

SINKER CREEK WATERMASTER REPORT
AND
WATER ALLOCATION WORKSHEET

Introduction and Guidelines For Use

The Sinker Creek Watermaster Report/Water Allocation Worksheet form has been designed to replace the Watermaster Daily Record Book currently in use by Idaho Water Districts. The new reporting method is specific to the Sinker Creek drainage, taking into account the unique character of the creek and the irrigation systems utilizing it.

On the attached sample Report form, a schematic diagram depicts the Sinker Creek drainage from Hulet Reservoir in Sec 11, T4S R2W, to its confluence with Snake River in Sec 6, T3S R1E. Four water users hold all the water rights delivered along these reaches. Murphy Mutual Canal (MMC) delivers storage water from Hulet Reservoir and/or natural flow from Sinker Creek to lands owned by Jay Hulet on Murphy Flat. MMC may also deliver Sinker Creek natural flow to lands on Murphy Flat owned by Joyce Land and Livestock. Diversion points downstream from Hulet Dam along Sinker Creek serve Joyce Land and Livestock, Edwards Ranch (previously Tyson Ranch) and Nahas Ranch.

By measuring and recording flows at all diversions and monitoring points, the Watermaster is able to calculate the natural, or unadjusted, flow in the Sinker Creek. The Water Allocation Worksheet then enables the Watermaster to determine, based on natural flow, a relative order of water delivery. If there is flow which is misappropriated, points of adjustment are easily identified. If excess flow is available, the Watermaster may deliver it in priority order, and minimize waste. (See Attachment A, from an IDWR draft Watermaster Handbook, for a more comprehensive discussion of natural flow water allocation.)

The following guidelines will be helpful in completing the form:

1. Each day the Watermaster is on duty, all diversions and monitoring locations specified on the report form must be measured and recorded. The legal descriptions of all measuring points are listed in Attachment B.
2. All diversions related to a water right are labeled "D", for example, D8 is a diversion used by Joyce Land and Livestock. Those measurements which represent a monitoring flow or a cumulative total flow are labeled "Q", for example, QA is a point in upper Sinker Creek just below Hulet Dam which is used for, among other things, reservoir outflow adjustment. Note that QM, the flow entering MMC, may be a combination of direct flows (D1 and D3), and stored flows (D2). The breakdown is dependent upon a variety of factors and the information must be obtained from the water users on each measurement day.

3. The formula for Computing Natural Flows uses flows recorded for that measurement day. Computation of natural flows is necessary for Sinker Creek because of the gaining nature of the stream. Springs or irrigation returns recharge flows throughout the drainage and can increase total water availability. NA represents Natural Flow at point A, which is the same location as the weir at which QA is measured. Under normal delivery conditions, QA and QI are identical. NB represents Natural Flow at point B, which is the location at which QB is assessed. GA-B is the gain in flow from all sources between point A and point B.
4. The use of the Water Allocation Worksheet (page 2) begins by transferring the calculated NA and NB values from page 1 to their respective blanks near the top of the worksheet. These blanks are in two columns labeled RNF - Remaining Natural Flow. Each column represents a reach or segment of Sinker Creek in which a right is diverted. The left-most column lists all water users and the amounts of their water rights in priority ranking. (For a more complete water rights listing, see Attachment C.) As each right is fulfilled in order, the amount of the diversion (DIV) is entered into the corresponding reach column. The diverted flow is then subtracted from RNF in that reach and the reach below, if applicable. (Hint: when a blank is present, a value is required.) Rights with shared rankings must both be satisfied or both must be reduced. When RNF reaches zero in Reach B, water allocation ceases.
5. Particular attention must be paid to the sum of the Joyce diversions and the conditions of their use. Joyce may divert at either MMC (in reach A) or directly from Sinker Creek (in reach B). Because of the gaining nature of Reach B below Hulet Dam, the total Joyce diversions in Reach B can easily exceed the amount originally available at QA. This is acceptable so long as this total plus the amount of natural flow to Joyce in MMC does not exceed the Joyce decreed rights (21.07 cfs) and rights ranked 3 and 4 are satisfied. If Joyce is diverting to MMC for use beyond NE $\frac{1}{4}$ S25, T3S R1W, the right ranked 7a must also be satisfied. Excess natural flows which are deliverable in priority order at MMC must be credited to Hulet under right no. 6.
6. If actual diversions differ substantially from what the worksheet says they should be, misappropriations are occurring and adjustments should be made, contingent upon demand. Not all water users will demand all flow at all times, and those diversions which are declined may be deleted from the allocation schedule, and that water re-allocated to remaining rights in priority order. If any flow is declined, be sure to make a note in comments.
7. The form should be filled out completely and administered in the field. Be sure to sign and date the form at the end of the trip. This form will become a part of the official permanent records of the Water District.

