

DRAFT 4

**AGREEMENT REGARDING
MUD LAKE WATER ADMINISTRATION AND DELIVERY**

WATER RIGHT NOS. See Attached List of Water Rights Numbers

Mud Lake Water Users Inc., Dobson Ranch Partnership, Level Canal Co. Inc., Jalene and Keith Shuldborg, husband and wife, Van and Joan Burtenshaw, husband and wife, Don and Beverly Burtenshaw, husband and wife and Independent Water Users, Inc. and all of their successors in interest ("Claimants") and the Idaho Department of Water Resources ("IDWR") hereby enter into this Agreement as of this ____ day of _____, 2001.

Introduction

The Claimants voluntarily enter into this Agreement regarding the administration and delivery of water from Mud Lake. The Claimants consist of all of the water users who own ground water rights that are pumped into and delivered from Mud Lake and who own surface water rights that are stored and delivered from Mud Lake. The Claimants and IDWR enter into this Agreement in order to preserve and clarify the historical delivery practice of water from Mud Lake upon which they have all relied.

[Savings language that the Department wants to consider? Nothing contained in this Agreement prevents the Director of IDWR from executing his duty as required by law.]
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Terms of Agreement

The Claimants agree and stipulate to the delivery and management of Mud Lake water as described below.

Allotment System

a. Definitions. For purposes of this Agreement:

Mud Lake: For purposes of administration, Mud lake is defined as Mud Lake or its tributaries at points affected by the backwaters of Mud Lake. Historically the term "Mud Lake" has been Mud Lake and Camas Creek downstream of T7N R35E Section 25, SWSWSE.

Divertable Volume: Water in Mud Lake above the elevation of 4773.99 feet, National Geodetic Vertical Datum of 1929.

Allotment Sheet: An accounting system maintained by the Watermaster consisting of the following: the (1) "Allotment" section which records volumes deliverable to holders of surface water rights; the (2) "Well Balance" section which records volumes deliverable to

holders of ground water rights; and the (3) "Inflow/Outflow Accounting" section, which records evaporation and other losses, inflows, outflows, and mass-balance calculations.

Early Season Pumped Ground Water: Ground water diverted to storage in Mud Lake prior to May 1, under water right numbers: 31-332, 31-11339, 31-11429, 33-11430, 31-11432. It is accounted for in the Well Balance section of the Allotment Sheet.

Provisional Allotment: The Provisional Allotment is the volume of water anticipated to be deliverable to holders of surface water rights diverted from Mud Lake. This is computed as the Divertable Volume of Mud Lake on May 1, less Early Season Pumped Ground Water contributions, plus Water Delivered Prior to May 1, plus the anticipated natural inflows to Mud Lake for the current irrigation season.

Final Allotment: The Final Allotment is the actual volume of water deliverable to holders of surface water rights diverted from Mud Lake. This is computed as the Divertable Volume of Mud Lake on May 1, less Early Season Pumped Ground Water contributions, plus Water Delivered Prior to May 1, plus the actual natural inflows to Mud Lake from May 1 to the date of the calculation of the Final Allotment. The Final Allotment is calculated when natural inflows to Mud Lake from Camas Creek have ceased and no further natural inflows are anticipated from Camas Creek.

Individual Allotment: The portion of the Provisional or Final Allotment allocated to an individual water user, according to the priority date and the sum of the volume of his/her surface water rights diverted out of Mud Lake.

Individual Allotment Balance: The Individual Allotment less the volume of withdrawals (including withdrawals made prior to May 1) and the cumulative total of the proportionate share of losses charged against the allotment.

Well Balance: The volume of stored water in Mud Lake that has been injected from ground water, from May 1 to November 1, or that has been injected from Early Season Pumped Ground Water.

Individual Well Balance: The portion of the Well Balance allocated to an individual water user, according to the injections made from that user's well(s), under that user's ground water right(s) less the volume of withdrawals (including withdrawals made prior to May 1) and the cumulative total of the proportionate share of losses charged against the allotment.

Positive Balance: An Individual Allotment Balance or Individual Well Balance with a value greater than zero.

Negative Balance: ~~An Individual Allotment Balance or individual Well Balance with a value less than zero.~~

- b. This Agreement shall apply to all water rights diverted or rediverted out of Mud Lake as defined for administrative purposes.
- c. The Watermaster shall maintain the Allotment Sheet to show the ownership of Individual Allotment water and Well Balance water. Well Balances shall be recorded beginning with the date of the first pumping of wells or May 1, whichever is earlier. Allotment Balances shall be computed beginning May 1. The Allotment Sheet shall be maintained through November 1.
- d. Ground water flowing without pumping into Mud Lake, prior to May 1 and after November 1, shall be accounted as natural inflow to Mud Lake and shall not be carried in any Well Balance or Individual Well Balance. Owners of wells capable of flowing without pumping into Mud Lake shall allow such wells to flow subject to the discretion and control of the Watermaster, and shall allow such water to accumulate in Mud Lake, prior to May 1 and after October 31.
- e. All well water, whether naturally flowing or pumped, delivered through Mud Lake from May 1 to November 1, shall be credited to the Individual Well Balance of the water user owning the well(s) and water right(s) under which the water is diverted.
- f. Early Season Pumped Ground Water shall be credited to the Individual Well Balance(s) of the water user(s) owning the well(s) and water right(s) under which the water is diverted. These water rights are 31-332, 31-11339, 31-11429, 31-11430, and 31-11432.
- g. On May 1 of each year, the Watermaster shall compute the Provisional Allotment and allocate it to the Individual Allotments of water rights defined in (b.) above, and record the Individual Allotments on the Allotment Balance section of the Allotment Sheet. Every fifteen days thereafter the Watermaster shall adjust the Individual Allotment Balances according to daily records of evaporation and other losses, and daily records of diversions. At the same time the Watermaster shall also adjust the Well Balance and Individual Well Balances according to daily records of evaporation and other losses, daily measured inflows, and daily records of diversions.
- h. The Watermaster shall maintain daily records of natural inflows to Mud Lake from Camas Creek. At each fifteen-day recalculation interval, the Watermaster may if necessary adjust the Provisional Allotment and recalculate the Individual Allotments to correspond to actual natural inflows and revised anticipated natural inflows.
- i. At such time as Camas Creek ceases to contribute water to Mud Lake, and no further contributions are anticipated in the current irrigation season, the Watermaster shall compute a Final Allotment and recalculate Individual Allotments.
- j. At such time that all Individual Allotments cannot be completely filled, the Allotment and Individual Allotments shall be recalculated to prevent injury to holders of senior surface

water rights.

- k. At each fifteen-day recalculation interval, all evaporation and other losses shall be proportioned according to the volume of water recorded in each respective Individual Allotment Balance or Individual Well Balance and charged against these balances.
- l. Positive Balances shall not be carried forward past November 1.
- m. ~~Negative Balances~~ Overdrafts of Individual Allotments discovered at the end of the irrigation season shall be carried forward to the subsequent irrigation season's Allotment Sheet and charged against the Individual Allotment Balance or Individual Well Balance on May 1. ~~If Negative Balances are in excess of the calculated Individual Allotment, the excess amount shall be charged against the Individual Well Balance on May 1. Overdrafts of Individual Allotments are not authorized.~~
- n. The Watermaster may determine that the water user(s) may not withdraw more than 35% of the Individual Allotment in any calendar month if necessary to prevent injury to other water users. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's Individual Allotment.

CLAIMANT MUD LAKE WATER USERS, INC.

Gerald Messerli, President

Date signed

CLAIMANT DOBSON RANCH PARTNERSHIP

Andy Dobson, Partner (Cannot be president of a partnership?) Date Signed

CLAIMANT LEVEL CANAL CO., INC.

Wilfried Smith, President

Date signed

CLAIMANT JALENE OR KEITH SHULDBERG, HUSBAND AND WIFE

Keith Shuldberg

Date signed

CLAIMANT VAN OR JOAN BURTENSCHAW, HUSBAND AND WIFE

Van Burtenshaw

Date signed

CLAIMANT DON OR BEVERLY BURTENSCHAW, HUSBAND AND WIFE

Don Burtenshaw

Date signed

CLAIMANT INDEPENDENT WATER USERS, INC.

Andy Dobson, President

Date signed

IDWR CONCURRENCE
Director of the IDWR

Date signed

ACKNOWLEDGMENTS

STATE OF IDAHO)
) ss.
County of _____)

I, _____, a notary public, do hereby certify on this ____ day of _____, 2001, personally appeared before me _____, who, being by me first duly sworn, declared that he/she is the _____ of _____ and that he/she signed this *Agreement re Mud Lake Water Administration* in his official capacity, and that the statements contained herein are true.

