to get us from Step A to Step F I am estimating 71 man days of effort. If we subtract from that the time that has been spent on the pump data we are still 68 man-days away from a final accounting if we continued on at the current rate.

This evaluation might lead someone to believe that if one man were to work full time on the items outlined in this memo the final water use numbers for 1992 could be available by mid-November. It is important to understand that there are certain built in restraints that limit our ability to accomplish certain tasks. For example, the main data base for the accounting program is referred to as the HISTORY. This file will contain about 500,000 records for one accounting year. While we do make changes in the HISTORY file throughout the year, it has to be done when it is not needed for the daily accounting runs. Because of the limitations on access to this file we normally wait until the end of the irrigation season to make changes. Access could be provided by creating a second "dummy" history file which could be updated with the final data as they become available. However, because of the memory requirements of the HISTORY FILE it is unlikely that we would be able to maintain two files of this size. Clearly WD 01 does not have the space allocated to allow this to be done.

13010500 JACKSON LAKE NR MORAN, WY  
13032450 PALISADES RESERVOIR NR IRWIN, ID  
13039000 HENRYS LAKE NR LAKE, ID  
13042000 ISLAND PARK RESERVOIR NR ISLAND PARK, ID  
13046500 GRASSY LAKE RESERVOIR  
13057950 RIRIE RESERVOIR NR RIRIE, ID  
13076500 AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, ID  
13081000 LAKE WALCOTT NR MINIDOKA, ID  
13087900 MILNER RESERVOIR AT MILNER, ID

*RE RESERVOIRS*

13011000 SNAKE RIVER NR MORAN  
13022500 SNAKE RIVER ABV RESERVOIR, NR ALPINE  
13023000 GREYS RIVER ABV RESERVOIR, NR ALPINE  
13027500 SALT RIVER ABV RESERVOIR, NR ETNA  
13032500 SNAKE RIVER NR IRWIN  
13037500 SNAKE RIVER NR HEISE  
13037977 EAGLE ROCK CANAL ABV WILLOW CREEK  
13038000 DRY BED SNAKE RIVER NR RIRIE  
13038500 SNAKE RIVER AT LORENZO  
13039500 HENRYS FORK NR LAKE  
13042500 HENRYS FORK NR ISLAND PARK  
13046023 HENRYS FORK NR ASHTON  
13046510 FALLS RIVER AT GRASSY LAKE  
13047500 FALLS RIVER NR SQUIRREL  
13049500 FALLS RIVER NR CHESTER  
13050016 CROSSCUT CANAL BLW DIVERSIONS  
13050018 CROSSCUT CANAL ABV TETON RIVER  
13050500 HENRYS FORK AT ST ANTHONY  
13055000 TETON RIVER NR ST ANTHONY  
13056500 HENRYS FORK NR REXBURG  
13057155 SNAKE RIVER NR IDAHO FALLS  
13057940 WILLOW CREEK BLW TEX CREEK  
13058000 WILLOW CREEK NR RIRIE  
13058510 SAND CREEK ABOVE WILLOW CREEK  
13058520 WILLOW CREEK FLOODWAY NR UCON  
13058530 WILLOW CREEK BELOW FLOODWAY NR UCON  
13060000 SNAKE RIVER NR SHELLEY  
13062500 SNAKE RIVER AT BLACKFOOT  
13069500 SNAKE RIVER NR BLACKFOOT  
13077000 SNAKE RIVER AT NEELEY  
13081500 SNAKE RIVER NR MINIDOKA  
13088000 SNAKE RIVER AT MILNER

RIVER

CAUSES

(FLOWS)

PO 370

10000000

13032510 MRS. PAUL BYRD  
 13033643 J FLEMING PUMP  
 13033646 T LOTT #1 PUMP  
 13033650 WEEKS, JAY  
 13033670 R JACOBSON PUMP (BEASLEY)  
 13033690 T LOTT #2 PUMP  
 13034460 JACOBSON, LLOYD  
 13034480 W XXXXXX PUMP  
 13037305 I SPAULDING PUMP  
 13037475 RILEY CANAL ✓  
 13037490 B FOSTER PUMP  
 ✓13037505 ANDERSON CANAL ✓  
 13037510 M & M CATTLE CO. (S) PUMP  
 13037515 M & M CATTLE CO. (N) PUMP  
 13037855 M NEWBY #1 PUMP  
 13037860 M NEWBY #2 PUMP  
 13037880 M NEWBY #3 PUMP  
 ✓13037975 EAGLE ROCK CANAL  
 ✓13037980 FARMERS FRIEND CANAL  
 13037985 ENTERPRISE CANAL ✓  
 13037997 C HICKMAN PUMP  
 13038025 BUTLER ISLAND CANAL ✓  
 13038030 ROSS AND RAND CANAL ✓  
 13038050 STEELE CANAL ✓  
 13038055 HARRISON CANAL ✓  
 13038065 CHENEY CANAL ✓  
 13038080 BUTLER ISL #2 CANAL ✓  
 13038085 RUDY CANAL ✓  
 13038090 LOWDER SLOUGH CANAL ✓  
 ✓13038095 BOOMER CANAL  
 13038098 KITE & NORD CANAL ✓  
 13038110 BURGESS CANAL ✓  
 13038113 M H HILL PUMP  
 ✓13038115 CLARK & EDWARDS CANAL  
 13038145 CROFT DITCH ✓  
 13038150 EAST LABELLE CANAL ✓  
 13038179 RIGBY LATERAL ✓  
 13038180 RIGBY CANAL ✓  
 13038201 WHITE ISLAND PUMP  
 13038205 DILTS CANAL ✓  
 ✓13038210 ISLAND CANAL  
 13038225 WEST LABELLE & LONG ISLAND CANAL ✓  
 13038305 PARKS & LEWISVILLE CANAL ✓  
 13038315 NORTH RIGBY CANAL ✓  
 13038331 JEFF HILLS ELEC PUMP  
 13038332 JEFF HILLS ENG PUMP  
 13038340 WHITE DITCH ✓  
 13038352 J W JONES #1 PUMP  
 13038360 BRAMWELL CANAL ✓  
 13038362 ELLIS CANAL ✓  
 13038371 J T JONES PUMP  
 13038373 N TAYLOR PUMP  
 13038382 W DABELL PUMP (HUNTER)  
 13038383 FRESH PAK PUMP  
 13038384 D STOKER PUMP (HUNTER)  
 13038386 J N ERICKSON PUMP  
 13038387 NELSON CANAL ✓  
 13038388 MATTSON-CRAIG CANAL ✓  
 13038392 SUNNYDELL CANAL  
 13038393 B COVINGTON PUMP ✓

13033010 PALISADES CANAL

*05*

SNK DIJ. TTL

27-022556

13038398 ARNSBERGER PUMP  
13038405 T PARKINSON PUMP  
13038410 R GROVER PUMP  
13038416 THERON CHENEY  
13038417 M CHENEY PUMP  
13038422 LYLE ROBISON  
13038426 LENROOT CANAL ✓  
13038428 R BURNS PUMP  
13038431 REID CANAL ✓  
13038434 TEXAS & LIBERTY CANAL ✓  
13038435 BANNOCK JIM SLOUGH ✓  
13038436 HILL PETTINGER CANAL ✓  
13038437 NELSON COREY CANAL ✓  
13038438 R ROTH PUMP  
13045655 G MAROTZ PUMP  
13045675 L CHERRY PUMP  
13045705 F HOWELL PUMP  
13045710 D WOODRUFF PUMP  
13045721 E G HOWELL #1 PUMP  
13045724 E G HOWELL #2 PUMP  
13045727 E G HOWELL #3 PUMP  
13045755 T HOLCOMB PUMP  
13045780 R LEE PUMP  
13045805 Z J EGBERT #1 PUMP  
13045807 R RITCHEY PUMP  
13045810 R STEWART #2 PUMP  
13045811 R STEWART #1 PUMP  
13045813 Z J EGBERT #2 PUMP  
13045823 R D BAKER #2 PUMP  
13045829 D LARSON PUMP  
13045849 D SEELEY PUMP  
13045860 Z J EGBERT #3 PUMP  
13045880 Z J EGBERT #4 PUMP  
13045930 Z J EGBERT #5 PUMP  
13045940 G NEDROW PUMP  
13045950 R D BAKER #1 PUMP  
13045960 H STEINMAN #1 PUMP  
13046015 R & C BAUM PUMP  
13046020 J MCCULLOCH PUMP  
13046025 H STEINMAN #2 PUMP  
13046030 E LENZ (R HESS) PUMP  
13046070 A NEDROW #1 PUMP  
13046072 A NEDROW #2 PUMP  
13046075 J NEDROW PUMP  
13046080 E & S CLARK PUMP  
13046083 V & D KIRKHAM PUMP  
13046084 D NEDROW PUMP  
13046086 D FRANSEN PUMP  
13046090 L BRATT PUMP  
13046095 L LOOSLI #1 PUMP  
13046310 DEWEY CANAL  
13046315 J SEELEY PUMP  
13047305 YELLOWSTONE CANAL  
13047475 MARYSVILLE CANAL  
13047510 E GRIFFEL PUMP  
13047515 F & L GRIFFEL PUMP  
13047565 R BAUM PUMP  
13047570 G /6 CORP PUMP (GRIFFEL)  
13047575 FARMERS OWN CANAL  
13047605 W SCAFÉ PUMP (REINKE)