3. If Joyce is over-diverting, notify Paul Nettleton that an immediate adjustment is necessary. Paul may continue to operate the Sinker Creek diversions without controlling works, however, any requested adjustments must be made within two hours of the Watermaster visit.
4. If Joyce total diversions exceed 21.07 cfs and downstream rights are satisfied, the following action may be taken: The distribution of flow in MMC may be modified by reducing the natural flow amount recorded at D3 until total Joyce diversions (D3 + JLL) equal 21.07 cfs. Natural flow credited to Hulet in MMC will be increased by the same amount. Actual flows in MMC will not be altered. For example, if Joyce has 10 cfs in MMC and 17 cfs from Sinker Creek diversions for a total of 27 cfs, a reduction of the Joyce flow in MMC to 4 cfs will bring Joyce into compliance. The excess 6 cfs is to be distributed to Hulet under right no. 57-00181. Both Nettleton and Hulet must be advised of this action.
5. Any excess inlet flows measured above Hulet reservoir which are not accounted for after rights 1-5 are satisfied should be delivered and recorded to Hulet under the natural flow right 57-00181 (rank 6). Releases of stored water to meet Hulet's orders should only occur after natural flows are not available above the reservoir.

These guidelines go into effect on your next Watermaster visit. Please call me prior to that trip if possible so we may discuss them in more detail. My new phone number is 208-327-5406.

Sincerely,



Cindy Hodges
Sr. Water Resource Agent
Water Distribution Section

cc: Sherl Chapman
Jay Hulet
Paul Nettleton
Western Region WD File

SINKER CREEK WATERMASTER REPORT

DATE _____

Instructions for completing form

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

Note: Show all flows in cfs.D1 _____
HULET (natural)D2 _____
HULET (stored)D3 _____
JLLQM _____
CANAL TOTALQI _____
INLET

MMC

QA _____
CREEK

Sinker Creek

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

JLL TOTAL

D10 _____
EDWARDSD11 _____
NAHASQB _____
CREEK

SNAKE RIVER

Nahas
Reservoir**Computing Natural Flows**

$$\frac{\quad}{D1} + \frac{\quad}{D3} + \frac{\quad}{QA} = \frac{\quad}{NA}$$

$$\left(\frac{\quad}{JLL} + \frac{\quad}{D10} + \frac{\quad}{D11} + \frac{\quad}{QB} \right) - \frac{\quad}{QA} = \frac{\quad}{GA-B}$$

$$\frac{\quad}{GA-B} + \frac{\quad}{NA} = \frac{\quad}{NB}$$

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	<u>REACH A</u>		<u>REACH B</u>	
			DIV	RNF	DIV	RNF
				____ (NA)		____ (NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage _____

WATERMASTER SIGNATURE

SINKER CREEK WATERMASTER REPORT
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SINKER CREEK WATERMASTER REPORT

DATE _____

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3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

Note: Show all flows in cfs.D1 _____
HULET (natural)D2 _____
HULET (stored)D3 _____
JLLQM _____
CANAL TOTALQI _____
INLET

MMC

QA _____
CREEK

Sinker Creek

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

JLL TOTALD10 _____
EDWARDSD11 _____
NAHASQB _____
CREEKNahas
Reservoir

SNAKE RIVER

Computing Natural Flows

$$\frac{\quad}{D1} + \frac{\quad}{D3} + \frac{\quad}{QA} = \frac{\quad}{NA}$$

$$\left(\frac{\quad}{JLL} + \frac{\quad}{D10} + \frac{\quad}{D11} + \frac{\quad}{QB} \right) - \frac{\quad}{QA} = \frac{\quad}{GA-B}$$

$$\frac{\quad}{GA-B} + \frac{\quad}{NA} = \frac{\quad}{NB}$$

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	<u>REACH A</u>		<u>REACH B</u>	
			DIV	RNF	DIV	RNF
				____ (NA)		____ (NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage _____