(Notarial Seal)

Notary Public for Idaho
Residing at _____
My Commission expires _____

ATTACHMENT TO AGREEMENT REGARDING MUD LAKE WATER
ADMINISTRATION AND DELIVERY

AFFECTED WATER RIGHTS

1. Surface Water Rights Stored In Mud Lake

31	5	/
31	6	/
31	19	/
31	26	/
31	27	/
31	34	/
31	35	/
31	36	/
31	37	/
31	38	/
31	52	/
31	65	/
31	104	/
31	105	/
31	134	/
31	135	/
31	143	/
31	144	/
31	147	/
31	147	/
31	159	/
31	162	/
31	163	/
31	166	/
31	168	/
31	169	/
31	184	/
31	185	/
31	185	/
31	186	/
31	187	/
31	188	/
31	189	/
31	190	/
31	191	/
31	192	/
31	206	/
31	207	/
31	208	/
31	209	/
31	210	/

147 A

31	211	/
31	212	A
31	213	/
31	232	/
31	237	/
31	243	/
31	263	/
?	24	323
31	344	/
31	345	/
31	354	/
31	355	/
31	360	/
31	361	/
31	363	/
	10956	
31	10957	/
31	10958	/
31	10959	/
31	10960	/
31	10961	/
31	10962	/
31	11335	/
31	11337	/

GW

look at source - GW

2. Ground Water Rights Stored In Mud Lake

31	332	X
31	11339	X
31	11429	X
31	11430	X
31	11432	X

3. Ground Water Irrigation Rights Delivered Via Mud Lake

31	327	/
31	328	/
31	329	/
31	330	/
31	331	/
31	336 B	/
31	337 B	/
31	371	/
31	2239	/
31	2265	/
31	2289	/
31	2290	/
31	2297	/
31	2310	/

31	2317 A	✓
31	2317 B	✓
31	2332	✓
31	2341	✓
31	2342	✓
31	2343	✓
31	2344	✓
31	2345	✓
31	2358	✓
31	7005	✓
31	10965 A	✓

31-2321

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ADMINISTRATION AND DELIVERY

AFFECTED WATER RIGHTS

1. Surface Water Rights Stored In Mud Lake

31	5
31	6
31	19
31	26
31	27
31	34
31	35
31	36
31	37
31	38
31	52
31	65
31	104
31	105
31	134
31	135
31	143
31	144
31	147 A
31	159
31	162
31	163
31	166
31	168
31	169
31	184
31	185
31	186
31	187
31	188
31	189
31	190
31	191
31	192
31	206
31	207
31	208
31	209
31	210
31	211
31	212 A

31	213
31	232
31	237
31	243
31	263
31	344
31	345
31	354
31	355
31	360
31	361
31	363
31	7005
31	10957
31	10958
31	10959
31	10960
31	10961
31	10962
31	11335
31	11337

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31	327
31	328
31	329
31	330
31	331
31	336 B
31	337 B
31	371
31	2239
31	2265
31	2289
31	2290
31	2297
31	2310
31	2317 A
31	2317 B
31	2321

31	2332
31	2341
31	2342
31	2343
31	2344
31	2345
31	2358
31	7005
31	10965 A

DRAFT 3

AGREEMENT REGARDING
MUD LAKE WATER ADMINISTRATION AND DELIVERY

WATER RIGHT NOS. : 31-332, 31-11339, 31-11429, 33-11430, 31-11432 [Insert Ground
Water Right Numbers too?]

Mud Lake Water Users Inc., Dobson Ranch Partnership, Level Canal Co. Inc., Jalene and Keith Shuldberg, husband and wife, Van and Joan Burtenshaw, husband and wife, Don and Beverly Burtenshaw, husband and wife and Independent Water Users, Inc. hereinafter referred to as "Claimants" hereby enter into this Agreement as of this ____ day of _____, 2001.

Introduction

The Claimants voluntarily enter into this Agreement regarding the administration of water from Mud Lake. The Claimants consist of all of the water users who own ground water rights that are pumped into and delivered from Mud Lake and who own surface water rights that are stored and delivered from Mud Lake. The Claimants enter into this Agreement in order to preserve and clarify the historical delivery practice of water from Mud Lake which they have all relied upon. ~~Furthermore, the Claimants want to insure that such delivery practices continue in the future.~~

Terms of Agreement

The Claimants agree and stipulate to the delivery and management of Mud Lake water as described below.

1. Allotment System
- a. Definitions. For purposes of this Agreement:

Mud Lake: For purposes of administration, Mud lake is defined as Mud Lake or its tributaries at points affected by the backwaters of Mud Lake. Historically the term "Mud Lake" has been Mud Lake and Camas Creek downstream of T7N R35E Section 25, SWSWSE.

Divertable Volume: Water in Mud Lake above the elevation of 4773.99 feet, National Geodetic Vertical Datum of 1929.

Allotment Sheet: An accounting system maintained by the Watermaster consisting of the following: the (1) "Allotment" section which records volumes deliverable to holders of surface water rights; the (2) "Well Balance" section which records volumes deliverable to holders of ground water rights; and the (3) "Inflow/Outflow Accounting" section, which

GW storage
w/ early-spring
return
"25 GW
flow" (injected)
63 SW
volume
storage
rights

records evaporation and other losses, inflows, outflows, and mass-balance calculations.

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Individual Well Balance: The portion of the Well Balance allocated to an individual water user, according to the injections made from that user's well(s), under that user's ground water right(s). *(less withdrawals & losses)*

Positive Balance: An Individual Allotment Balance or Individual Well Balance with a value greater than zero.

Negative Balance: An Individual Allotment Balance or Individual Well Balance with a value less than zero. *— implies approval of over-dimension?*

Agreement

- b. This ~~General Provision~~ shall apply to all water rights diverted or rediverted out of Mud Lake as defined for administrative purposes.
- c. The Watermaster shall maintain the Allotment Sheet to show the ownership of Individual Allotment water and Well Balance water. Well Balances shall be recorded beginning with the date of the first pumping of wells or May 1, whichever is earlier. Allotment Balances shall be computed beginning May 1. The Allotment Sheet shall be maintained through November 1.
- d. Ground water flowing without pumping into Mud Lake, prior to May 1 and after ~~October 31~~ ^{Nov 1}, shall be accounted as natural inflow to Mud Lake and shall not be carried in any Well Balance or Individual Well Balance. Owners of ~~wells capable of flowing without pumping~~ ^{subject to control of watermaster} into Mud Lake shall allow such wells to flow, and shall allow such water to accumulate in Mud Lake, prior to May 1 and after ~~October 31~~ ^{Nov 1}.
- e. All well water, whether naturally flowing or pumped, ~~diverted~~ ^{through} from May 1 to November 1, shall be credited to the Individual Well Balance of the water user owning the well(s) and water right(s) under which the water is diverted.
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- i. At such time as Camas Creek ceases to contribute water to Mud Lake, and no further contributions are anticipated in the current irrigation season, the Watermaster shall compute a Final Allotment and recalculate Individual Allotments.
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water rights.

- k. At each fifteen-day recalculation interval, all evaporation and other losses shall be proportioned according to the volume of water recorded in each respective Individual Allotment Balance or Individual Well Balance and charged against these balances.
- l. Positive Balances shall not be carried forward past November 1.
- m. Negative Balances shall be carried forward to the subsequent irrigation seasons Allotment Sheet and charged against the Individual Allotment Balance on May 1. If Negative Balances are in excess of the calculated Individual Allotment, the excess amount shall be charged against the Individual Well Balance on May 1. (I still worry that this provision is implicit approval to exceed the water right -- which is the only way, other than calculation errors, to have a negative balance) *Certain language -*
- n. The Watermaster may determine that the water user(s) may not withdraw more than 35% of the Individual Allotment in any calendar month if necessary to prevent injury to other water users. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's Individual Allotment.

CLAIMANT MUD LAKE WATER USERS, INC.

Gerald Messerli, President

Date signed

CLAIMANT DOBSON RANCH PARTNERSHIP

Andy Dobson, Partner (Cannot be president of a partnership?) Date Signed

CLAIMANT LEVEL CANAL CO., INC.

Wilfried Smith, President

Date signed

CLAIMANT JALENE OR KEITH SHULDBERG, HUSBAND AND WIFE

Keith Shuldberg

Date signed

CLAIMANT VAN OR JOAN BURTENSHAW, HUSBAND AND WIFE

Van Burtenshaw

Date signed

CLAIMANT DON OR BEVERLY BURTENSHAW, HUSBAND AND WIFE

Don Burtenshaw

Date signed

CLAIMANT INDEPENDENT WATER USERS, INC.

Andy Dobson, President

Date signed

IDWR CONCURRENCE

Date signed

ACKNOWLEDGMENTS

STATE OF IDAHO)
) ss.
County of _____)

I, _____, a notary public, do hereby certify on this ____ day of _____, 2001, personally appeared before me _____, who, being by me first duly sworn, declared that he/she is the _____ of _____ and that he/she signed this *Agreement re Mud Lake Water Administration* in his official capacity, and that the statements contained herein are true.

(Notarial Seal)

Notary Public for Idaho
Residing at _____
My Commission expires _____

MEMORANDUM

To: Mud Lake Water Users General File
A31-332
A31-11430
A31-11432
Fr: Bryce Contor
Date: 2/23/2001
Re: Office visit

Today I visited in the office with chairman Jerry Messerli, retired chairman Garth Soderquist, and manager Shawn Grover.

We discussed the attached memo on loss calculations and total recommended volumes. I told them that the current recommendations totaled about 195,000 acre feet but that I felt this was an error. Based on the transfer, the calculations of actual need, and the calculations of capacity, I should have added a combined use limitation to the 174,195 acre feet authorized by transfer 5335.

There are two reasons for this proposed combined limitation: 1) My charge is to recommend the water rights as accurately as possible, and this appears to more accurately reflect historical usage. 2) The 174,195 acre feet figure is defensible against objection because it was approved in a post-1987 formal transfer, and any objectors have already had due process during that administrative action.

We carefully reviewed the calculations, and it appears that 174,195 acre feet is adequate to meet the irrigation needs, losses in canals from the lake to place of use, losses in the lake, and losses from the points of diversion to the lake. It is true that the company also holds surface rights, but there are years in which little or no surface water is available, so the well rights must be adequate to provide all the company's needs.

The three gentlemen here today felt this would be acceptable, but they want to take it back to the board. I suggested it might be worthwhile to have a professional engineer review the loss calculations, and told them I had to have any requests for change back by March 20.

The tentative decision is that unless the board and/or the consultant disagree, I will add the combined use limitation but otherwise recommend the rights as proposed in the preliminary. Because I didn't catch the need for the combined use limitation early-on, and include it on the preliminary report, I feel I shouldn't add it now if they disagree.

MEMORANDUM

TO: Mud Lake Water Users General File

31-11430

31-332

31-11432

Fr: Bryce Connor

Date: 2/17/01

Re: Loss Calculations

I. Loss in Lake

Watermaster Records, 1996, show 29,730 acre ft. lake loss.