13047610 E HESSMAN #1 PUMP  
13047616 R STURM PUMP  
13047625 M GRIFFEL PUMP  
13047635 C LOOSLI #1 PUMP  
13047681 CONANT CREEK CANAL  
13047710 K NYBORG PUMP  
13047900 BOOM CREEK CANAL  
13048025 SQUIRREL CREEK CANAL  
13048050 ORME CANAL  
13048080 D HARSHBARGER PUMP  
13048265 D ZUNDELL PUMP  
13048275 L LOOSLI #2 PUMP  
13048280 C & L LOOSLI PUMP  
13048290 C LOOSLI #2 PUMP  
13048350 J HILL PUMP  
13048430 D REYNOLDS PUMP  
13048440 C LOOSLI #3 PUMP  
13048470 T POTTER PUMP  
13048475 ENTERPRISE CANAL  
13048480 L MARTINDALE #2 PUMP  
13048485 R D MILLER PUMP  
13048551 L MARTINDALE #1 PUMP  
13048560 FALL RIVER CANAL  
13048705 CHESTER CANAL  
13049008 MCBEE CANAL  
13049010 SILKEY CANAL  
13049015 CURR CANAL  
13049490 L LOOSLI #3 PUMP  
13049495 G BLANCHARD PUMP  
13049550 LAST CHANCE CANAL  
13049560 CROSSCUT CANAL  
13049705 FARMERS FRIEND CANAL  
13049710 TWIN GROVES CANAL  
13049725 ST ANTHONY UNION CANAL  
13049805 SALEM UNION CANAL  
13050525 EGIN CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13050535 INDEPENDENT CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13053951 TETON PIPELINE #4 PUMP ✓  
13053971 J RICKS PUMP  
13054031 TETON PIPELINE #3 PUMP ✓  
13054041 TETON PIPELINE #2 PUMP ✓  
13054043 TETON PIPELINE #1 PUMP ✓  
13054046 K J ARNOLD #1 PUMP  
13054111 R & J BROWN PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13054391 PARKINSON & KERBS PUMP  
13054397 K J ARNOLD #2 PUMP  
13054420 B PARKINSON PUMP  
13054515 CANYON CREEK CANAL ✓  
13054577 G CRAPO PUMP  
13054590 R STEVENS PUMP ✓  
13054705 V SCHWENDIMAN PUMP  
13054708 C M OLSEN PUMP  
13054762 R R RICKS PUMP ✓  
13054772 R. BRENT RICKS ✓  
13054801 CANYON CREEK LATERAL PUMP ✓  
13054850 SIDDOWAY SHEEP PUMP

13054940 H BISCHOFF PUMP  
O 13055030 WILFORD CANAL ✓  
13055040 TETON IRRIGATION CANAL ✓  
13055042 SIDDOWNAY CANAL ✓  
13055050 PIONEER CANAL  
13055060 STEWART CANAL 55041  
b 13055193 N BIRCH PUMP  
o 13055195 B LEAVITT PUMP  
x 13055205 PINCOCK-BYINGTON CANAL  
x 13055206 HOLLIST, BOYD  
x 13055210 TETON ISLAND FEEDER CANAL ✓  
x 13055245 NORTH SALEM CANAL ✓  
x 13055263 J HARRIS PUMP  
x 13055275 ROXANA CANAL ✓  
x 13055280 ISLAND WARD CANAL ✓  
x 13055295 SAUREY CANAL  
O 13055306 MCCORMICK-ROWE CANAL  
13055311 PINCOCK-GARNER CANAL  
13055313 E GARDNER PUMP ✓  
13055314 BIGLER SLOUGH CANAL  
13055315 WOODMANSEE-JOHNSON CANAL  
13055319 R O WILDING PUMP  
13055323 CITY OF REXBURG CANAL ✓  
13055325 T BRUNSON PUMP  
13055327 J S WRIGHT PUMP  
✓ 13055331 R & K WALKER PUMP  
O 13055334 REXBURG IRRIGATION CANAL ✓  
13057012 HARTERT L.A.  
13057013 A GUNDERSON PUMP  
13057014 R & C MILLER PUMP  
13057015 R MILLER PUMP  
13057018 BOYLE & S #1 PUMP  
13057021 BOYLE & SONS #2 PUMP  
13057025 BUTTE & MARKET LAKE CANAL ✓  
13057030 BEAR TRAP CANAL ✓  
13057038 O ELLSWORTH PUMP  
13057046 H TOMCHAK PUMP  
13057097 N FULLMER PUMP  
13057105 D BOYCE PUMP  
13057106 B TOMCHAK #1 PUMP  
13057107 C BOYCE PUMP  
13057114 STIENKE-MURDOCK PUMP  
13057115 L CARLSON NORTH PUMP  
13057116 B TOMCHAK #2 PUMP  
13057117 L CARLSON SOUTH PUMP  
13057118 L BROWN PUMP  
13057119 L HANSEN WEST  
13057120 ARRINGTON NORTH PUMP  
13057121 G OFFUTT PUMP (MARTIN)  
13057122 ARRINGTON SOUTH PUMP  
13057123 BEAR ISLAND N PUMP (ANDRUS)  
13057125 OSGOOD CANAL ✓  
13057126 CLEMENTS CANAL  
13057130 KENNEDY CANAL ✓  
✓ 13057135 GREAT WESTERN CANAL ✓  
13057139 BEAR ISLAND E PUMP ✓  
13057140 L HANSEN EAST PUMP  
13057141 J GAY PUMP  
13057142 L HANSEN MACKAY PUMP  
13057143 YORGENSON PUMP

13057145 IDAHO CANAL ✓  
13057154 W WARD PUMP  
13057171 A BUTIKOFER PUMP  
13057250 PORTER CANAL ✓  
13057938 LOERTSCHER CANAL  
13058090 B JOHNSON PUMP  
13058105 LOVELL PUMP  
13058125 FERGUSON CANAL ✓  
13058145 LOVELL # 2 PUMP  
13058165 WALLACE REED PUMP  
13058210 SARGENT & SUMMERS CANAL ✓  
13058230 DURTSCHI PUMPS  
13058250 REED PUMPS  
13058270 SPERRY PUMP  
13058290 ORVAL AVERY CANAL ✓  
✓13058310 ROY AVERY CANAL  
13058330 STUCKI PUMPS  
13058350 ORVAL AVERY PUMP  
✓13058370 ROY COOPER SAND CR CANAL  
✓13058380 ROY COOPER WILLOW CREEK CANAL  
13058510 SAND CREEK ABV WILLOW CREEK DIVERSION  
✓13058512 BEAN CANAL  
✓13058514 W & O COOPER CANAL  
13058515 SAND CREEK DELIVERY TO IDAHO CANAL COMPANY ✓  
13058530 WILLOW CREEK BELOW FLOOD CHANNEL  
13058532 DEMICK CANAL  
13059486 MONROC LARGE  
13059490 IF MONROC #3 PUMP  
13059505 WOODVILLE CANAL  
13059525 SNAKE RIVER VALLEY CANAL  
13060005 A M CANNON PUMP  
13060055 P HILL PUMP  
✓13060500 RESERVATION CANAL ✓  
13061430 BLACKFOOT CANAL  
13061520 NEW LAVA SIDE CANAL  
13061521 CHET ADAMS PROPANE  
13061522 R C ADAMS PUMP  
13061525 PEOPLES CANAL  
13061610 ABERDEEN CANAL ✓  
13061650 CORBETT CANAL  
13061670 NIELSON-HANSEN CANAL  
13061677 R LAMBERT PUMP  
13061685 K CHRISTENSEN PUMP  
13061705 RIVERSIDE CANAL  
✓13061995 DANSKIN CANAL  
13062050 TREGO CANAL  
13062447 HOPKINS PACKING PUMP  
13062502 BLACKFOOT MONROC  
13062503 WEARYRICK CANAL  
13062505 J WADSWORTH PUMP  
13062506 WATSON CANAL  
✓13062507 PARSONS CANAL  
13063507 SHRADER, LARK  
13075900 FT HALL MICHAUD CANAL  
13076400 FALLS IRRIGATION PUMP  
13077652 OSBORN PUMP  
13077755 CALL FARMS PUMP (BARKDULL)  
13077775 M KUWANA PUMP  
13080000 MINIDOKA NORTH SIDE CANAL  
13080500 MINIDOKA SOUTH SIDE CANAL