WATERMASTER SIGNATURE

SINKER CREEK WATERMASTER REPORT

DATE Aug 10 - 97

Made inlet run, Requested
by Jay. Made no other measurements
Received These forms in mail Aug 11 - 97

Instructions for completing form

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Note: Show all flows in cfs.

D1 .6
HULET (natural)

D2 9.04
HULET (stored)

D3 1.24
JLL

QM 10.88
CANAL TOTAL

QI 1.84 cfs
INLET

Pauls upper ground water pump
and Reft pump not running
Bench field not running

MMC

QA 0
CREEK

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

JLL TOTAL

D10 _____
EDWARDS

D11 _____
NAHAS

D12 _____
QB _____
CREEK

Nahas
Reservoir

Computing Natural Flows

$$\frac{.6}{D1} + \frac{1.24}{D3} + \frac{0}{QA} = \frac{1.84}{NA}$$

$$\left(\frac{\quad}{JLL} + \frac{\quad}{D10} + \frac{\quad}{D11} + \frac{\quad}{QB} \right) - \frac{\quad}{QA} = \frac{\quad}{GA-B}$$

$$\frac{\quad}{GA-B} + \frac{\quad}{NA} = \frac{\quad}{NB}$$

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	REACH A		REACH B	
			DIV	RNF	DIV	RNF
				_____(NA)		_____(NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

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COMMENTS/TRIP LOG

Called Baker and left message with Edwards daughter that if they want more or less water to inform me. Baker said he was fine, and heard nothing from Edwards.

Mileage 64

Mary Blackstock
WATERMASTER SIGNATURE

SINKER CREEK WATERMASTER REPORT

DATE Aug 14-97**Instructions for completing form**

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
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6. Sign and date form.

Note: Show all flows in cfs.

D1 .6
HULET (natural)

D2 20.93 *weir submerged*
HULET (stored)

D3 1.24
JLL

QM 22.77
CANAL TOTAL

QI 1.84
INLET

Hulet
Reservoir

MMC

QA 0
CREEK

D4 0D5 .23 *Noweir.*D6 .78 *No weir*D7 .48 *Noweir.*D8 .18 *Noweir*D9 .29 *No weir*

1.96
JLL TOTAL

*pumps pump to canal out
pumps ground water pump in*

D10 2.57
EDWARDS

D11 .629
NAHAS

QB .79
CREEK

Nahas
Reservoir

$$\begin{array}{r} 1.37 \\ - .79 \\ \hline .60 \end{array}$$

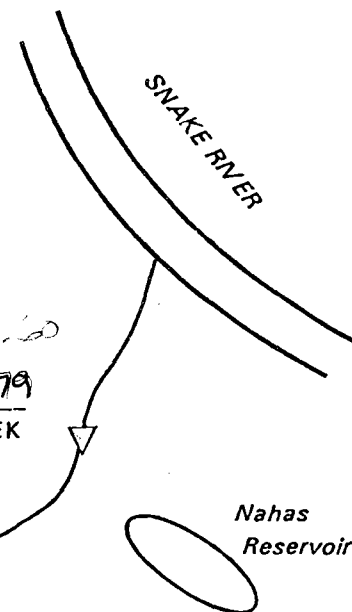
Nahas

Computing Natural Flows

$$\frac{.6}{D1} + \frac{1.24}{D3} + \frac{0}{QA} = \frac{1.84}{NA}$$

$$\frac{1.96}{JLL} + \frac{2.57}{D10} + \frac{.629}{D11} + \frac{.79}{QB} + \frac{0}{QA} = \frac{5.949}{GA-B}$$