GW recommendations via lake total:

MLWU 24,261.3

Independent 4,109.0

+ Jobson

28,370.3 acres

$$\text{Loss/acre} = 29,730 / 28,370.3 = 1.05 \text{ acre ft/acre}$$

$$24,261.3 \times 1.05 = 25,474.4 \text{ acre feet}$$

II. Loss in Canals fr. Lake to Places of use

a) Jackett - $\frac{3 \text{ miles} \times 5280 \text{ ft} \times 20 \text{ ft}}{43560 \text{ ft}^2/\text{acre}} = 7.3 \text{ acres}$

b) Holley - $\frac{5 \text{ miles} \times 5280 \text{ ft} \times 25 \text{ ft}}{43560 \text{ ft}^2/\text{acre}} = 12.2 \text{ acres}$

c) Owsley - $\frac{14 \text{ miles} \times 5280 \text{ ft} \times 40 \text{ ft}}{43560 \text{ ft}^2/\text{acre}} = 67.9 \text{ acres}$

$$\text{Total } 87.4 \text{ acres} \times 0.2 \text{ in/hr}^* \times 14 \text{ in} \times 24 \text{ hr/day} = 35.0 \text{ af/day}$$

$$35 \text{ acre ft/day} \times 185 \text{ days} = 6,475 \text{ acre ft.}$$

III. Field headgate requirement

$$24,261.3 \times 35 = 84,914.6 \text{ acre ft.}$$

II. Total Required in Lake (Delivered to Lake)

Lake loss	25,474.4	acre feet
Canal loss	6,475.0	acre ft
Field headgate	<u>84,914.6</u>	acre ft
	116,864.0	acre ft.

I. Required at Pump

Watermaster records indicate up to 39% loss in Independent/Jachett Ditch. Holley & Owsley wells are right on Camas Creek & therefore no loss is allowed. North Lake ditch loses up to 20.4% per USGS study.

These losses are pro-rated to required

*... ..

MCWU p3

are lost by proportion of pumping capacity &/or original acres.

Assume North Lake = $\frac{1}{3}$ of Dowsley Capacity. X
17800 original Dowsley acres = 5933 acres

Fachett = 3100 acres per merger documents.

$$\text{North Lake requirement} = 116864 \times 5933 / 24261 = 28,600$$
$$28,600 / (100\% - 20.42\%) = 35,930 \text{ acre ft}$$

$$\text{Fachett Requirement} = 116864 \times 3100 / 24261 = 14,933$$
$$14,933 / (100\% - 39\%) = 24,480 \text{ acre ft}$$

$$\text{Bybee/Holley} = 116864 - (28,600 + 14,933) = 73,331$$

Total Req. @ diversions

Fachett	24,480
North Lake	35,930
Bybee/Holley	<u>73,331</u>
Total	133,741 acre ft.

VI. Max volume during irr. season at max rate

$$503 \times 1,9835 \times 185 = 184,575$$

VII. Required volume for Early pumping

Watermaster records show 26,374 ac-ft stored in lake in 1991.

Previous calculations showed requirement of 26,434 ^(from MLWU) required to fill lake in a dry year.

VIII. 61 day volume + 185-day volume at 1995 Capacity

310 Owsley & Tackett (from 1995 early-pumping records)

47 Holley (from deced water)

357 cfs

$$357 \times 1.9835 \times 61 = 43,195$$

$$357 \times 1.9835 \times 185 = 131,000$$

$$174,195$$

IX. Authorized volume per T 5335 is 174,269.3

Proposed volume for Ben Use claims is an additional 21,434

MLWU PS

Total proposed volume = 195,703

Total capacity (1995) = 174,195

Total requirement @ well = 133,741

Summary of MLWA Surface ^{recommended} Volumes;
 B. Condon 2/17/2001

31-2276 Wastewater Vol. 2
 Licence Not avail
 from lake not incl.
 i. b's

44.3

Owsley Division Fr. Lake

31-6	Decreed	1.4 x 2 x 123	344.4
31-34	Decreed	3.2 x 2 x 123	787.2
31-35	Decreed	6.4 x 2 x 123	1574.4
31-36	Decreed	9.6 x 2 x 123	2361.6
31-37	Decreed	6.4 x 2 x 123	1574.4
31-38	Decreed	0.8 x 2 x 123	196.8
31-52	Decreed	2.5 x 2 x 123	615
31-65	Decreed	3.0 x 2 x 123	738
31-104	Decreed	3.0 x 2 x 123	738
31-105	Decreed	1.6 x 2 x 123	393.6
31-147A	Decreed	4.0 x 2 x 123	984
31-159	Decreed	2.44 x 2 x 123	600.2
31-162	Decreed	1.0 x 2 x 123	246
31-163	Decreed	1.0 x 2 x 123	246
31-166	Decreed	1.72 x 2 x 123	423.1
31-168	Decreed	1.6 x 2 x 123	393.6
31-169	Decreed	1.6 x 2 x 123	393.6
31-184	Decreed	50.8 x 2 x 123	19826.8
31-185	Decreed	72.6 x 2 x 123	17859.6

MLWU Surface Volume p 2

31-186	75 x 2 x 123	18450
31-187	25 x 2 x 123	6150
31-188	1.6 x 2 x 123	393.6
31-232	1.6 x 2 x 123	393.6
31-237	2.4 x 2 x 123	590.4
31-263	2.68 x 2 x 123	659.3
31-363	6.4 x 2 x 123	<u>1574.4</u>

Total of Dowsley Division
Surface rights

78557.6 sf

$$78557.6 / 17818 = 4.41 \text{ sf/acre}$$

Fachett Division

31-134	3.5 x 2 x 123	861
31-135	2.5 x 2 x 123	615
31-143	1.0 x 2 x 123	246
31-144	1.0 x 2 x 123	246
31-190	5.9 x 2 x 123	1451.4
31-192	3 x 2 x 123	<u>738</u>

Total of Fachett Division
Surface rights

4157.4

$$4157.4 / 3107.3 = 1.34 \text{ sf/acre}$$

MLWU Surp. p 3

Holley Division

31-134	1.7 x 2 x 123	418.2
31-345	0.8 x 2 x 123	196.8
31-354	0.8 x 2 x 123	196.8
31-355	0.8 x 2 x 123	196.8
31-360	3.0 x 2 x 123	738.0
31-361	2.4 x 2 x 123	590.4
31-10957	2.5 x 2 x 123	615.0
31-10958	2.7 x 2 x 123	664.2
31-10959	7.98 x 2 x 123	1963.1
31-10960	2.36 x 2 x 123	580.6
31-10961	6.18 x 2 x 123	1520.3
31-10962	1.94 x 2 x 123	477.2
Total		8157.4

$$8157.4 / 2978 \text{ acres} = 2.74 \text{ af/acre}$$

Total for MLWU

	af	acres
Owsley division	78,557.6	17818.0
Fackett division	4,157.4	3107.3
Holley division	8,157.4	2978.0
	<u>90,872.4</u>	<u>23,903.3</u>

$$90,872.4 / 23,903.3 = 3.80$$

Contor, Bryce

From: Tuthill, Dave
Sent: Thursday, December 28, 2000 11:55 AM
To: Contor, Bryce; McHugh, Candice
Cc: Carlsen, Ernie; Fritschle, Carter
Subject: RE: Early Pumping remark

Looks good to me.

Dave

-----Original Message-----

From: Contor, Bryce
Sent: Thursday, December 28, 2000 10:41 AM
To: McHugh, Candice; Tuthill, Dave
Cc: Carlsen, Ernie; Fritschle, Carter
Subject: RE: Early Pumping remark

I forgot to mention a detail I learned yesterday from the watermaster: There are years when early-pumped water does need to be delivered as an "April draft." This is contrary to what I had told y'all earlier. Can we use:

Early Season Pumping: Upon submission of a pumping plan by the holders of water rights 31-332, 31-11339, 31-11429, 31-11430, and 31-11432, the Watermaster, under the direction of the Director of the Idaho Department of Water Resources, may authorize diversion to storage and irrigation storage under this right as early as March 1, and irrigation from storage as early as April 1. Any diversion or use of water before May 1 under this remark shall have a priority date of June 15, 1961.

-----Original Message-----

From: **McHugh, Candice**
Sent: Thursday, December 28, 2000 9:33 AM
To: Tuthill, Dave
Cc: Carlsen, Ernie; Contor, Bryce; Fritschle, Carter
Subject: RE: Early Pumping remark

Dave --

This is the latest version of the early season pumping remark that I have. Is this the version that Bryce should use?

Early Season Pumping: Upon submission of a pumping plan by the holders of water rights 31-332, 31-11339, 31-11429, 31-11430, and 31-11432, the Watermaster, under the direction of the Director of the Idaho Department of Water Resources, may authorize diversion to storage and irrigation storage under this right as early as March 1. Any diversion of water before May 1 under this remark shall have a priority date of June 15, 1961.

Candice

Confidentiality Notice: This e-mail may contain confidential and privileged information exempt from disclosure under applicable law. This message is intended only for the use of the individual or individuals identified above. If you have received this message by mistake, please notify the sender immediately by replying to this message. Please delete the message from your system and

BASIN 31 General Provisions

1. Allotment System:

- a. This general provision applies to all water rights having points of diversion from Mud Lake or its tributaries at points affected by the backwaters of Mud Lake.
- b. On or about May 1st of each year and every 15 days thereafter during the irrigation season, the ~~Director of the Idaho Department of Water Resources~~ ("Director Watermaster") shall compute the amount of water that may be available in Mud Lake for diversion and use during the irrigation season. This computation shall be the pProvisional Aallotment in acre-feet for the irrigation season. The Pprovisional aAllotment shall include the Ddivertable Vvolume of Mud Lake on May 1 (less Eearly--Sseason Gground Wwater volumes pumped under water rights _____, _____, _____), Wwater Uused Pprior to May 1, and the anticipated natural inflows to Mud Lake. The WatermasterDirector shall allot this computed volume to the Individual Allotments of holders of water rights as defined in General Provision 1(a) in the order of respective water right priority dates. Subsequent computations shall adjust the Provisional and Individual aAllotments according to actual natural inflows and revised anticipated natural inflows. At such time as Camas Creek has ceased to flow into Mud Lake for the season, a Final Allotment shall be calculated in the same manner as the Provisional Allotment was calculated, substituting actual natural inflows for anticipated inflows. At the time of calculation of the Final Allotment, Individual Allotments shall be recalculated in order of the respective priority of the water rights. At such time that all Individual aAllotments cannot be completely filled, delivery shall be curtailed by water right priority date. Each Individual

aAllotment shall be charged its proportionate part of the evaporation and other losses in the lake. There shall be no carryover of Positive allotments Balances from the previous irrigation season, but Negative Balances shall be carried forward and charged against the next season's Individual Allotment on May 1.