13047625 M GRIFFEL PUMP  
13047635 C LOOSLI #1 PUMP  
13047681 CONANT CREEK CANAL  
13047710 K NYBORG PUMP  
13047900 BOOM CREEK CANAL  
13048025 SQUIRREL CREEK CANAL  
13048050 ORME CANAL  
13048080 D HARSHBARGER PUMP  
13048265 D ZUNDELL PUMP  
13048275 L LOOSLI #2 PUMP  
13048280 C & L LOOSLI PUMP  
13048290 C LOOSLI #2 PUMP  
13048350 J HILL PUMP  
13048430 D REYNOLDS PUMP  
13048440 C LOOSLI #3 PUMP  
13048470 T POTTER PUMP  
13048475 ENTERPRISE CANAL  
13048480 L MARTINDALE #2 PUMP  
13048485 R D MILLER PUMP  
13048551 L MARTINDALE #1 PUMP  
13048560 FALL RIVER CANAL  
13048705 CHESTER CANAL  
13049008 MCBEE CANAL  
13049010 SILKEY CANAL  
13049015 CURR CANAL  
13049490 L LOOSLI #3 PUMP  
13049495 G BLANCHARD PUMP  
13049550 LAST CHANCE CANAL  
13049560 CROSSCUT CANAL  
13049705 FARMERS FRIEND CANAL  
13049710 TWIN GROVES CANAL  
13049725 ST ANTHONY UNION CANAL  
13049805 SALEM UNION CANAL  
13050525 EGIN CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13050535 INDEPENDENT CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13053951 TETON PIPELINE #4 PUMP ✓  
13053971 J RICKS PUMP  
13054031 TETON PIPELINE #3 PUMP ✓  
13054041 TETON PIPELINE #2 PUMP ✓  
13054043 TETON PIPELINE #1 PUMP ✓  
13054046 K J ARNOLD #1 PUMP  
13054111 R & J BROWN PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13054391 PARKINSON & KERBS PUMP  
13054397 K J ARNOLD #2 PUMP  
13054420 B PARKINSON PUMP  
13054515 CANYON CREEK CANAL ✓  
13054577 G CRAPO PUMP  
13054590 R STEVENS PUMP ✓  
13054705 V SCHWENDIMAN PUMP  
13054708 C M OLSEN PUMP  
13054762 R R RICKS PUMP ✓  
13054772 R. BRENT RICKS ✓  
13054801 CANYON CREEK LATERAL PUMP ✓  
13054850 SIDDOWNAY SHEEP PUMP

13038047 COVINGTON BROS EXCHANGE WELL  
13048549 L LOOSLI EXCHANGE WELL  
13050570 USBR #2 EXCHANGE WELL  
13051281 G NELSON EXCHANGE WELL  
13054048 STEVECO CANYON EXCHANGE WELL  
13055041 CANYON CREEK LATERAL EXCHANGE WELL ✓ 0  
13055043 B PARKINSON EXCHANGE WELL 0  
13055044 V SCHWENDIMAN EXCHANGE WELL 0  
13055045 M PARKINSON EXCHANGE WELL 0  
13055049 M & M RAMMEL EXCHANGE WELL  
13055198 D BOTT EXCHANGE WELL  
13055199 C HOOPES EXCHANGE WELL  
13055304 USBR #5 EXCHANGE WELL  
13055316 HOOPES BROTHERS EXCHANGE WELL 0  
13055317 R RICKS EXHCANGE WELL ✓ 0  
13055318 EHCO RANCH EXCHANGE WELL 0  
13055324 D, L, & R ARD EXCHANGE WELL 0  
13055326 HINK INC. EXCHANGE WELL  
13055329 R & J BROWN EXCHANGE WELL ✓ 0  
13055343 USBR #3 EXCHANGE WELL  
13056505 USBR #1 EXCHANGE WELL

EXCHANGE PUMPS

13085500 A & B IRRIGATION DISTRICT PUMPS  
13057171 A BUTIKOFER PUMP  
13057013 A GUNDERSON PUMP  
13060005 A M CANNON PUMP  
13046070 A NEDROW #1 PUMP  
13046072 A NEDROW #2 PUMP  
13061610 ABERDEEEN CANAL  
13037505 ANDERSON CANAL  
13038398 ARNSBERGER PUMP (D. BLAKELY)  
13057120 ARRINGTON NORTH PUMP  
13057122 ARRINGTON SOUTH PUMP  
13038393 B COVINGTON PUMP  
13037490 B FOSTER PUMP  
13058090 B JOHNSON PUMP  
13055195 B LEAVITT PUMP  
13054420 B PARKINSON PUMP  
13057106 B TOMCHAK #1 PUMP  
13057116 B TOMCHAK #2 PUMP  
13038435 BANNOCK JIM SLOUGH  
13058512 BEAN CANAL  
13057139 BEAR ISLAND E PUMP  
13057123 BEAR ISLAND N PUMP (ANDRUS)  
13057030 BEAR TRAP CANAL  
13055314 BIGLER SLOUGH CANAL  
13061430 BLACKFOOT CANAL  
13062502 BLACKFOOT MONROC  
13047900 BOOM CREEK CANAL  
13038095 BOOMER CANAL  
13057018 BOYLE & S #1 PUMP  
13057021 BOYLE & SONS #2 PUMP  
13038360 BRAMWELL CANAL  
13038110 BURGESS CANAL  
13038080 BUTLER ISL #2 CANAL  
13038025 BUTLER ISLAND CANAL  
13057025 BUTTE & MARKET LAKE CANAL  
13048280 C & L LOOSLI PUMP  
13057107 C BOYCE PUMP  
13037997 C HICKMAN PUMP  
13047635 C LOOSLI #1 PUMP  
13048290 C LOOSLI #2 PUMP  
13048440 C LOOSLI #3 PUMP  
13054708 C M OLSEN PUMP  
13077755 CALL FARMS PUMP (BARKDULL)  
13054515 CANYON CREEK CANAL  
13054801 CANYON CREEK LATERAL PUMP  
13038065 CHENEY CANAL  
13048705 CHESTER CANAL  
13061521 CHET ADAMS PROPANE  
13084650 CITY OF BURLEY PUMP  
13055323 CITY OF REXBURG CANAL  
13038115 CLARK & EDWARDS CANAL  
13057126 CLEMENTS CANAL  
13047681 CONANT CREEK CANAL  
13050545 CONSOLIDATED FARMERS CANAL  
13061650 CORBETT CANAL  
13038145 CROFT DITCH  
13049560 CROSSCUT CANAL  
13049015 CURR CANAL  
13057105 D BOYCE PUMP  
13046086 D FRANSEN PUMP

1,800 9,000

SNK DIV. TTL



EB SORT/KEY = (POSITION=10, SIZE=42)

→ ^ SNK DIV. TTL ^ ~~SNK~~ DIVSRT. TTL



DIVSRT. TTL

Sorts names in SNK DIV. TTL  
(which is sorted by number)  
and and puts into names file  
(DIVSRT. TTL).

13048080 D HARSHBARGER PUMP  
13045829 D LARSON PUMP  
13046084 D NEDROW PUMP  
13048430 D REYNOLDS PUMP  
13045849 D SEELEY PUMP  
13038384 D STOKER PUMP (HUNTER)  
13045710 D WOODRUFF PUMP  
13048265 D ZUNDELL PUMP  
13061995 DANSKIN CANAL  
13058532 DEMICK CANAL  
13046310 DEWEY CANAL  
13038205 DILTS CANAL  
13058230 DURTSCHI PUMPS  
13046080 E & S CLARK PUMP  
13045721 E G HOWELL #1 PUMP  
13045724 E G HOWELL #2 PUMP  
13045727 E G HOWELL #3 PUMP  
13055313 E GARDNER PUMP  
13047510 E GRIFFEL PUMP  
13047610 E HESSMAN #1 PUMP  
13046030 E LENZ (R HESS) PUMP  
13037975 EAGLE ROCK CANAL  
13038150 EAST LABELLE CANAL  
13050525 EGIN CANAL  
13038362 ELLIS CANAL  
13037985 ENTERPRISE CANAL  
13048475 ENTERPRISE CANAL  
13047515 F & L GRIFFEL PUMP  
13045705 F HOWELL PUMP  
13048560 FALL RIVER CANAL  
13076400 FALLS IRRIGATION PUMP  
13037980 FARMERS FRIEND CANAL  
13049705 FARMERS FRIEND CANAL  
13047575 FARMERS OWN CANAL  
13058125 FERGUSON CANAL  
13038383 FRESH PAK PUMP  
13075900 FT HALL MICHAUD CANAL  
13047570 G /6 CORP PUMP (GRIFFEL)  
13049495 G BLANCHARD PUMP  
13054577 G CRAPO PUMP  
13045655 G MAROTZ PUMP  
13045940 G NEDROW PUMP  
13057121 G OFFUTT PUMP (MARTIN)  
13086130 GLENDALE FARMS  
13057135 GREAT WESTERN CANAL  
13054940 H BISCHOFF PUMP  
13045960 H STEINMAN #1 PUMP  
13046025 H STEINMAN #2 PUMP  
13057046 H TOMCHAK PUMP  
13038055 HARRISON CANAL  
13057012 HARTERT L.A.  
13038436 HILL PETTINGER CANAL  
13055206 HOLLIST, BOYD  
13062447 HOPKINS PACKING PUMP  
13037305 I SPAULDING PUMP  
13057145 IDAHO CANAL  
13059490 IF MONROC #3 PUMP  
13050535 INDEPENDENT CANAL  
13038210 ISLAND CANAL  
13055280 ISLAND WARD CANAL

PAID ZUNDELL c/o ZUNDELL BROS INC.  
RT 2 BOX 18  
ASHTON

158 2 P.