$$\frac{5.949}{GA-B} + \frac{1.84}{NA} = \frac{7.789}{NB}$$



WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	REACH A		REACH B	
			DIV	RNF	DIV	RNF
				<u>1.84</u> (NA)		<u>7.789</u> (NB)
D1 HULET	1	0.6	<u>.6</u>	<u>1.24</u>		<u>6.549</u>
D3-9 JOYCE*	1	1.0**	<u>1.24</u>	<u>0</u>	<u>1.96</u>	<u>4.589</u>
D3-9 JOYCE*	2	16.23**	—	—	—	—
D3-9 JOYCE*	3	1.44**	—	—	—	—
D10 EDWARDS	3	6.56			<u>2.57</u>	<u>2.019</u>
D11 NAHAS	4	2.63			<u>.629</u>	<u>+1.39</u>
D3-9 JOYCE*	5	2.46**	—	—	—	—
D1 HULET	6	54.5	—	—	—	—
D11 NAHAS	7a	0.97			—	—
D11 NAHAS	7b	0.834			—	—

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Pauls ground water pumps were running
Pauls left pump to canal running
Bench field 1. CFS

Says stored water with stick on weir, 20.93 CFS Weir Submerged.

Mary M. Blackstock
WATERMASTER SIGNATURE

Aug 14-97

Jay Requested me to check or see what was going on around canal on 8-14-99.



There were 265 sprinklers Running.

Bench field Running 1. CFS
canal staff Read 5.36 For 56.07 CFS
Stick on Weir was .74 = 20.93 CFS (Weir Submerged)
Paul Had Ground Water Pumping.
Paul Had Refit to Canal on.

7/97

Page 1

SINKER CREEK WATERMASTER REPORT

DATE Sept 3-97**Instructions for completing form**

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

Note: Show all flows in cfs.

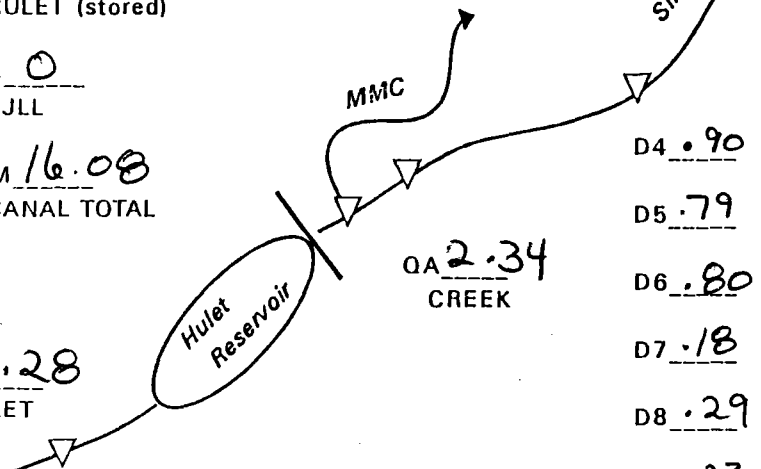
D1 .6
HULET (natural)

D2 15.48
HULET (stored)

D3 0
JLL

QM 16.08
CANAL TOTAL

QI 1.28
INLET



D4 .90

D5 .79

D6 .80

D7 .18

D8 .29

D9 .23

3.19
JLL TOTAL

QB .69
CREEK

D11 .600
NAHAS

D10 2.27
EDWARDS

Nahas
Reservoir

Computing Natural Flows

$$\frac{.6}{D1} + \frac{0}{D3} + \frac{2.34}{QA} = \frac{2.94}{NA}$$

$$\frac{(3.19 + 2.27)}{JLL} + \frac{.60}{D11} + \frac{.69}{QB} - \frac{2.34}{QA} = \frac{4.41}{GA-B}$$

$$\frac{4.41}{GA-B} + \frac{2.94}{NA} = \frac{7.35}{NB}$$

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	REACH A		REACH B	
			DIV	RNF	DIV	RNF
				____(NA)		____(NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

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COMMENTS/TRIP LOG

Sprinklers on top not running
Bench not running.
Relift not running,
Pauls Ground Water Pump running

One big rain shower came thru.
inlet measurement .20 adjusted for Heavy Rain. to .18 for 1.28 CFS
Bar for creek dam gone, Paul + Jay Blame each other, called Both
and informed if bar not in place Friday morning, I would Hire a welder.