- c. The Watermaster shall maintain an accounting of ground water stored in the lake in the section of the Allotment Sheet known as the Well Balance section. The accounting shall include records of groundwater contributions to storage, diversions of stored ground water, and a proportionate share of losses, by water user. The calculations shall be performed in the same manner as the calculations for Individual Allotment Balances.

B31 Definitions

Mud Lake:	For purposes of administration, Mud lake is defined as "Mud Lake or its tributaries at points affected by the backwaters of Mud Lake." Historically this has been Mud Lake and Camas Creek downstream of the dike and screw gates located in T7N R35E Section 25, SW 1/4 of the SE 1/4, the location known locally as Bybee Bridge. This location could change with changes in the physical structures built on Camas Creek or Mud Lake.
Watermaster:	The administrator of water rights in Basin 31, elected and/or appointed pursuant to Idaho Code 42-605.
Divertable Volume:	Water in Mud Lake capable of being diverted. It is that water above the minimum elevation from which the diversion works can extract water. Historically the water above -1.0 feet on the USGS gage has been considered divertable, but this value could change as a result of changes in the gage datum, changes in the lake topography, or general changes in diversion works.
Allotment Sheet:	An accounting system maintained by the Watermaster. It includes the "Allotment" section which records volumes deliverable to holders of surface water rights, the "Well Balance" section which records volumes deliverable to holders of ground water rights, and the "Inflow/Outflow Accounting" section, which records evaporation and other losses, inflows, outflows, and mass-balance calculations.
Early Season Ground Water:	Ground water diverted to storage prior to May 1 under the Early Season Pumping remark. It is accounted for in the Well Balance section of the Allotment Sheet.
Water Diverted Prior to May 1:	Surface water diverted from Mud Lake after March 31 and prior to May 1. It is added to the Provisional Allotment calculation as water having been available for use in the current irrigation season, but deducted as a draft from the Individual Allotment balance of the water user who diverted it.
Allotment:	The volume of water to be allocated among holders of surface water rights diverted out of Mud Lake, either the Provisional Allotment or the Final Allotment as defined below.
Provisional Allotment:	The Divertable Volume of Mud Lake on May 1, less Early Season Ground water Contributions, plus Water Diverted Prior to May 1, plus the anticipated natural inflows to Mud Lake for the current irrigation season. The Provisional Allotment is the volume of water anticipated to be deliverable to holders of surface water rights diverted from Mud Lake and is to be allocated to individual right holders in order of priority.

Final Allotment:	The Divertable Volume of Mud Lake on May 1, less Early Season Ground water Contributions and Water Delivered Prior to May 1, plus the actual natural inflows to Mud Lake from May 1 to the date of the calculation of the Final Allotment. Calculated when natural inflows to Mud Lake via Camas Creek have ceased and no further natural inflows are anticipated via Camas Creek. The Final Allotment is the actual volume of water deliverable to holders of surface water rights diverted from Mud Lake and is to be allotted to individual right holders in order of priority.
Individual Allotment:	The portion of the Allotment allocated to an individual water user, according to the volumes and priority dates of his/her surface water rights diverted out of Mud Lake, relative to the volumes and priority dates all the surface water rights diverted out of Mud Lake.
Individual Allotment Balance:	The Individual Allotment less the cumulative total of withdrawals and the cumulative total of the proportionate share of losses charged against the allotment.
Well Balance:	The volume of stored water in Mud Lake that has been injected from ground water, after April 30 and before November 1, or that has been injected from Early Season Groundwater pumping.
Individual Well Balance:	The portion of the Well Balance allocated to an individual water user, according to the injections made from that user's well(s), under that user's ground water right(s).
Positive Balance:	An Individual Allotment Balance or individual Well Balance with a value greater than zero.
Negative Balance:	An Individual Allotment Balance or individual Well Balance with a value less than zero.

MUD LAKE PRESEASON PUMPING AGREEMENT

April 7, 1997

At a meeting held in Mud Lake, Idaho, April 7, 1997, a preseason pumping agreement was adopted for the 1997 irrigation season.

In attendance at this meeting, representatives of all the water user groups of Mud Lake were in attendance plus private water users Burtenshaw Bros. Water user groups represented were the following: Owsley Canal Co., Jackett Canal Co., Independent Water Users, Level Canal Co., and Holley Water Users.

Purpose of the meeting was to decide what lake level would be needed to provide enough water for the first heavy drafts of water for irrigation on May 1st, and until Camas Creek and its tributaries flowed enough water into Mud Lake to sustain irrigation thereafter.

A lot of discussion was had on a desired water level and the risk of over pumping and creating a hazard but still getting enough to sustain early pumping. It was decided to start pumping at as late a date as possible and still reach a 4.5 G.H. by May 1, 1997. It was further decided to reduce this pumping level if stormy conditions existed and demand for early irrigation demand appeared to be low.

Discussion was then had on the method of pumping needed to get the best and fairest desired lake level. Two methods discussed was by getting credit to each pumper the amount he pumped or by all pumpers pumping full capacity for the last 15 days of April and allotting the waters strictly by the decree. It was decided to use the decree method and allot lake capacity only without credit by pumping.

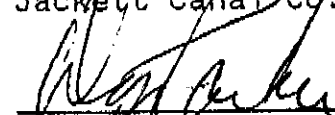
Both desired lake gauge and method of pumping was agreed on by all of the under signed.

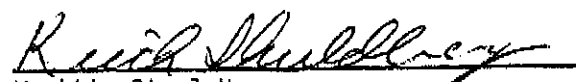

Owsley Canal Co. President


Ind. User Assn. President

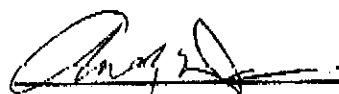

Jackett Canal Co. President


Holley Water User President


Level Canal Co. President


Keith Shuldberg


Burtenshaw Brothers


Andy Dobson
Dobson

MUD LAKE PRESEASON PUMPING AGREEMENT

March 9, 1995

At a meeting held in Mud Lake, Idaho, March 9, 1995, a preseason pumping agreement was adopted for the 1995 irrigation season.

In attendance at this meeting, representatives of all the water user groups of Mud Lake were in attendance plus private water users Burtenshaw Bros. Water user groups represented were the following: Owsley Canal Co., Jackett Canal Co., Independent Water Users, Level Canal Co., and Holley Water Users.

Purpose of the meeting was to decide what lake level would be needed to provide enough water for the first heavy drafts of water for irrigation on May 1st, and until Camas Creek and its tributaries flowed enough water into Mud Lake to sustain irrigation thereafter.

A lot of discussion was had on a desired water level and the risk of over pumping and creating a hazard but still getting enough to sustain early pumping. It was decided to start pumping at as late a date as possible and still reach a 4.5 G.H. by May 1, 1995. It was further decided to reduce this pumping level if stormy conditions existed and demand for early irrigation demand appeared to be low. A motion was made by Andy Dobson and second by Garth Soderquist for the 4.5 G.H. level.

Discussion was then had on the method of pumping needed to get the best and fairest desired lake level. Two methods discussed was by getting credit to each pumper the amount he pumped or by all pumpers pumping full capacity for the last 17 days of April and allotting the waters strictly by the decree. It was decided to use the decree method and allot lake capacity only without credit by pumping. This method of allotment was made by and motioned by Andy Dobson and second by Garth Soderquist.

Both motions were unanimous and an aye vote cast by every water user.