70006AM 40 HRS

June 9-10

13033643 J FLEMING PUMP  
13057141 J GAY PUMP  
13055263 J HARRIS PUMP  
13048350 J HILL PUMP  
13046020 J MCCULLOCH PUMP  
13038386 J N ERICKSON PUMP  
13046075 J NEDROW PUMP  
13053971 J RICKS PUMP  
13055327 J S WRIGHT PUMP  
13046315 J SEELEY PUMP  
13038371 J T JONES PUMP  
13038352 J W JONES #1 PUMP  
13062505 J WADSWORTH PUMP  
13034460 JACOBSON, LLOYD  
13038331 JEFF HILLS ELEC PUMP  
13038332 JEFF HILLS ENG PUMP  
13061685 K CHRISTENSEN PUMP  
13054046 K J ARNOLD #1 PUMP  
13054397 K J ARNOLD #2 PUMP  
13047710 K NYBORG PUMP  
13057130 KENNEDY CANAL  
13038098 KITE & NORD CANAL  
13046090 L BRATT PUMP  
13057118 L BROWN PUMP  
13057115 L CARLSON NORTH PUMP  
13057117 L CARLSON SOUTH PUMP  
13045675 L CHERRY PUMP  
13057140 L HANSEN EAST PUMP  
13057142 L HANSEN MACKAY PUMP  
13057119 L HANSEN WEST  
13046095 L LOOSLI #1 PUMP  
13048275 L LOOSLI #2 PUMP  
13049490 L LOOSLI #3 PUMP  
13048551 L MARTINDALE #1 PUMP  
13048480 L MARTINDALE #2 PUMP  
13049550 LAST CHANCE CANAL  
13038426 LENROOT CANAL  
13057938 LOERTSCHER CANAL  
13058145 LOVELL # 2 PUMP  
13058105 LOVELL PUMP  
13038090 LOWDER SLOUGH CANAL  
13038422 LYLE ROBISON  
13037515 M & M CATTLE CO. (N) PUMP  
13037510 M & M CATTLE CO. (S) PUMP  
13038417 M CHENEY PUMP  
13047625 M GRIFFEL PUMP  
13038113 M H HILL PUMP  
13077775 M KUWANA PUMP  
13037855 M NEWBY #1 PUMP  
13037860 M NEWBY #2 PUMP  
13037880 M NEWBY #3 PUMP  
13047475 MARYSVILLE CANAL  
13038388 MATTSON-CRAIG CANAL  
13049008 MCBEE CANAL  
13055306 MCCORMICK-ROWE CANAL  
13086000 MILNER LOW LIFT PUMP  
13080000 MINIDOKA NORTH SIDE CANAL  
13080500 MINIDOKA SOUTH SIDE CANAL  
13059486 MONROC LARGE  
13032510 MRS. PAUL BYRD

13055193 N BIRCH PUMP  
13057097 N FULLMER PUMP  
13038373 N TAYLOR PUMP  
13038387 NELSON CANAL  
13038437 NELSON COREY CANAL  
13061520 NEW LAVA SIDE CANAL  
13061670 NIELSON-HANSEN CANAL  
13038315 NORTH RIGBY CANAL  
13055245 NORTH SALEM CANAL  
13086510 NORTHSIDE 'A' LATERAL CANAL  
13086520 NORTHSIDE CROSSCUT GOODING CANAL  
13087000 NORTHSIDE TWIN FALLS CANAL  
13057038 O ELLSWORTH PUMP  
13048050 ORME CANAL  
13058290 ORVAL AVERY CANAL  
13058350 ORVAL AVERY PUMP  
13077652 OSBORN PUMP  
13057125 OSGOOD CANAL  
13060055 P HILL PUMP  
13054291 P L STOTT #1 PUMP  
13054325 P L STOTT #2 PUMP  
13085800 PA LATERAL PUMP  
13054391 PARKINSON & KERBS PUMP  
13038305 PARKS & LEWISVILLE CANAL  
13062507 PARSONS CANAL  
13061525 PEOPLES CANAL  
13055205 PINCOCK-BYINGTON CANAL  
13055311 PINCOCK-GARNER CANAL  
13055050 PIONEER CANAL  
13057250 PORTER CANAL  
13046015 R & C BAUM PUMP  
13057014 R & C MILLER PUMP  
13054111 R & J BROWN PUMP  
13055331 R & K WALKER PUMP  
13047565 R BAUM PUMP  
13084725 R BLEI PUMP  
13038428 R BURNS PUMP  
13061522 R C ADAMS PUMP  
13045950 R D BAKER #1 PUMP  
13045823 R D BAKER #2 PUMP  
13048485 R D MILLER PUMP  
13038410 R GROVER PUMP  
13033670 R JACOBSON PUMP (BEASLEY)  
13061677 R LAMBERT PUMP  
13045780 R LEE PUMP  
13057015 R MILLER PUMP  
13055319 R O WILDING PUMP  
13054762 R R RICKS PUMP  
13045807 R RITCHEY PUMP  
13038438 R ROTH PUMP  
13054590 R STEVENS PUMP  
13045811 R STEWART #1 PUMP  
13045810 R STEWART #2 PUMP  
13047616 R STURM PUMP  
13054772 R. BRENT RICKS  
13058250 REED PUMPS  
13038431 REID CANAL  
13060500 RESERVATION CANAL  
13086530 RESERVOIR DISTRICT #2 CANAL  
13055334 REXBURG IRRIGATION CANAL

13038180 RIGBY CANAL  
13038179 RIGBY LATERAL  
13037475 RILEY CANAL  
13061705 RIVERSIDE CANAL  
13038030 ROSS AND RAND CANAL  
13055275 ROXANA CANAL  
13058310 ROY AVERY CANAL  
13058370 ROY COOPER SAND CR CANAL  
13058380 ROY COOPER WILLOW CREEK CANAL  
13038085 RUDY CANAL  
13049805 SALEM UNION CANAL  
13058510 SAND CREEK ABV WILLOW CREEK DIVERSION  
13058515 SAND CREEK DELIVERY TO IDAHO CANAL COMPANY  
13058210 SARGENT & SUMMERS CANAL  
13055295 SAUREY CANAL  
13063507 SHRADER, LARK  
13055042 SIDDOWNAY CANAL  
13054850 SIDDOWNAY SHEEP PUMP  
13049010 SILKEY CANAL  
13085275 SIMPLOT #1 PUMP  
13085300 SIMPLOT #2 PUMP  
13059525 SNAKE RIVER VALLEY CANAL  
13058270 SPERRY PUMP  
13048025 SQUIRREL CREEK CANAL  
13049725 ST ANTHONY UNION CANAL  
13050530 ST ANTHONY UNION FEEDER CANAL  
13038050 STEELE CANAL  
13055060 STEWART CANAL  
13057114 STIENKE-MURDOCK PUMP  
13058330 STUCKI PUMPS  
13038392 SUNNYDELL CANAL  
13055325 T BRUNSON PUMP  
13045755 T HOLCOMB PUMP  
13033646 T LOTT #1 PUMP  
13033690 T LOTT #2 PUMP  
13038405 T PARKINSON PUMP  
13048470 T POTTER PUMP  
13055040 TETON IRRIGATION CANAL  
13055210 TETON ISLAND FEEDER CANAL  
~~13054043 TETON PIPELINE #1 PUMP~~  
13054042 TETON PIPELINE #2 PUMP CLEMENTSVILLE  
13054031 TETON PIPELINE #3 PUMP BOELKE  
13053951 TETON PIPELINE #4 PUMP SOUTH PIPE  
13038434 TEXAS & LIBERTY CANAL  
13038416 THERON CHENEY  
13062050 TREGO CANAL  
13087500 TWIN FALLS SOUTHSIDE CANAL  
13049710 TWIN GROVES CANAL  
13046083 V & D KIRKHAM PUMP  
13085400 V HOBSON PUMP  
13054705 V SCHWENDIMAN PUMP  
13058514 W & O COOPER CANAL  
13038382 W DABELL PUMP (HUNTER)  
13047605 W SSAFE PUMP (REINKE)  
13057154 W WARD PUMP  
13034480 W XXXXXX PUMP  
13058165 WALLACE REED PUMP  
13062506 WATSON CANAL  
13062503 WEARYRICK CANAL  
13033650 WEEKS, JAY

13038225 WEST LABELLE & LONG ISLAND CANAL  
13038340 WHITE DITCH  
13038201 WHITE ISLAND PUMP  
13055030 WILFORD CANAL  
13058530 WILLOW CREEK BELOW FLOOD CHANNEL  
13055315 WOODMANSEE-JOHNSON CANAL  
13059505 WOODVILLE CANAL  
13047305 YELLOWSTONE CANAL  
13057143 YORGENSON PUMP  
13045805 Z J EGBERT #1 PUMP  
13045813 Z J EGBERT #2 PUMP  
13045860 Z J EGBERT #3 PUMP  
13045880 Z J EGBERT #4 PUMP  
13045930 Z J EGBERT #5 PUMP

13084650 CITY OF BURLEY PUMP  
13084725 R BLEI PUMP  
13085275 SIMPLOT #1 PUMP  
13085300 SIMPLOT #2 PUMP  
13085400 V HOBSON PUMP  
13085500 A & B IRRIGATION DISTRICT PUMPS  
13085800 PA LATERAL PUMP  
13086000 MILNER LOW LIFT PUMP  
13086130 GLENDALE FARMS  
13086510 NORTHSIDE 'A' LATERAL CANAL  
13086520 NORTHSIDE CROSSCUT GOODING CANAL  
13086530 RESERVOIR DISTRICT #2 CANAL  
13087000 NORTHSIDE TWIN FALLS CANAL  
13087500 TWIN FALLS SOUTHSIDE CANAL

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

*CERTIFICATE OF APPOINTMENT*

This is to certify that I have this day appointed L. CLAUDE STORER as  
TREASURER of STATE WATER DISTRICT NO. 01 ~~for~~  
~~or~~ until his successor is appointed and qualified  
under the provisions of Section 42-619, Idaho Code, at such rate of compensation as established by  
applicable law.