Mileage 99.

Mary Blackstock
WATERMASTER SIGNATURE

7/97

Page 1

SINKER CREEK WATERMASTER REPORT

DATE Sept 5-97

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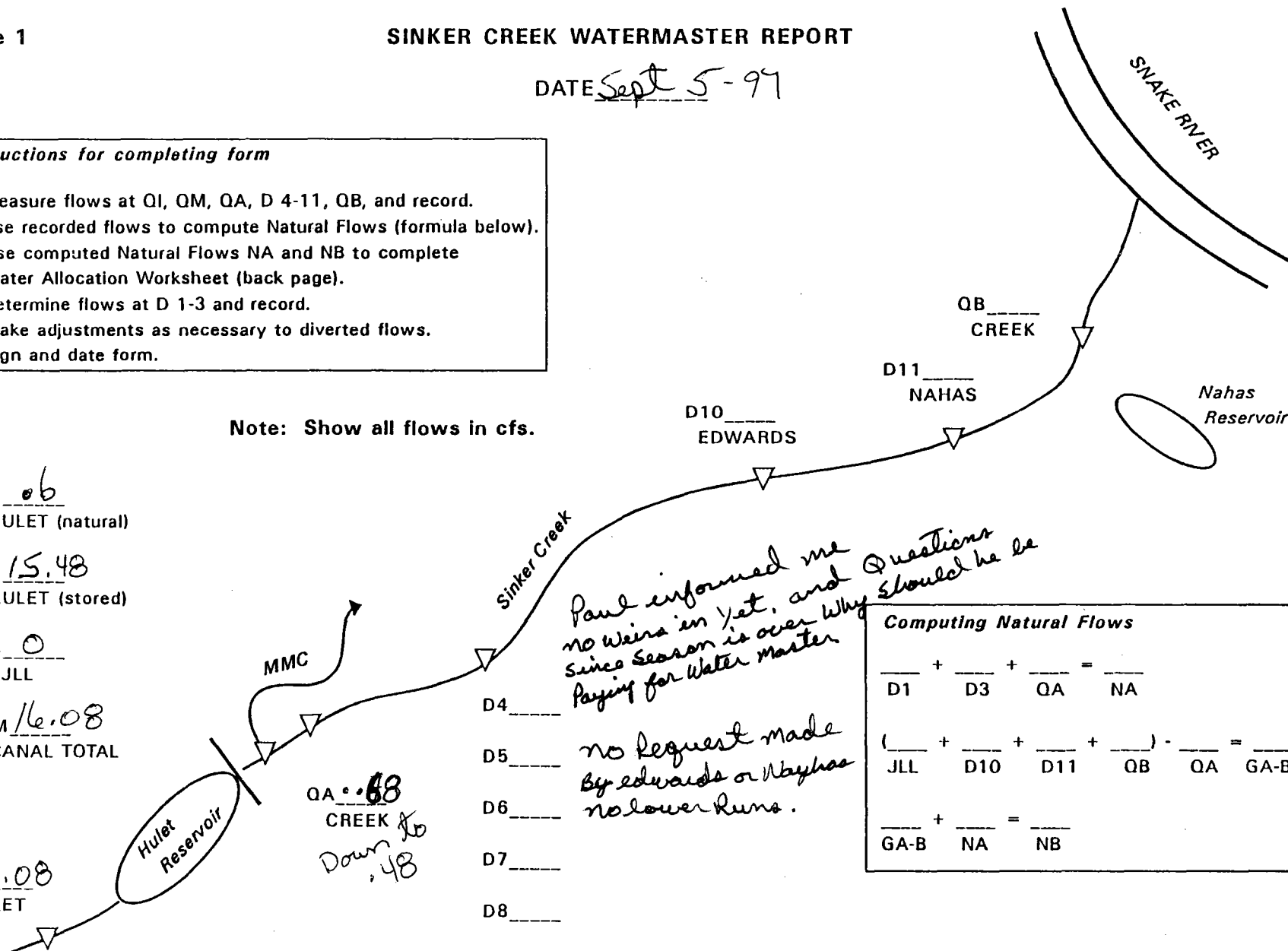
D1 06
HULET (natural)