Garth Soderquist 3/14/95
Owsley Canal Co. President

Andy Dobson
Ind. User Assn. President

Edgar Green 3/14/95
Jackett Canal Co. President

Carl Hogg 3-14-95
Holley Water User President

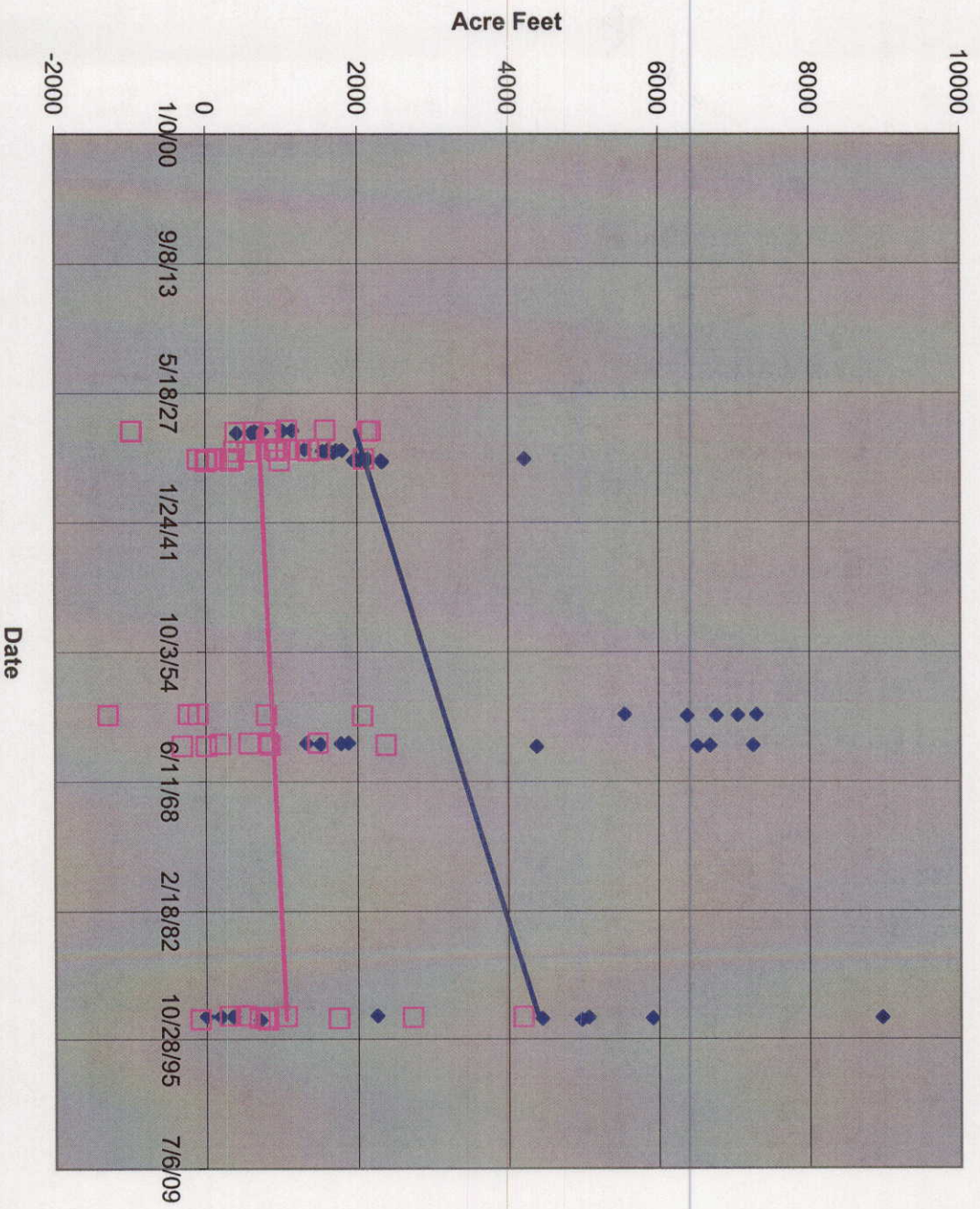
Don Parker 3-14/95
Level Canal Co. President

Keith Shulberg 3-14-95
Keith Shulberg

0 0 0 1 2 3 4 5 6 7 8 9

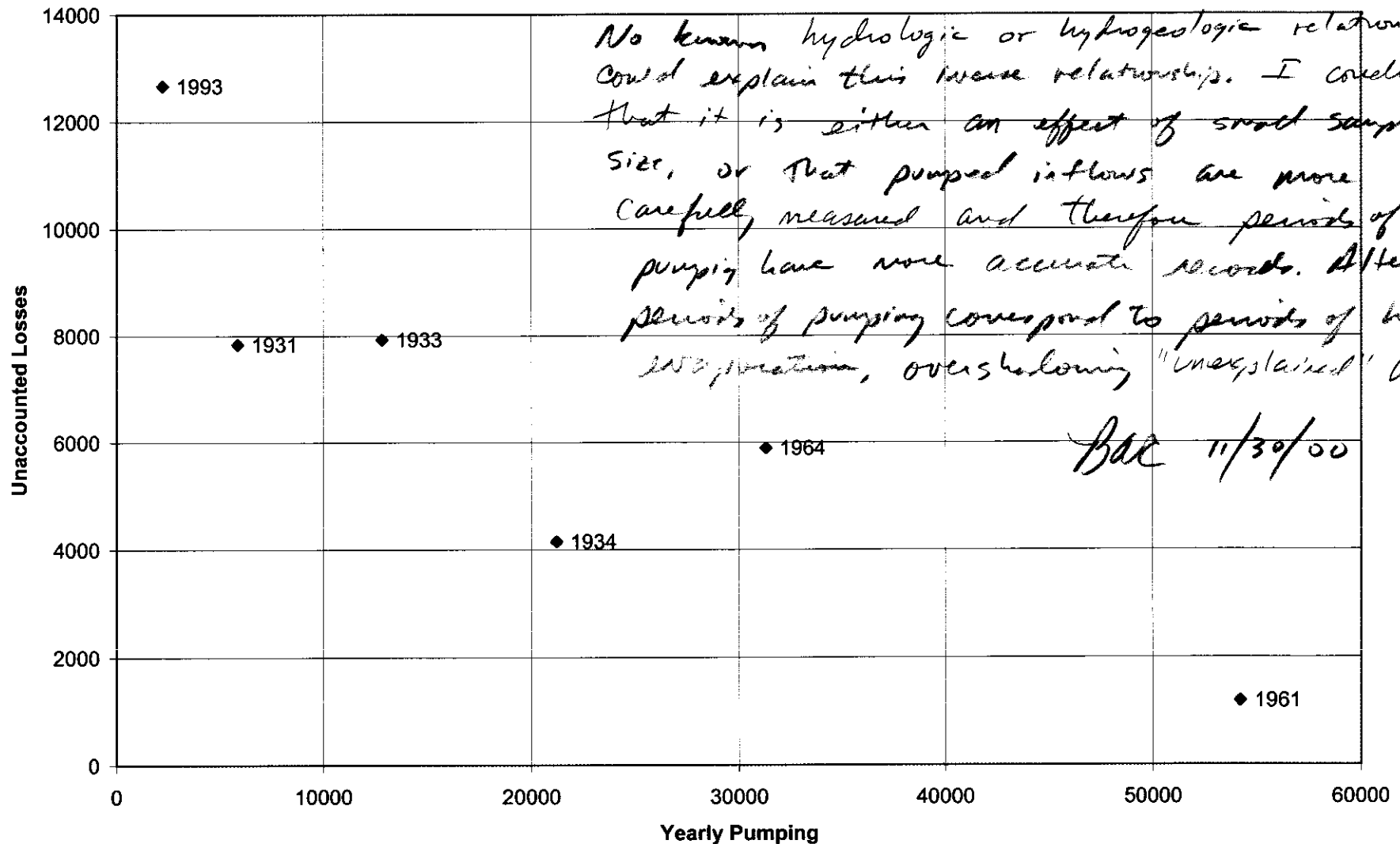
Mark 2

Losses and Pumping By Period



- 15-day Pumping
- Unaccounted Losses
- Linear (Unaccounted Losses)
- Linear (15-day Pumping)

Yearly Pumping and Unaccounted Losses





MEADOWLAND FARM

Bryce & Valene Contor
HC65, Box 1058
Howe, ID 83244

Historical Perspective

1) Suave - 1930

- a) Estimated Inflow
- b) Volumes not rates
- c) "Independent Source" provision

1940

2) Bawley - dispute over GW

"Ind" or "trib"

addressed artesian flow GW

3) Early-pumping agreement - (1961)

addressed pumping GW. (1981)

Operation 2 "balances" ↗ allotment balance
 ↘ well balance

4 classes of water (Note that all users have surface sources & GW sources)

- 1) Natural inflow from surface tributaries
- part of "allotment" per 1930 Suave
- 2) Artesian Flow prior to May 1
- part of "allotment" per 1940 Bancroft
- 3) All well flow after May, Artesian or Pumped
- property of well owner per 1940 Bancroft
- accounted in "well balance" of allotment sheet per historical practice
- 4) "Early Pumping" well water pumped prior to May 1
- property of well owner per 1961 direction from Carter to Shenton, and per 1980's "Early Pumping Agreement."

Process

May 1 - content + estimate = allotment
adjust for early pumping,
April Draft, "Bottom of pool."

- Every 15 days
 - review inflows & drafts
 - mass balance & evap pan $\rightarrow$ losses
 - losses apportioned by stored volume
- When Camas Creek goes flowing, "final allotment"
- overdrafts either replaced by pumping or carried forward to next year
- No carry over of "positive" balances
 - implicit in Suave
 - by resolution

GW in Suave

31-0062

31-0063

31-0103

31-0100

31-0101

31-0102

} (allows future development)
(Surface - GW?)

(None via lake)

Non-Trib Suave Decree

7N34E5	31- 160	}	Spring Lake (Saver)	claimed GW
	161			
	170	}	Spring Lake	not claimed
	171			
	172			
	182	}	Spring Lake	not claimed
	183			
	266	}	Spring Lake	not claimed
	377		" "	not claimed.

GW converted to Surface

31- 95/96 (Monty - Bawel, California Commission)
 31- 160A, B
 31- 161A, B
 (Jefferson Lake?)