This certificate has been issued and the seal of the  
Director affixed at Boise, Idaho this 4TH  
day of DECEMBER 19 92.

  
\_\_\_\_\_

**STATE OF IDAHO**

STATE OF IDAHO                    )  
  )    SS  
County of Bonneville        )

**OFFICIAL OATH**

I do solemnly swear (or affirm) that I will support the Constitution of the United States, the Constitution and laws of the State of Idaho, specifically including the provisions of Section 42-605 and 42-607, Idaho Code and that I will faithfully discharge all the duties of the office of Treasurer of Water District #1 according to the best of my ability. So help me God.

L. Clouds Storr  
Principal

SUBSCRIBED AND SWORN to before me this 30 day of November, 1992.

[Signature]  
NOTARY PUBLIC  
Residing at IDAHO FALLS  
Commission Expires 9-12-92



STATE OF IDAHO  
WATER DISTRICT 1

PK

Ronald Carlson  
Watermaster  
(208) 525-7172

150 Shoup Ave., Suite 15  
Idaho Falls, Idaho 83402

Committee of Nine

RECEIVED

NOV 02 1992

Department of Water Resources

October 30, 1992

Mr. R. Keith Higginson, Director  
Idaho Department of Water Resources  
1301 N. Orchard  
Statehouse Mail  
Boise, Idaho 83720

Re: Appointment of Treasurer for Water District 01

Dear Keith:

The Committee of Nine of Water District 01 asks that you appoint Claude Storer as Treasurer of Water District 01, effective as of the 29th day of October, 1992, to serve until the next Water District 01 annual meeting.

This letter request has been authorized by a unanimous vote of the Committee of Nine at yesterday's meeting.

Respectfully submitted,



DeWITT A. MOSS  
Chairman, Committee of Nine

10309201.JAR



State of Idaho  
DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000  
Phone: (208) 327-7900 FAX: (208) 327-7866

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CECIL D. ANDRUS  
GOVERNOR

R. KEITH HIGGINSON  
DIRECTOR

April 17, 1992

DeWitt A. Moss  
Chairman, Committee of Nine  
Water District 01  
269-B S. 300 E.  
Jerome, ID 83338

Re: Water District 01 Treasurer Appointment

Dear Mr. Moss:

The department has received your letter of April 2, 1992 requesting that Claude Storer be appointed interim treasurer of Water District 01.

Before Mr. Storer can be appointed as treasurer, we ask that he take an oath of office using the attached form. The form may be returned to this office. Upon receipt of the oath, the Department can then formally appoint Mr. Storer as treasurer. This same procedure should be followed for all future treasurers. This procedure is described under Idaho Code Section 42-619(4). This procedure is unchanged by the legislation recently passed by the legislature and signed by the governor.

Please contact this office if you have questions regarding this matter.

Respectfully,

Tim Luke  
Hydrologist  
Water Allocation Bureau

cc: Ron Carlson, Water District 01 Watermaster

RECEIVED  
APR 3 1992

Department of Water Resources

April 2, 1992

Mr. R. Keith Higginson, Director  
Idaho Department of Water Resources  
1301 N. Orchard  
Statehouse Mail  
Boise, Idaho 83720

Re: Appointment of Treasurer on an Interim Basis for Water District 01

Dear Keith:

The Committee of Nine of Water District 01 asks that you appoint Claude Storer on an interim basis as Treasurer of Water District 01, effective as of the 2nd day of April, 1992.

This letter request has been authorized by a unanimous vote of the Committee of Nine.

It is our intent to develop a job description for a Treasurer, and in the near future to nominate a Treasurer for your consideration to serve until the next annual Water District 01 meeting.

Respectfully submitted,



DeWITT A. MOSS  
Chairman, Committee of Nine

03239203.JAR

269-B S. 300 E.  
Teton, ID 83338



# United States Department of the Interior

## BUREAU OF RECLAMATION

Minidoka Project Office  
1359 Hansen Avenue  
Burley, Idaho 83318-1821



IN REPLY  
REFER TO: 100  
PRJ-13.00

Ted Diehl  
North Side Canal Company  
921 North Lincoln  
Jerome ID 83338

Subject: Paper on the Water Supply and Operation of Minidoka  
Project Reservoirs Remainder of 1992  
(Reservoir Operation)

Dear Ted:

We have developed an information paper on the water supply and reservoir operations to-date for 1992 and our projected operations for the remainder of the year. It is, as the paper states, an estimate of the probable operations. Operations can and will change as we go through the remainder of the season this year. Temperature and precipitation (or lack of), crop distribution, crop maturity, water conservation, and harvest will all effect the Upper Snake River system operation and actual occurrence of events.

Enclosed for your use is a copy of that paper. I think this paper will give you a better sense of where we are headed and may help answer questions you and your constituents may have. A press release summary of this information is also being prepared. As Earl Corless of my office has said many times, imagine that there is a big "IF" on the front of it.

Please call us if we can provide further information. We are receiving and have received many calls each day as people express their concern over this year's drought. I know each of you have also received many inquiries as well. It seemingly has already been a long year, but here we are only in mid-June.

Sincerely,

  
John M. Dooley  
Project Superintendent

Enclosure

cc: Regional Dir., Boise, ID, Attn: PN-100, PN-400 (w/o Encl)  
CSPO, Boise, ID, Attn: Jerry Gregg (w/Encl)

June 16, 1992

**Assessment on Water Situation in Upper Snake**

Prepared by John Dooley, Mike Beus, Dala Walton

**Minidoka Project Office**

There is the perception that there is a magic rock that we can strike (ala Moses?) in the Upper Snake above Milner and provide all the water any one will need within the Minidoka Project service area. We have therefore prepared this paper assessing what has been done thus far this year and what we estimate our operations will be for the remainder of the year.

John Dooley

This narrative is based on our best estimates at this time.

I. Forecasts

WATER FORECAST RUNOFF UPPER SNAKE - 1992			
Station	Percent of Normal		
	Mar-Jul	Apr-Jul	May-Jul
Heise	63	49	48
Island Park	77	69	60
Little Wood	43	7	-3

The forecasts have steadily deteriorated as we have moved from late winter to early spring and summer. All of these forecasts project normal accumulations of precipitation from the date of the forecast. This has not occurred. In fact, we have experienced below normal precipitation except for isolated areas.

**II. Storage Status and Projections of Storage**

<b>TOTAL UPPER SNAKE CONTENT - 1992</b>				
<b>LOCATION</b>	<b>ACRE FEET</b>			
	<b>March 1</b>	<b>April 1</b>	<b>May 1</b>	<b>June 1</b>
Jackson	638,500	637,300	719,800	825,300
Palisades	751,200	850,100	836,800	536,400
Henrys Lake	82,900	84,600	87,600	86,900
Island Park	101,400	109,700	132,100	130,800
Grassy Lake	12,300	12,400	13,800	15,200
Ririe	43,200	47,000	49,000	47,100
Am Falls	1,297,800	1,473,100	1,257,900	898,100
Walcott	39,300	76,600	96,000	92,000
<b>TOTAL</b>	<b>2,966,600</b>	<b>3,290,800</b>	<b>3,193,000</b>	<b>2,631,800</b>
Little Wood	15,400	23,100	23,600	15,000

In the fall of 1991, the total system storage carryover was over 500,000 acre-feet more water than in the fall of 1990. The total carryover was 1,446,000 acre-feet. This, and early season (November) snow accumulations, led everyone to expect great things from a water supply standpoint for 1992. The maximum storage accumulation for the Upper Snake River storage system was 80 percent on April 12. On May 1 it was 78 percent and June 1 it was 65 percent.

Our estimate, as of early June, is that American Falls will be empty by September 1, and Palisades will be at the top of the inactive pool by early to mid-August. Jackson Lake will not be empty by the end of September but will only have a limited amount of storage remaining, less than 100,000 acre feet.

At season's end, Island Park will be emptied, Ririe will be down to the top of the inactive pool, Grassy Lake will be drafted to half full, Henrys Lake will be drafted by 45,000 acre feet leaving about the same amount remaining in storage, and Lake Walcott will be drawn down to the top of the inactive pool.