D2 15.48
HULET (stored)

D3 0
JLL

QM 16.08
CANAL TOTAL

QI 1.08
INLET



*Paul informed me
no weirs in yet, and questions
since season is over why should he be
paying for water master.*

*no request made
by edwards or nahas
no lower runs.*

Computing Natural Flows

$$\frac{\text{D1}}{\text{D1}} + \frac{\text{D3}}{\text{D3}} + \frac{\text{QA}}{\text{QA}} = \frac{\text{NA}}{\text{NA}}$$

$$\left(\frac{\text{JLL}}{\text{JLL}} + \frac{\text{D10}}{\text{D10}} + \frac{\text{D11}}{\text{D11}} + \frac{\text{QB}}{\text{QB}} \right) - \frac{\text{QA}}{\text{QA}} = \frac{\text{GA-B}}{\text{GA-B}}$$

$$\frac{\text{GA-B}}{\text{GA-B}} + \frac{\text{NA}}{\text{NA}} = \frac{\text{NB}}{\text{NB}}$$

1.96
JLL TOTAL

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	<u>REACH A</u>		<u>REACH B</u>	
			DIV	RNF	DIV	RNF
				_____ (NA)		_____ (NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

- * If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.
- ** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage 64

Mary Blackstock
WATERMASTER SIGNATURE

SINKER CREEK WATERMASTER REPORT

DATE Sept 8-97**Instructions for completing form**

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

Note: Show all flows in cfs.D1 .6
HULET (natural)D2 9.71
HULET (stored)D3 0
JLLQM 10.31
CANAL TOTALQI .70
INLETQA .1
CREEK

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

1.96
JLL TOTALD10 _____
EDWARDSD11 _____
NAHASQB _____
CREEKNahas
Reservoir

Sinker Creek

No Lower Run

MMC

Hulet
Reservoir**Computing Natural Flows**

$$\frac{\quad}{D1} + \frac{\quad}{D3} + \frac{\quad}{QA} = \frac{\quad}{NA}$$

$$\left(\frac{\quad}{JLL} + \frac{\quad}{D10} + \frac{\quad}{D11} + \frac{\quad}{QB} \right) - \frac{\quad}{QA} = \frac{\quad}{GA-B}$$

$$\frac{\quad}{GA-B} + \frac{\quad}{NA} = \frac{\quad}{NB}$$

SNAKE RIVER

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	<u>REACH A</u>		<u>REACH B</u>	
			DIV	RNF	DIV	RNF
				_____(NA)		_____(NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage 64


WATERMASTER SIGNATURE

7/97

Page 1

SINKER CREEK WATERMASTER REPORT

DATE 9-17-97

Instructions for completing form

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

Note: Show all flows in cfs.

D1 .38
HULET (natural)

D2 3.31
HULET (stored)

D3 0
JLL

QM 3.69
CANAL TOTAL

QI .79
INLET

QA .64
CREEK

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

1.96
JLL TOTAL

D10 _____
EDWARDS

D11 _____
NAHAS

QB _____
CREEK

Nahas
Reservoir

Snake River

No Lower Run

Computing Natural Flows

$$\frac{\text{D1}}{\text{D1}} + \frac{\text{D3}}{\text{D3}} + \frac{\text{QA}}{\text{QA}} = \frac{\text{NA}}{\text{NA}}$$

$$\left(\frac{\text{JLL}}{\text{JLL}} + \frac{\text{D10}}{\text{D10}} + \frac{\text{D11}}{\text{D11}} + \frac{\text{QB}}{\text{QB}} \right) - \frac{\text{QA}}{\text{QA}} = \frac{\text{GA-B}}{\text{GA-B}}$$

$$\frac{\text{GA-B}}{\text{GA-B}} + \frac{\text{NA}}{\text{NA}} = \frac{\text{NB}}{\text{NB}}$$

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	<u>REACH A</u>		<u>REACH B</u>	
			DIV	RNF	DIV	RNF
				____(NA)		____(NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

- * If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.
- ** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage 64

Mary Blackstock
WATERMASTER SIGNATURE

SINKER CREEK WATERMASTER REPORT

Instructions for completing form

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

DATE Sept 22 - 97

water at Highway in canal drying up, with little running
opened Res gate, no water amount
came up. opened creek canal gate
Took chains off.