Water District No. 31

Summary of Mud Lake

Season of 1996

		1	2	3	4	5	6	7	8	9	10	11	12	13
	Water Users	Allocations	July Allocation	Transfer From	Transfers To	In Flows	over Flow INEL	USE	Loss	April Draft	Balance 10-31-96			
1	Shuldberg	418	0	0	0	615	0	606	420	0	7			
2														
3	Holly Owsley Canal Co.	0	0	0	0	1,402	0	818	251	0	333			
4														
5	JLL Owsley Canal Co.	0	0	0	0	4,200	0	4,200	0	0	0			
6														
7	Owsley Canal Co.	18,710	4,838	0	0	73,318	0	68,018	20,052	0	8,796			
8														
9	Level Canal Co.	394	4,038	0	0	7,538	0	5,110	5,607	0	1,253			
10														
11	Dobson Ranch	1,540	378	0	0	2,585	0	2,430	1,964	0	109			
12														
13	Joe Potter	198	48	0	0	388	0	250	320	0	64			
14														
15	Don Burtenshaw	0	0	0	0	2,262	0	998	1,116	0	148			
16														
17														
18	Totals.	21,260	9,302	0	0	92,308	0	82,430	29,730	0	10,710			
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														

Date 4/5/00 Sig: Li Contor

 Claim Mud Lake Storage
 Doc Source Watermaster
WD 31

Water District No. 31

Summary

Season of 1993

		1	2	3	4	5	6	7	8	9	10	11	12	13
	Water Users	Allotments	July Allocation	Transfer from	Transfer To	Inflows	Overflow to INEL	Use	Loss	April Draft	Balance 10-31-93			
1														
2	Shuldberg	418	418		300	182	0	328	415	0	157			
3														
4	Holley Water Users	0	0			1638	0	712	409	0	517			
5	(Spill to Burtenshaw)													
6	Jackett Canal Co.	1107	1968			6863	0	5048	2563	0	1,220			
7														
8	Owsley Canal Co.	18,022	22450			45557	0	45291	17549	0	5,164			
9														
10	Level Canal Co.	394	5904	- 602		2237	0	4232	2803	0	504			
11														
12	Dobson Ranch	1582	1918			767	0	1356	1217	0	112			
13														
14	Joe Potter	197	246			115	0	108	211	0	42			
15														
16	Don Burtenshaw	0	0		302	671	0	738	241	0	(-6)			
17														
18														
19	Totals	21720	32904	- 602	+ 602	58030	0	57816	25408	0	7,710			
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														

Date 3/31/00 sig. D. Carlson

 Claim Mud Lake Storage
 Doc Source Greg Stanton
Watermaster, WD 31

Mtz w/ Karl / Norm 11/20/02

Definitions

- 1) Define Watershed
- 2) Define "positive" & "negative" balance.
- 3) Provisional allotment
- 4) Divertable Volume
- 5) Less early season GW
- 6) Define when diverted prior to May 1 (April days)

Question

proposed by Warden of CR, approved
by WM, subject to Crj. agt.

DRAFT 11-2-00
Basin 31 General Provisions

1. Allotment System:

- a. This general provision applies to all water rights having points of diversion from Mud Lake or its tributaries at points affected by the backwaters of Mud Lake. *direction of*
- b. On or about May 1st of each year and every 15 days thereafter during the irrigation season, the ~~Watermaster~~ *Watermaster* under the ~~authority~~ *direction of* of the Director of the Idaho Department of Water Resources (~~"Watermaster"~~) shall compute the amount of water that may be available in Mud Lake for diversion and use during the irrigation season. This computation shall be the provisional allotment in acre-feet for the irrigation season. The provisional allotment shall include the divertable volume of Mud Lake on May 1 (less early-season ground water volumes pumped under water rights _____, _____, _____, _____), water used prior to May 1, and the anticipated natural inflows to Mud Lake. *and stored* The Watermaster shall allot this computed volume to the holders of water rights as defined in General Provision 1(a) in the order of respective water right priority dates. Subsequent *per* computations shall adjust the allotments according to actual natural inflows and revised anticipated natural inflows. *At such time* that all allotments cannot be completely filled, delivery shall be curtailed by water right priority date. Each allotment shall be charged its proportionate part of the evaporation and other losses in the lake. There shall be no carryover of positive allotments from the previous irrigation season. *percent is needed out*
- c. The Watermaster may determine that the water user(s) may not withdraw more than 35% of the allotment in any calendar month if necessary to prevent injury to other water users. All water, whenever used, including water used prior to May 1st and after ~~September 1st~~ *Aug 31st*, shall be charged against the water user's allotment. *the is above*

2. Conjunctive Management: [USE MOST RECENT LANGUAGE]

The following surface water rights from the following source of water in Basin 31 shall be administered separately from all other surface water rights in Basin 31:

None.

All water rights within Basin 31 are from connected sources of water in the Snake River Basin and shall be administered conjunctively.

Basin 31 Remark (on the individual water right)

Early Season Pumping: The Watermaster may authorize diversion to storage and irrigation storage under this right as early as March 1. Any diversion of water before May 1 under this remark shall be subject to the ~~Watermaster's~~ ^{Submaster's} pumping plan approved by the holders of water rights ____, ____, ____, and ____, and shall have a priority date of June 1, 1961.

Basin 31 Explanatory Remarks

Diversion Volume: The diversion volume described above was calculated by multiplying the diversion rate of ____ by 2.0 acre feet per day for 123 days.

For Ground Water Storage: Water stored under this right shall be charged its proportionate part of the evaporation and other losses in the lake.

BASIN 31 General Provisions

1. Allotment System:

- a. This general provision applies to all water rights having points of diversion from Mud Lake or its tributaries at points affected by the backwaters of Mud Lake.
- b. On or about May 1st of each year and every 15 days thereafter during the irrigation season, the watermaster under the authority of the Director of the Idaho Department of Water Resources ("~~Director~~ Watermaster") shall compute the amount of water that may be available in Mud Lake for diversion and use during the irrigation season. This computation shall be the provisional allotment in acre-feet for the irrigation season. The provisional allotment shall include the divertable volume of Mud Lake on May 1 (less early-season ground water volumes pumped under water rights _____, _____, _____, _____), water used prior to May 1, and the anticipated natural inflows to Mud Lake. The Watermaster~~Director~~ shall allot this computed volume to the holders of water rights as defined in General Provision 1(a) in the order of respective water right priority dates. Subsequent computations shall adjust the allotments according to actual natural inflows and revised anticipated natural inflows. At such time that all allotments cannot be completely filled, delivery shall be curtailed by water right priority date. Each allotment shall be charged its proportionate part of the evaporation and other losses in the lake. There shall be no carryover of positive allotments from the previous irrigation season.

- c. The ~~Director~~Watermaster may determine that the water user(s) may not withdraw more than 35% of the allotment in any calendar month if necessary to prevent injury to other water users. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's allotment.

2. Conjunctive Management: [USE MOST RECENT LANGUAGE]

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None.

All water rights within Basin 31 are from connected sources of water in the Snake River Basin and shall be administered conjunctively.

Basin 31 Remark (on the individual water right)

Early Season Pumping: The ~~Director~~ Watermaster may authorize diversion to storage and irrigation storage under this right as early as March 1. Any diversion of water before May 1 under this remark shall be subject to the Watermaster's a pumping plan approved by the ~~Director~~ holders of water rights _____, _____, and _____, and shall have a priority date of June 1, 1961.

Basin 31 Explanatory Remarks

Diversion Volume: The diversion volume described above was calculated by multiplying the diversion rate of _____ by 2.0 acre feet per day for 123 days. (May 1 - Sept 1) by a factor of 2

For Ground Water Storage: Water stored under this right shall be charged its proportionate part of the evaporation and other losses in the lake.

Season of Use

Season of Use

Surface Water Storage

Surface Storage: 1/1 to 12/31

Irrigation from Storage: 4/1 to 10/31

Ground Water Storage

Irrigation Storage: 5/1 to 10/31 (w/ remark allowing early storage)

Irrigation from Storage: 5/1 to 10/31 (~~w/ remark allowing early diversion~~)

Diversion to Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

Contor, Bryce

From: Contor, Bryce
Sent: Wednesday, August 23, 2000 12:39 PM
To: McHugh, Candice; Music, Vicky
Subject: FW: Transfer 5335

-----Original Message-----

From: **Contor, Bryce**
Sent: Wednesday, August 23, 2000 12:12 PM
To: Carlson, Ron
Cc: Hamlin Nygard, Susan; Jones, Harold (Skip); Carlsen, Ernie
Subject: Transfer 5335

This transfer was issued in 1999 on 24 groundwater rights, totalling 643.21 cfs, on 24,261.3 acres.

The only intent of the transfer was to combine land lists of three canal companies which had merged, making all the rights appurtenant to all the lands on a permissible place of use basis.

The transfer formalized (cast in stone) all the elements of the water right, even though Allocations did not have the resources to fully investigate. The list that follows shows items that are at a variance with what I now wish I could recommend:

- 1) Period of use for irrigation. Transfer imposed the then-current IDWR standard. I want to recommend per historical beneficial use and current IDWR standard.
- 2) Period of use for diversion to storage. Transfer gave 1-/16 to 4/14, the non-irrigation season. I want to recommend consistent with other storage claims, exact period yet to be determined in phone conference tomorrow.
- 3) Diversion rate for 31-00328. Transfer authorizes 110 cfs for irrigation. I want to recommend 100 cfs per original decree.
- 4) Priority dates. Four rights were given priority 0/00/0000. I want to recommend original decreed priority.
- 5) POD's. The number of diversions, and the locations, as supplied by the claimant, do not match field inspection. Diversions exist in quarter-quarters not listed on the transfer, and quarter-quarters on the transfer do not contain active diversions. More total diversions exist than listed.
- 6) Typo in legal descriptions for POD's. One POD is listed in "Lot 4 (SESW), Sec 18" but Lot 4 actually corresponds to the SWSW. One pod is listed in "SWNW, Section 19" but actually should be in Lot 2.
- 7) Minor variations in land list. Mark Larson of the State Office has been working carefully with the canal company to prepare an accurate map depicting the company's service area. This will be used for the surface rights. It is highly unlikely that the land list on the transfer matches Larson's work acre-per-acre, quarter-per-quarter. I want to recommend surface and groundwater rights with the same service area.
- 8) Right 31-00332. This right appears to have been forfeited. Were it not for its inclusion on the transfer, I would disallow. In this case, this is not really substantive, because it overlaps a beneficial use right I would recommend with a priority date only a few years later.

In general, though, the recognition of a right in a transfer blocks any finding of forfeiture even if later data show forfeiture had occurred.

9) Conditions 9 and 11 depend on a different reading of Bauerly Decree than we have arrived at in AJ analysis. Allocations interpreted the limitation as a rate limitation, I now read it as a volume limitation written in terms of the volume delivered by pumping at X diversion rate over Y period of time. I would ordinarily have recommended a volume limitation, rather than a rate.

In this particular case, other investigation points to a need for a rate limitation, so I'm content to leave the transfer limitation in place. This is probably cleaner than overcoming the discrepancies between actual development, the Bauerly decree, a 1970's or 1980's letter from Bob Fleenor to the watermaster, and Dave Tuthill's very thorough 1980's analysis of the problems with Bauerly and the departments historical interpretation of Bauerly.