**II. Pattern of Releases from Reservoirs**

<b>RELEASES FROM UPPER SNAKE RESERVOIRS - 1992</b>							
<b>LOCATION</b>	<b>CUBIC FEET PER SECOND (CFS)</b>						
	<b>3/1</b>	<b>3/15</b>	<b>4/1</b>	<b>4/15</b>	<b>5/1</b>	<b>5/15</b>	<b>6/1</b>
Jackson	440	430	430	440	440	460	3790
Palisades	1100	1100	1100	3370	12990	13990	12990
Henrys Lake	10	10	3	10	0	10	220
Island Park	270	600	260	260	320	420	1030
Grassy Lake	0	0	0	0	0	20	10
Ririe	0	0	0	0	50	50	40
Am Falls	300	300	5020	8130	10820	10010	11190
Walcott	420	440	1120	4780	7170	7800	7450
Little Wood	20	10	10	90	210	260	210

Releases from Jackson Dam are at 4,000 cubic feet per second (cfs) and will remain so until early to mid-July when they will be increased to 4,500 cfs until Labor Day. Releases from Palisades are near 13,000 cfs and will remain at that level until late July. After that they will gradually decrease until we will be passing inflow (5,000 to 6,000 cfs) in mid to late August. Releases from Ririe are now at 35 cfs and will remain at that rate until early August when they will be increased to evacuate the remaining storage over a three to five week period.

Water from Henrys Lake began to be released and moved downstream in late May. The release rate was 220 cfs from May 28 to June 18. At which time it was raised to 280 cfs. It will remain at that level until September 1. Island Park releases are at 1,500 cfs and will remain at that level until mid-August. Releases from Grassy Lake are now zero. We estimate that releases from Grassy Lake will begin in late June at a rate of 100 cfs for about 40 days.

American Falls releases are currently at 11,000 cfs. We expect them to continue at that level to meet irrigation demands at Minidoka and Milner gradually tapering off with irrigation requirements in mid to late August until the reservoir is empty at which time inflow will be passed. Releases from Minidoka Dam are now at 7,400 cfs. They will fluctuate with demands, which we expect to fall early this year,

perhaps by August. The difference in the releases from American Falls and Minidoka is the diversions to the North Side and South Side Canals for Minidoka and Burley Irrigation Districts.

**IV. Snake River Water Right Cutoff Dates**

<b>LAST RIGHT FILLED 1934 VS. 1992 COMPARISON</b>		
<b>DATE 1992</b>	<b>1934 ABOVE BLACKFOOT</b>	<b>1992 ABOVE BLACKFOOT</b>
April 10	June 1, 1889	March 3, 1921
April 20	November 20, 1890	March 23, 1903
April 30	February 6, 1895	March 22, 1895
May 10	July 9, 1896	October 11, 1895
May 20	July 9, 1896	February 6, 1895
May 30	August 18, 1894	October 11, 1900
June 10	June 1, 1891	December 14, 1891

By late June or early July water rights with priority dates in the 1880's (1885-90) will be being cut.

**V. Assessment of What is Happening and What Has Happened and What We Project/Estimate Will Occur**

At the present time headgates are being locked and natural flow rights are being cut. People will continue to run out of water this year. The forecasted runoff and water supply scenario continues to follow 1934 very closely. That was the year the State of Idaho called out the National Guard to guard the headgates. We are in the fifth year out of six in which runoff and precipitation are below normal, whatever normal is.

We began this season by attending and presenting water supply information at the annual Idaho Water Users Association meeting in Boise on January 8 and 9 and the annual Water District #1 meeting March 3. We have attended stockholders

meetings of various canal companies and irrigation districts including Twin Falls Canal Company, North Side Canal Company, Burley Irrigation District, A&B Irrigation District, Milner Irrigation District, and North Fork Protective Association. We met with waterusers and managers of the Upper Snake River system on March 18 in Idaho Falls to apprise them of the water supply situation. We have attended Committee of Nine meetings on March 2, April 2, and June 2.

On May 12, we held our annual "spring meeting" in Jackson, Wyoming to discuss summer operations at Jackson Dam. On May 13, we met with Idaho Department of Fish and Game personnel in Idaho Falls to discuss summer operations of the Minidoka Project reservoirs.

We have had and will have monthly meetings (February 14, March 27, May 1, and May 28), or more often, with our canal company and irrigation district managers to apprise them of the situation and of their storage use. We met on May 12 with some 75-80 water managers of the Fremont-Madison Irrigation District to advise them of the water supply situation. Members of the staff of Water District #1 have also attended these meetings to apprise the water users of the natural flow situation. Water users have also been informed of the turn-off process. Each affected system is notified by registered letter and then by a visit from Water District #1 personnel. We continue to send out our "teacup" diagram of the water supply situation in the Upper Snake River system as well as our thirty day forecasts.

Water levels in domestic and irrigation wells have continued to drop. In many instances wells have been deepened, sometimes with limited results. Ground water levels and production from wells have and will continue to drop throughout the summer and fall.

The Upper Snake River water rental pool received requests for 150,000 acre feet of rental water this year. Only 3,500 acre feet of water has been placed in the pool. In the past, every year that the pool or water bank has been in existence, there has always been more water placed in the pool than was rented. This will not be the case this year. We expect little or no additional water will be placed in the pool. This will not be a source of salvation this year.

## **VI. Expected Carryover**

A poll of canal companies and irrigation districts at the last managers meeting on May 28 indicated that the expected carryover will be about 175,000 acre feet. This will be monitored throughout the season.

The following table shows expected carryover and system turn off dates for some of the entities on the Minidoka Project.

DISTRICT/COMPANY	ANTICIPATED CARRYOVER Acre Feet	TURN OFF DATE
North Side Canal Company	0	Sep 15 or Oct 1
Twin Falls Canal Company	0	End of Aug No Storage
A&B Irrigation District	70,000	Oct 15
Milner Irrigation District	19,000	Oct 15
Minidoka Irrigation District	0	Oct 1
Aberdeen Springfield Canal Company	0 50% of normal cut to run full season	Oct 15
Snake River Valley Irrigation District	0	Aug 15 - Sep 15
Falls Irrigation District	10,000	Oct 15
American Falls Reservoir District #2	0	Aug 30
Burley Irrigation District	0	Off - Normal
Upper Valley	50,000	

#### VII. Fall/winter (1992-93) Operations

This year's fall/winter operations will not be constrained or limited by storage space. We will not have to be concerned with passing water downstream unnecessarily, but rather the limiting factor will be the base inflow. If reservoirs are empty or at the top of inactive space, releases will be limited by inflow. Any water released from reservoirs above American Falls can be captured there. We expect that the fall/winter releases will be as follows:

Jackson Dam                      inflow or 280 cfs (supplemented by Wyoming's water to get to 280 cfs),

<b>Palisades</b>	<b>1,000 to 1,100 cfs (inflow may be in the 2,000 cfs range),</b>
<b>Island Park</b>	<b>100 cfs, (inflow may in the 200 cfs range)</b>
<b>Ririe</b>	<b>0 cfs,</b>
<b>Henry's Lake</b>	<b>0 cfs (is normally 0),</b>
<b>Grassy Lake</b>	<b>0 cfs (is normally 0),</b>
<b>American Falls</b>	<b>300 cfs,</b>
<b>Minidoka Dam/ Lake Walcott</b>	<b>winter inflow 400 to 500 cfs,</b>
<b>Milner</b>	<b>inflow 500 to 700 cfs.</b>

**Fall/winter inflows below American Falls, occurring after October, can not be stored in Milner or Minidoka because of winter operating restrictions from icing and/or limited storage capacity. \***

*Home*

MEMORANDUM

DATE: JUNE 3, 1992

TO: FILES

FROM: DAVID SHAW *DS*

*pcy*

SUBJECT: WATER DISTRIBUTION FOR THE GRAND TETON CANAL COMPANY

I was contacted yesterday by Melvin Strong, telephone 354-2971, regarding distribution of water to the Grand Teton Canal Company. Mr. Strong told me he had been informed that D. O'Brian, the Idaho Deputy Watermaster for Teton Creek, was going to regulate the Grand Teton diversions on June 3rd and reduce their diversion to the May 1, 1892 water right amount of 127.2 cfs. Mr. Strong referred to an August 2, 1988 letter from Lynne Krogh-Hampe indicating the State District Court in the SRBA may not have jurisdiction to adjudicate the water rights of the Grand Teton Canal Company and he questioned under the circumstances, whether the Idaho Watermaster had authority to regulate the Canal Company.

I assured Mr. Strong the terms of the Roxanna Decree were not changed at this point by the SRBA, and the authority vested in the Idaho Watermaster by the Roxanna Decree was unchanged. Mr. Strong still questioned the Watermaster's authority and I told him I would investigate further and call him before the day was over.

I then reviewed the Roxanna Decree, the Rexburg Decree, and the Grand Teton Canal Company vs. Lynn Crandall Decrees to be certain the Idaho Watermaster had authority to regulate the water rights of the Grand Teton Canal Company and to further identify those water rights. I contacted Lyle Swank in Idaho Falls and verified the water rights of record for the Grand Teton Canal Company, I also spoke with Frank Carr in Wyoming regarding the regulation problem. By the time I reached Mr. Carr, apparently Mr. Strong had already called the Wyoming office and arrangements had been made for the Idaho Watermaster, Mr. O'Brian, and the Wyoming equivalent of the Watermaster to regulate the Grand Teton Canal Company headgates on the morning of June 3rd. Mr. Carr indicated a desire to have the Grand Teton Canal Company water rights decreed in the SRBA since there is no record of the Canal Company water rights in Wyoming. I assured him the rights were included in the Rexburg Decree and we would pursue further the possibility of including the water rights in the SRBA.