The paper (note) 22 put in jays mail Box
for this date said Sept 20, but was the
Sept 22. my mistake

Note: Show all flows in cfs.

D1 _____
HULET (natural)D2 _____
HULET (stored)D3 _____
JLLQM _____
CANAL TOTALQI _____
INLET

MMC

QA _____
CREEK

Sinker Creek

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

JLL TOTAL

D10 _____
EDWARDSD11 _____
NAHASQB _____
CREEKNahas
Reservoir

Computing Natural Flows

$$\frac{\quad}{D1} + \frac{\quad}{D3} + \frac{\quad}{QA} = \frac{\quad}{NA}$$

$$\left(\frac{\quad}{JLL} + \frac{\quad}{D10} + \frac{\quad}{D11} + \frac{\quad}{QB} \right) - \frac{\quad}{QA} = \frac{\quad}{GA-B}$$

$$\frac{\quad}{GA-B} + \frac{\quad}{NA} = \frac{\quad}{NB}$$

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	REACH A		REACH B	
			DIV	RNF	DIV	RNF
				_____ (NA)		_____ (NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage 64

Mary Blackstock
WATERMASTER SIGNATURE

SINKER CREEK WATERMASTER REPORT

DATE Oct 18-95*Paul Requested a measurement of inlet & creek.***Instructions for completing form**

1. Measure flows at QI, QM, QA, D 4-11, QB, and record.
2. Use recorded flows to compute Natural Flows (formula below).
3. Use computed Natural Flows NA and NB to complete Water Allocation Worksheet (back page).
4. Determine flows at D 1-3 and record.
5. Make adjustments as necessary to diverted flows.
6. Sign and date form.

Note: Show all flows in cfs.D1 0
HULET (natural)D2 0
HULET (stored)D3 0
JLLQM 0
CANAL TOTALQI .70
INLETHulet
Reservoir

MMC

QA
CREEK*creek staff Reading**5.53 = 1.18 cfs**over creek weir .18 = 1.28 cfs*

Sinker Creek

D4 _____

D5 _____

D6 _____

D7 _____

D8 _____

D9 _____

D10
EDWARDSD11
NAHASQB
CREEKNahas
Reservoir

SNAKE RIVER

Computing Natural Flows

$$\frac{\quad}{D1} + \frac{\quad}{D3} + \frac{\quad}{QA} = \frac{\quad}{NA}$$

$$\left(\frac{\quad}{JLL} + \frac{\quad}{D10} + \frac{\quad}{D11} + \frac{\quad}{QB} \right) - \frac{\quad}{QA} = \frac{\quad}{GA-B}$$

$$\frac{\quad}{GA-B} + \frac{\quad}{NA} = \frac{\quad}{NB}$$

JLL TOTAL

WATER ALLOCATION WORKSHEET

DIVERSION AND PARTY	RANK	AMOUNT (cfs)	REACH A		REACH B	
			DIV	RNF	DIV	RNF
				____ (NA)		____ (NB)
D1 HULET	1	0.6	_____	_____		_____
D3-9 JOYCE*	1	1.0**	_____	_____	_____	_____
D3-9 JOYCE*	2	16.23**	_____	_____	_____	_____
D3-9 JOYCE*	3	1.44**	_____	_____	_____	_____
D10 EDWARDS	3	6.56			_____	_____
D11 NAHAS	4	2.63			_____	_____
D3-9 JOYCE*	5	2.46**	_____	_____	_____	_____
D1 HULET	6	54.5	_____	_____		_____
D11 NAHAS	7a	0.97			_____	_____
D11 NAHAS	7b	0.834			_____	_____

* If flow is being diverted at D3 (MMC) for use beyond Bench Field, then rights ranked 3, 4 and 7a must be satisfied unless delivery is declined.

** These flows may be diverted in either reach. However, the total Joyce diversion may not exceed 21.07 cfs when Joyce is diverting to Reach A and Hulet is diverting.

COMMENTS/TRIP LOG

Mileage 64


WATERMASTER SIGNATURE