In looking at things I wish to change, I think they fall into three categories:

- 1) Current technology (GIS, GPS) provides more accurate data than was available to Allocations or water user (POD's, POU).
- 2) AJ investigation discovers issues in decrees or historical practices that affect elements of the right (periods of use, forfeiture, cfs/volume limitations). These may not become apparent until investigation begins in a particular basin.
- 3) Typo's (priority dates, lots and quarter-quarters, diversion rate on 31-00328).

I think all of these could be corrected with an administrative order. I also think that either the concept of a "provisional transfer" (good until issuance of a directors report) or a limited transfer that only addresses the elements to be changed, would have prevented the heartburn with this particular transfer.

DRAFT #5

BASIN 31 General Provisions

1. Allotment System:

- My rights in blue...*
- a. This general provision applies to ^{all} water rights having points of diversion from Mud Lake or its tributaries at points affected by the backwaters of Mud Lake.
- b. On or about May 1st of each year and ^{every 15 days} ~~as necessary~~ thereafter, ^{during the ir. season,} the Director of the Idaho Department of Water Resources ("Director") shall compute the amount of water that ~~may be~~ ^{is} available in Mud Lake for diversion and use. This computation ~~shall include~~ ^{include}, in acre-feet, the seasonal allotment of water available to fill each right from May 1st to September 1st in the order of respective priorities. The initial computation by the Director shall ~~also take into consideration~~ ^{include} anticipated ~~accretion to the lake from~~ ^{to the lake} natural inflows. ~~The allotted amount of water in the lake, plus the estimated inflow from Camas Creek, shall be the amount of water of Mud Lake available for use during that irrigation season.~~ ^{natural inflow} Subsequent computations shall adjust the allotments according to actual ~~accretion~~ ^{accretion} and revised anticipated ~~accretion from~~ ^{accretion} natural inflow. Each allotment shall be charged its proportionate part of the evaporation and other losses in the lake. At such time that all ^{allotments} ~~allotted amounts~~ cannot be completely filled through September 1st, delivery shall be curtailed by priority. There shall be no carryover of ~~allotted~~ ^{allotted} water from the previous irrigation season.

(I could live with striking the last sentence above.)

- c. If the total demand for water from Mud Lake would be greater than the volume of available water ~~of physically~~ deliverable from the lake ~~as determined in 1(b) above~~, then the Director may determine that the water user(s) may not withdraw more than 35% of the allotment in any calendar month. All water for the allotment, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's seasonal allotment.

2. Conjunctive Management: [USE MOST RECENT LANGUAGE]

The following surface water rights from the following source of water in Basin 31 shall be administered separately from all other surface water rights in Basin 31:

None.

All water rights within Basin 31 are from connected sources of water in the Snake River Basin and shall be administered conjunctively.

Basin 31 Remark (on the individual water right)

Early Season Pumping: The director may authorize ~~pumping~~ diversion to storage and irrigation storage under this right as early as March 1. Any use of water before May 1 under this remark is subordinate to all water rights having no subordinated early ~~pumping~~ diversion to storage or irrigation storage use and ~~shall have~~ having a priority date of earlier than June 1, 1961.

Alternate wording:

Early Season Pumping: The director may authorize diversion to storage and irrigation storage under this right as early as March 1. Any use of water before May 1 under this remark shall have a priority date of June 1, 1961.

Basin 31 Explanatory Remarks

Diversion Volume: The diversion volume described above was calculated by multiplying the diversion rate of ____ by 123 days.

For Groundwater Storage: Water stored under this right shall be charged its proportionate part of the evaporation and other losses in the lake.

Season of Use

Season of Use

Surface Water Storage

Surface Storage: 1/1 to 12/31

Irrigation from Storage: 4/1 to 10/31

Groundwater Storage (w/ priority 5/1/31)

Irrigation Storage: 5/1 to 10/31 (w/ remark allowing early storage)

Irrigation from Storage: 5/1 to 10/31 (~~w/ remark allowing early diversion~~)

Diversion to Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

Contor, Bryce

From: Contor, Bryce
Sent: Friday, August 25, 2000 10:02 AM
To: Carlsen, Ernie
Subject: Invitees to Sept 26 meeting:

The following have surface claims diverted from the lake, or from Camas Creek below Bybee Bridge:

Mud Lake Water Users Association
PO BOX 68, Terreton ID 83450

Keith Shuldberg
1785 N 1800E, Hamer ID 83425

Don Burtenshaw
1603 N 1000 E, Terreton ID 83450

Van Burtenshaw
1698 N 1300 E, Terreton ID 83450

Dobson Ranches
C/O ANDY DOBSON
1595 N 1500 E, Terreton ID 83450 *Hamer ID 83425*

Level Canal
C/O DON PARKER
2032 W 4200 S, Rexburg ID 83440

C/O WILFRIED SCHMITT
HC 63 BOX 2585, Montevieu ID 83435

Joe Potter
PO BOX 114, Terreton ID 83450

The following have groundwater claims delivered via the lake:

Mud Lake Water Users Association
PO BOX 68, Terreton ID 83450

Dobson Ranches
C/O ANDY DOBSON
1595 N 1500 E, Terreton ID 83450

Independent Water Users
1785 N 1800 E, Hamer ID 83425

C/O DON PARKER
2032 W 4200 S, Rexburg ID 83440

Note that the members of "Independent Water Users" are:

Keith Shuldberg
Don Burtenshaw

Van Burtenshaw
Dobson Ranches
Level Canal
Joe Potter

Thus there actually is 100% overlap between users of GW via the lake and SW from or via the lake.

DRAFT #4

BASIN 31 General Provisions

1.

Allotment System:

a) ~~last or~~ location - follow Suave #5

b)

On or about May 1st of each year, the Director of the Idaho Department of Water Resources ("Director") shall compute the amount of water available in Mud Lake for diversion and use. ~~This computation shall be based on information provided by the United States Geological Survey gauge located at the mouth of Camas Creek. The Director shall include the estimated inflow volume from Camas Creek between the period from May 1st to September 1st. The amount of water in the lake, plus said estimated inflow, shall be the amount of water of Mud Lake available for use during that irrigation season. On or about May 1st of each year, the Director shall also compute in acre-feet the allotment of water necessary to fill each right from May 1st to September 1st in the order of respective priorities. There shall be no carryover of storage water from the previous irrigation season.~~

available

c)

Beginning on May 1st of each year and at least every 15 days from May 1st until the end of the irrigation season, the Director shall compute the amount of water diverted under each right, including the amount of water used prior to May 1st and the amount of water remaining available to fill such rights. The Director shall take into consideration accretion to the lake from natural inflow. Each right shall be charged its proportionate part of the evaporation and other losses in the lake. At such time that all rights cannot be completely filled through September 1st, delivery to the junior right(s) shall be discontinued.

2. d)

35% per month limitation:

If the total demand for water from Mud Lake would be greater than the volume of the lake as determined in 1(a) above, then the Director may determine that the water user(s) may not withdraw more than 35% of his/her total right [would it be accurate here to say, the allotment] in any calendar month. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's seasonal allotment.

yes

3. a)

Conjunctive Management:

(substitute new language)

The following surface water rights from the following source of water in Basin 31 shall be administered separately from all other surface water rights in Basin 31:

None.

All water rights within Basin 31 are from connected sources of water in the Snake River Basin and shall be administered conjunctively.

use best scientific data

118

Basin 31 Remark (on the individual water right)

diversion and irrigation
Early Season Pumping: The director may authorize ~~pumping to storage, storage, and diversion from storage~~ under this right as early as March 1. Any pumping prior to May 1 shall be subject to a "pumping plan" authorized by the director and shall bear a priority date of June 5, 1961.

Basin 31 Explanatory Remarks

Diversion Volume: The diversion volume described above was calculated by multiplying the diversion rate of ____ by 123 days.

For Groundwater Storage: Water stored under this right shall be charged its proportionate part of the evaporation and other losses in the lake. [Is this redundant since the general provision provides for this for all rights that a part of the allotment system? I do believe, however, that it would clarify for the water user the fact that their stored water is subject to reduction.]

Season of Use

Season of Use

Surface Water Storage

Surface Storage: 1/1 to 12/31

Irrigation from Storage: 4/1 to 10/31

Groundwater Storage (w/ priority 5/1/31)

Groundwater Storage: 5/1 to 10/31 (w/ remark allowing early storage)

Irrigation from Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

Diversion to Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

Questions

Do we need a volume for 'diversion to storage,' a rate, or both?

Can we include an adjustment for historical ditch losses?

Which rights should have the explanatory remarks attached to them?

I think we need it

vol ✓

Not needed for MCLWA or other Priority rights.

e-mailed list for SW,

3 Ben. use claims for GW Storage

MUD LAKE WATER USERS, INC. STOCKHOLDERS NEWSLETTER

July 17, 2000

Dear Stockholder,

We need you to **make sure that your ditches are clean** prior to you ordering water. If they are not clean you cannot get as good of a flow & we reserve the right to refuse to deliver water for such ditches.

The hot, dry, windy weather has caused a heavy demand for water. However, we have had good well flows this year and are keeping up with demand with only a few delays. Wells #3 & #4 in the Jackett have been off-line for repairs but we believe they will be operational by early August. At Holley the use of the creek pump has relieved pressure on the well field & supplied the needed water for deliveries. At North Lake we have shut #1 off do to cavitation. We have had a better use of magnacide this year, which has helped to control moss. We are also continuing to cut moss in Camas Creek & in the independent ditch. Currently our flow into the lake is 360 cfs with only 250 cfs going out & our current lake level is 4.3'.

In the past year we have used a large amount of gravel & bentonite from our yard, which will need to be replaced. However the repairs have been necessary. The maintenance done Jackett & Holley has been a great benefit to water distribution on those systems.

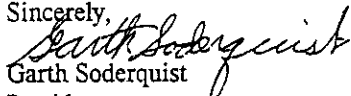
All stockholders with pivots crossing roadways or dikes should make as much effort to control them as possible, as this will reduce our expense.