I then re-contacted Mr. Strong and explained to him what I had found and that the headgates of the Grand Teton Canal Company would be adjusted and posted on the morning of June 3rd. Mr. Strong also expressed his desire to have the water rights of the Grand Teton Canal Company included in the SRBA and I told him we would explore further the options for bringing those water rights under the jurisdiction of the Idaho Court. I also told Mr. Strong that based upon stream flow forecasts the Grand Teton Canal Company's May 1, 1892 water right would probably not be deliverable for much longer. When I spoke with Lyle Swank, he indicated forecasts showed the May 1, 1892 water right may only be good through the end of this week.

We will find and attach a copy of the August 2, 1988 letter to this memorandum, since I understand Mr. Strong has contacted a number of people within the department. As far as I know the situation is resolved for the present time. Apparently, there has been some on going differences of opinion about the regulation of the Grand Teton Canal Company and Mr. Strong expressed his concerns, that while Grand Teton Canal Company had installed a new headgate and rating section for the canal, no other Wyoming water users had comparable control works and he had requested the Idaho Watermaster to rate the new section for the canal and the rating had never been completed.

By copy of this memo, I am passing this information on to the Water District 1 Watermaster.

AGENDA

Vault -  
WDO1 file -  
NCG

Tuesday, June 2, 1992 - 9:30 A.M.  
Committee of Nine Meeting  
Pocatello Airport

- I. Call to Order - Moss
- II. Minutes of Committee of Nine Meeting of April 2, 1992 - Beck
- III. Water Supply and Drought Operations
  - A. Watershed and Reservoirs - John Dooley
  - B. Operational Measures to Insure Proper Deliveries - Carlson
    - 1. Extraordinary Enforcement Measures
    - 2. Additional Costs
    - 3. Controls Implemented for Ordering Water
  - C. Discussion Regarding Drying Snake River at Blackfoot Reach - USF&W
  - D. IDWR - Comments on Drought - Higginson/Young
- IV. Report of Rental Pool Committee - Storer
- V. Snake River Water Rental Group and Northwest Power Planning Council Request for Augmented Snake River Flows - Higginson/Keys
- VI. Contract (MOU) Between Water District 01 and IDWR - Higginson/Carlson
- VII. Financial Report - Storer
- VIII. Report of Interim Finance Committee - Raybould
  - A. Status of Finance Committee Progress on Implementation of Accounting System
  - B. Status of Search for Permanent Treasurer
- IX. Other Business
  - A. Endangered Species Act/Salmon Issue - Higginson
  - B. Reapportionment Committee - Rosholt
- X. Adjourn - 2:30 p.m.

MINUTES

DRAFT

Committee of Nine  
April 2, 1992  
Pocatello Airport

Chairman DeWitt Moss Conducting

Committee of Nine members attending: DeWitt Moss, Paul Berggren, Wayne Lincoln, Claude Lilya, Dale Rockwood, Claude Storer, Jeff Marotz, James Siddoway, Leonard Beck. Others in attendance: Director Keith Higginson, Watermaster Ron Carlson, Attorneys Roger Ling, John Rosholt, Ray Rigby, Bureau personnel Earl Corless and Harold Short. Jim Bright, Leonard Scheer, Dick Oneida, Merle Kunz, Dale Swensen, Dell Raybould; Gaylen Myers and Grant Wyatt from Southwest Irrigation District and Bill Kevan from Salmon River Canal Company also attended.

Minutes of the March 3rd Committee of Nine meeting were read. Claude Storer moved and Dale Rockwood seconded that the minutes be approved as read. Motion passed.

Chairman Moss then asked for comments regarding Jeff Marotz being appointed to the Water Rental Committee. Hearing no opposition, Jeff was then asked to do so and he accepted.

Earl Corless from the Bureau gave a water outlook to those present. System is now 80% full. American Falls needs 200,000 acre feet to fill, 116,000 of this is last to fill water. Palisades will be dependent upon water requests whether it fills, and Jackson, Earl "says" will fill. Snow pack is around 60% of normal.

Southwest Irrigation presented to the Committee a proposal of renting 6,700 acre feet of water of Salmon River Canal Company space. This water is to be rented through the Water Bank. Harold Short then commented that water in Palisades the District would have to comply with R.R.A. regulations. This proposal is to be examined by the Rental Pool Committee with recommendations on whether to proceed with this proposal was asked for within ten days.

Claude Storer reported on water rental matters. He stated that excepting long term leases, there is 50,000 acre feet of requests and 50,000 acre feet of space assigned. He then asked for comments relating to Southwest's proposal. Discussion then ended by the asking of the three attorneys present to read the proposal and to offer comments to Claude as to whether it fits into the framework of the adopted rules and regulations of water rentals.

Dell Raybould reported on the Finance Committee meeting of March 17th. Accounting firm of Rudd & Co. had made a review of Water District 01 accounting

procedures and met with the Committee on the above date with the following recommendations:

- 1) Double entry accounting system should be implemented.
- 2) Some type of inventory control system, example for accounting of water rentals.
- 3) Implement an accrual basis instead of a cash basis.
- 4) Upgrading computer capabilities to assist in the accounting procedures of the District.
- 5) Change of accounting year to assist in a more defined up-to-date audit for the annual District meeting.
- 6) Periodic overview by a qualified financial advisor.
- 7) Accounting firm to assist in setting up and training office staff in these recommendations.

Comments were then discussed in regards to keeping the finances of the District within the District office or employing outside personnel to do this. Paul Berggren then moved to allow the Finance Committee to employ Rudd & Co. to:

- 1) Assist appropriate District 01 staff in implementing these accounting changes.
- 2) Purchase needed upgraded computer software. This cost is not to exceed \$2,500.00.

Claude Storer seconded motion and motion passed without dissent. Claude then moved to change the accounting year, which starts on March 1 and goes through February 28, to start on November 1 and go through October 31. Dale Rockwood seconded this motion and it passed without dissent. Wayne Lincoln moved to appoint Claude Storer as interim District 01 Treasurer with per diem costs of \$30.00 plus mileage. This will be until a permanent treasurer is employed. Paul Berggren seconded this motion and it passed without dissent.

DeWitt then commented on his recent meetings in Washington D.C.

Keith Higginson commented on legislative issues both current and those that have passed. He also commented on the draft of proposed workability study between the District and his office.

Meeting adjourned at 12:20 p.m.

05119201.JAR

**1992 SNAKE RIVER DROUGHT IMPACT MAP**

- LANDS CURRENTLY OUT OF WATER 
- LANDS PROJECTED TO BE OUT IN JUNE 
- LANDS PROJECTED TO BE OUT IN JULY 
- LANDS PROJECTED TO BE OUT IN AUGUST 
- LANDS HAVING A FULL WATER SUPPLY 
- STATUS OF WATER SUPPLY UNKNOWN 

June 17, 1976

WATER DISTRICTS

Water District 01, Upper Snake River

Water District 01 is composed of Snake River and its tributaries from the point where the river enters the State of Idaho downstream to Milner Dam which is located between Burley and Twin Falls, excluding Water Districts: 27, Blackfoot River; 29, Portneuf River; 41, Rock Creek; 43-A, Raft River and 45-N, Dry Creek. It includes areas in Fremont, Madison, Teton, Jefferson, Bonneville, Bingham, Bannock, Power, Minidoka, Cassia, Jerome and Twin Falls counties.

Water District 11, Bear River

Water District 11 is composed of the entire Bear River Drainage in Idaho, excluding those tributary streams which are set up as separate water districts. Those water districts which are excluded are as follows: 11-A, Eight Mile and Bailey Creeks; 11-B, Soda Creek; 11-E, Paris Creek; 11-F, Thomas Fork; 11-H, Montpelier Creek; 11-J, Bloomington Creek; 13-A, Cub River; 13-L, Battle Creek; 13-M, Cottonwood Creek; 13-N, Mink Creek; 13-P, North Fork Trout Creek; 13-O, Middle Fork Trout Creek; 13-R, Oxford Creek; and 13-S, Whiskey Creek. Water District 11 is located in Bear Lake, Caribou, and Franklin counties.

Water District 11-A, Eight Mile and Bailey Creeks

Water District 11-A is composed of the entire Eight Mile and Bailey Creek drainages and is located in Caribou and Bear Lake counties.

Water District 11-B, Soda Creek

Water District 11-B is composed of the entire Soda Creek drainage and is located in Caribou county.

Water District 11-E, Paris Creek

Water District 11-E is composed of the entire Paris Creek drainage basin and is located in Bear Lake county.

Water District 11-F, Thomas Fork

Water District 11-F is composed of the entire Thomas Fork drainage and is located in Bear Lake county.

Water District 11-H, Montpelier Creek

Water District 11-H is composed of the entire Montpelier Creek drainage basin and is located in Bear Lake county.

Water District 11-J, Bloomington Creek

Water District 11-J is composed of the entire Bloomington Creek drainage and is located in Bear Lake county.

Water District 13-A, Cub River

Water District 13-A is composed of that portion of the Cub River drainage located in the State of Idaho is situated in Franklin county.

Water District 13-L, Battle Creek

Water District 13-L is composed of the entire Battle Creek drainage basin and is located in Franklin county.

Water District 13-M, Cottonwood Creek

Water District 13-M is composed of the entire Cottonwood Creek drainage basin and is located in Franklin county.

Water District 13-N, Mink Creek

Water District 13-N is composed of the entire Mink Creek drainage basin and is located in Franklin county.

Water District 13-P, North Fork Trout Creek

Water District 13-P is composed of the entire North Fork of Trout Creek drainage basin to its junction with Trout Creek and is located in Caribou county.

Water District 13-Q, Middle Fork Trout Creek

Water District 13-Q is composed of the entire Middle Fork of Trout Creek drainage basin to its junction with Trout Creek and is located in Caribou county.

Water District 13-R, Oxford Creek

Water District 13-R is composed of the entire Oxford Creek drainage basin and is located in Franklin county.

Water District 13-S, Whiskey Creek

Water District 13-S is composed of the entire Whiskey Creek drainage basin and is located in Caribou county.

Water District 27, Blackfoot River

Water District 27 includes the entire Blackfoot River drainage basin and is located in Bingham and Caribou counties.

Water District 29, Portneuf River

Water District 29 is composed of the entire Portneuf River drainage basin with the exception of Water Districts 29-C, Mink Creek; 29-F, Rapid Creek; 29-H, Marsh Creek; and 29-U, Bill Jackson Creek, and is located in Bannock and Caribou counties.

Water District 29-C, Mink Creek

Water District 29-C is composed of the entire Mink Creek drainage basin to its junction with the Portneuf River and is located in Bannock county.

Water District 29-F, Rapid Creek

Water District 29-F is composed of the entire Rapid Creek drainage basin to its junction with the Portneuf River and is located in Bannock county.

Water District 29-H, Marsh Creek

Water District 29-H is composed of the entire Marsh Creek drainage basin to its junction with the Portneuf River and is located in Bannock county.

Water District 29-U, Bill Jackson Creek

Water District 29-U is composed of the entire Bill Jackson Creek drainage basin to its junction with the Portneuf River and is located in Bannock county.

Water District 31, Mud Lake and its Tributaries

Water District 31 is composed of Mud Lake and the entire Camas Creek drainage basin and is located in Clark and Jefferson counties.

Water District 32-C, Medicine Lodge Creek

Water District 32-C is composed of the entire Medicine Lodge Creek drainage basin and is located in Clark county.

Water District 55-A, Jackson Creek

Water District 55-A is composed of the Jackson Creek drainage basin and is located in Owyhee county.

Water District 57-B, Catherine Creek

Water District 57-B is composed of the entire Catherine Creek drainage basin to its junction with Castle Creek and is located in Owyhee county.

Water District 57-C, Castle Creek

Water District 57-C is composed of the entire Castle Creek drainage basin, with the exception of Water District 57-B, and is located in Owyhee county.

Water District 57-D, Sinker Creek

Water District 57-D is composed of the entire Sinker Creek drainage basin and is located in Owyhee county.

51 E Water District 57-R, Reynolds Creek

Water District 57-R is composed of the entire Reynolds Creek drainage basin and is located in Owyhee county. It is a result of the combining of Water Districts 57-A and 57-J.

Water District 61-A, Canyon Creek

Water District 61-A is composed of the entire Canyon Creek drainage basin to its junction with Squaw Creek and is located in Elmore county.

Water District 61-C, Bennett Creek

Water District 61-C is composed of the entire Bennett Creek drainage basin and is located in Elmore county.

Water District 61-D, Little Canyon Creek

Water District 61-D is composed of the entire Little Canyon Creek drainage basin and is located in Elmore county.

Water District 61-E, Cold Springs Creek

Water District 61-E is composed of the entire Cold Springs Creek drainage basin and is located in Elmore county.

Water District 61-F, King Hill Creek

Water District 61-F is composed of the entire King Hill Creek drainage basin and is located in Elmore county.

Water District 63, Boise River

Water District 63 is composed of the entire Boise River Drainage basin excluding Water Districts 63-B, Smith Creek; 63-P, Poor Boy Ditch; and 63-T, Warm Springs Creek. Water District 63 is located in Ada, Canyon, Elmore, Boise and Camas counties.

Water District 63-B, Smith Creek

Water District 63-B, Smith Creek is composed of the entire Smith Creek drainage basin and is located in Elmore county.

Water District 63-P, Poor Boy Ditch

Water District 63-P is composed of the Poor Boy Ditch which has its heading near the midway point of the south boundary of the NE $\frac{1}{4}$ , Sec. 14; Twp. 4N, Rge. 4W, B.M., and diverts water from the south drain of Drainage District No. 6 and is located in Canyon county.

Water District 63-T, Warm Springs Creek

Water District 63-T is composed of the entire Warm Springs Creek drainage basin and is located in Canyon county.

Water District 65-A, Squaw Creek

Water Dist. 65-C Willow, Rock & L. Rock Cr.

Water District 65-A is composed of the entire Squaw Creek drainage basin and is located in Gem Valley and Boise counties.

Water District 65-D, Boulder Creek

Water District 65-D is composed of the entire Boulder Creek drainage basin and is located in Valley county.

Water District 65-K, Lake Fork Creek

Water District 65-K is composed of the entire Lake Fork drainage basin and is located in Valley county.

Water District 65-L, Warm Springs & Scriver Creeks

Water District 65-L is composed of the Warm Springs and Scriver Creek drainage basins and is located in Boise county.

Water Dist. 65-M Scriver Creek

Water District 67, Weiser River

Water District 67 is composed of the entire Weiser River drainage basin, with the exception of Water District 67-A which is composed of the Little Weiser River drainage. The Weiser River is located in Adams and Washington counties.

Water District 67-A, Little Weiser River

Water District 67-A is composed of the entire Little Weiser River drainage basin to its junction with the Weiser River and is located in Adams and Washington counties.

Water District 72-B, Garden Creek

Water District 72-B is composed of the entire Garden Creek drainage basin and is located in Custer county.

Water District 72-C, Challis Creek

Water District 72-C is composed of the entire Challis Creek drainage basin and is located in Custer county.

Water District 72-F, Morgan Creek

Water District 72-F is composed of the entire Morgan Creek drainage basin to its junction with the Salmon river and is located in Custer county.

Water District 73, Pahsimeroi River

Water District 73 is composed of the entire Pahsimeroi River drainage basin and is located in Custer and Lemhi counties.

Water District 74-A, Geertsen Creek

Water District 74-A is composed of the entire Geertsen Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-B, Kirtley Creek

Water District 74-B is composed of the entire Kirtley Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-C, Bohannan Creek

Water District 74-C is composed of the entire Bohannan Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-F, Pratt Creek

Water District 74-F is composed of the entire Pratt Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-G, Sandy Creek

Water District 74-G is composed of the entire Sandy Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-J, Withington Creek

Water District 74-J is composed of the entire Withington Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-K, Pattee Creek

Water District 74-K is composed of the entire Pattee Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-M, Agency Creek

Water District 74-M is composed of the entire Agency Creek drainage basin to its junction with the Lemhi River and is located in Lemhi county.

Water District 74-Q, Mill Creek

Water District 74-Q is composed of the entire Mill Creek, Peterson Creek and Alder Creek drainage basins to their junction with the Lemhi River and is located in Lemhi county.

Water District 74-U, Andrews and Slough Ditch

Water District 74-U is composed of all the lands irrigated by the Andrews and Slough Ditch system and is located in Lemhi county.

Water District 74-W, Texas, Hawley, Timber, Junction, Bull, Jake and Canyon Creeks.

Water District 74-W is composed of the entire drainage basins of Texas, Hawley, Timber, Junction, Bull, Jake, Canyon and Eighteen Mile Creeks and is located in Lemhi county.

Water District 74-Y, Yearian Creek

Water District 74-Y is composed of the entire Yearian Creek drainage basin and is located in Lemhi county.

Water District 74-Z, Big Eight Mile and Lee Creeks

Water District 74-Z is composed of the entire Big Eight Mile and Lee Creek drainage basins to their junction with the Lemhi River and is located in Lemhi county.

Water District 75-A, Jesse Creek

Water District 75-A is composed of the entire Jesse Creek drainage basin and is located in Lemhi county.

Water District 75-B, Williams Creek

Water District 75-B is composed of the entire Williams Creek drainage basin and is located in Lemhi county.

Water District 75-C, Runsten-Minzer Ditch

Water District 75-C is composed of all the lands irrigated by the Runsten-Minzer Ditch system and is located in Lemhi county.

Water District 75-D, Carmen Creek

Water District 75-D is composed of the entire Carmen Creek drainage basin and is located in Lemhi county.

Water District 78-A, Big Creek

Water District 78-A is composed of the entire Goose Creek drainage basin and is located in Adams county.

Water District 78-C, Goose Creek

Water District 78-C is composed of the entire Goose Creek drainage basin and is located in Adams county.

Water District 95-A, Hayden Lake

Water District 95-A is composed of the entire Hayden Lake drainage basin, including the Avondale Lake drainage, to and including the outlet control dam on Hayden Lake, and is located in Kootenai county.

Lewellyn Cr 96 A

Blanchard D 96 D