At the North Lake well field we are planning to fill in the old wells that lie along the Old Rock Ditch to come into compliance with current regulations. We also plan to drill a new well there at #11D to replace a caved in well at the Marty well field.

We have installed computer controlled monitoring devices at several locations on the system, which has reduced our mileage in a year when high fuel prices make this increasingly important. We plan to install more in the future.

We now have a full-time secretary in the office from 8 AM to 4 PM Monday to Friday & 8 AM to 12 Noon Saturday. This means that there should always be someone to answer your calls for water orders & turn off notices. Please allow 1 day for orders & at least 12 hrs. for offs (6 hrs. for sprinkler transfers). We hope that you have been satisfied with our service this year, but if you are not our secretary will answer those calls as well & we will attempt to work out a solution. Our address, phone number, & fax number are at the bottom of the page for your reference. Please note that if you call the fax number the secretary will not answer. It is for faxes only.

Sincerely,


Garth Soderquist
President

Mud Lake Water Users, Inc.

pwf

*Mailed to B Conton
fr. Terreton 7/18/00
Recd 7/18/00*

P.O. Box 68
Terreton, ID 83450
Ph 663-4359
Fax 663-4369

*Note that this letter was sent prior to the
newsletter that invited many growers to cut hay.
The above figures probably represent close to
full-rate operation. Bas 7/26/00*

Contor, Bryce

From: Contor, Bryce
Sent: Wednesday, July 26, 2000 9:25 AM
To: Carlsen, Ernie
Cc: McHugh, Candice; Music, Vicky
Subject: storage questions

Thank you for discussing my storage questions. Based on what we talked about, here are my plans:

Beneficial Use Claims for Irrigation Storage:

- Three Claims - A31-11339, Independent Water Users
Mud Lake Water Users
Dobson Ranches
- Diversion to Storage - Match GW diversion rates, including combined use limitations. No volume. For the Mud Lake Water Users, this includes an in-season limitation to 200 cfs of certain rights that originally were Owsley rights.
- Irrigation Storage - 1.25 acre feet/acre per analysis of historical needs/practices and lake capacity. Mud Lake Water Users claim will be reduced 5,000 acre feet due to existence of transfer approval of decreed storage right 31-00332.
- Irrigation from Storage - same as Irrigation Storage, since volume analysis was based on one-fill assumption.
- Combined volume limitations w/ other GW rights per Bauerly Decree. Loss calculations indicate that if groundwater were the sole source, slightly less than 3.5 afa would be available at the field headgate. However, historical use documentation shows that Bauerly limitations far exceed actual usage.
- Because the "diversion to storage" will be recommended as a rate, and "irrigation storage" as a volume, there is no need to adjust the recommendations for ditch loss issues.

Please correct me if this won't work.

Thanks, Bryce

Contor, Bryce

From: Contor, Bryce
Sent: Thursday, July 13, 2000 2:03 PM
To: Contor, Bryce; Fritschle, Carter
Subject: RE: minor adjustment to Early Season pumping remark

More thoughts:

Even in years when there is an "April Draft," there is likely some natural flow volume in the lake (even if the early season pumping is required to bring water levels up high enough for practical diversion), enough to satisfy the small volumes historically pumped in an "April Draft."

So maybe we can dodge the bullet by having the remark read

"The director may authorize pumping to storage and storage under this right as early as..."

In other words, even if they pump early just so they can divert early, we can assert they are diverting "allotment" water and letting the "pumped" water accumulate in storage.

-----Original Message-----

From: Contor, Bryce
Sent: Thursday, July 13, 2000 12:46 PM
To: Fritschle, Carter
Subject: RE: minor adjustment to Early Season pumping remark

No record of prior to April 1 but plenty of record of prior to May 1, the proposed beginning of the SOU for the in-season beneficial use claim.

This start date is per Bauerly Decree and historical practice. We'll be stuck with a different start date on the forfeited (but reinstated by post-1987 formal transfer) 5000 acre-foot decreed storage right from GW (31-00332) but I think our analysis of May 1 on the other GW storage rights is spot-on.

-----Original Message-----

From: Fritschle, Carter
Sent: Thursday, July 13, 2000 9:14 AM
To: Contor, Bryce; Carlsen, Ernie; McHugh, Candice
Subject: RE: minor adjustment to Early Season pumping remark

I think we may need to break this remark down into two parts. The diversion to storage can begin as early as March 1, but I don't think we want to let them start irrigating that soon. Has there been any historical information to support irrigation water being pumped from the lake prior to April 1?

Carter

-----Original Message-----

From: Contor, Bryce
Sent: Wednesday, July 12, 2000 10:38 AM
To: Contor, Bryce; Carlsen, Ernie; Fritschle, Carter; McHugh, Candice
Subject: RE: minor adjustment to Early Season pumping remark

Correction: I meant to add diversion from storage rather than diversion to storage.

-----Original Message-----

From: Contor, Bryce
Sent: Wednesday, July 12, 2000 10:36 AM
To: Carlsen, Ernie; Fritschle, Carter; McHugh, Candice
Subject: minor adjustment to Early Season pumping remark

I meant to suggest this yesterday, but forgot:

"The director may authorize pumping to storage, storage,
and diversion from storage under this right as early as..."

In my mind this is necessary because our proposed season of use for all those elements for the beneficial use storage claims begins May 1, and all of those functions may in fact be utilized prior to May 1 if early pumping occurs.

Contor, Bryce

From: Contor, Bryce
Sent: Wednesday, July 12, 2000 3:44 PM
To: Tuthill, Dave; Carlsen, Ernie; Fritschle, Carter; McHugh, Candice
Cc: Music, Vicky
Subject: Unaccounted losses in Mud Lake

Based on our concerns yesterday, I plotted on Excel what data we have (copy attached). This is nearly complete data for 1931, 1934, and 1993, and partial data for 1961 and 1964.

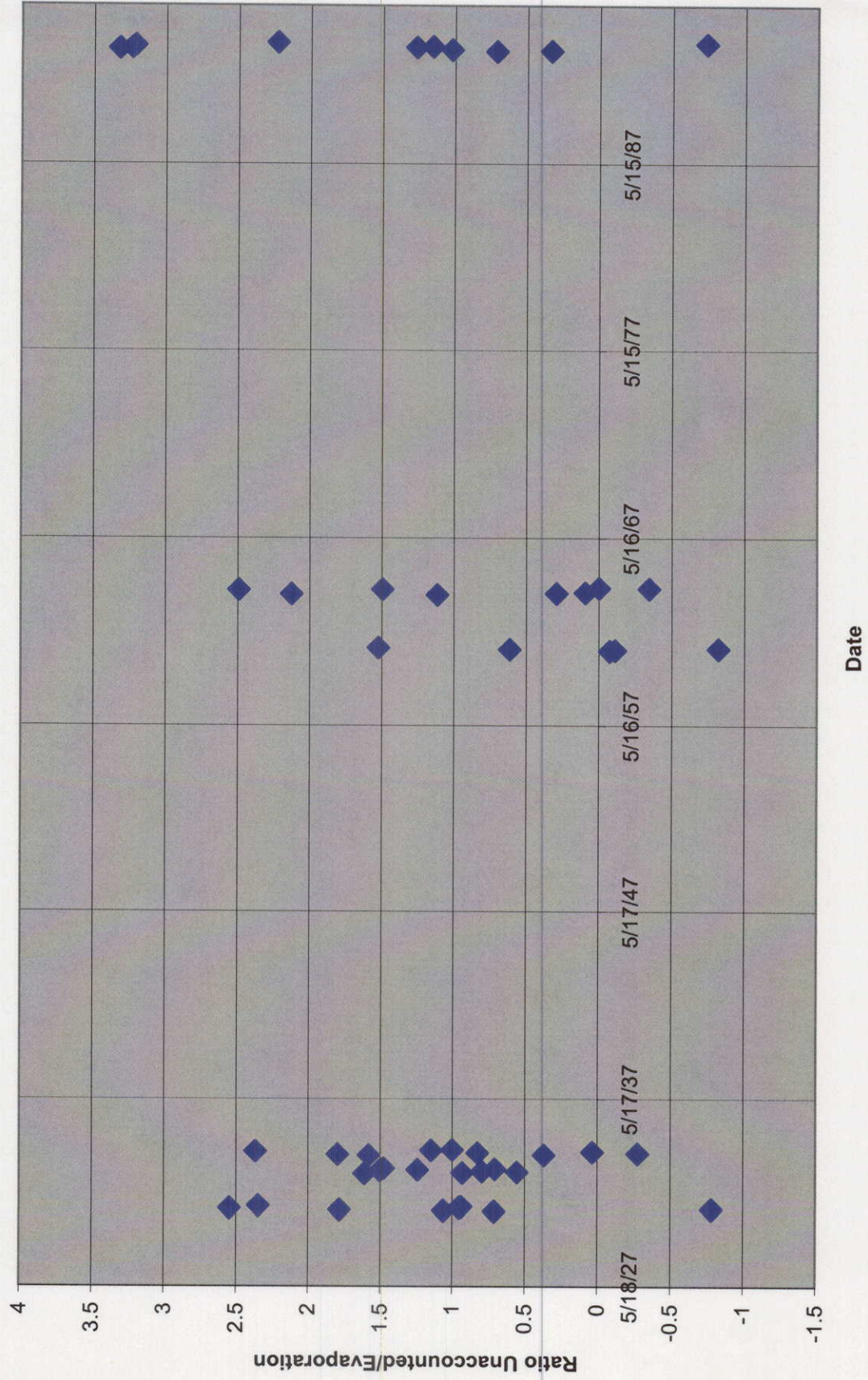
I didn't think at this point our needs justify formal analysis, but from the graphs it appears:

1. The ratio of "unaccounted for losses" to "evaporation" (where I presume well interference would show up) appears to have changed only slightly, if at all, over time.
2. The negative losses I spoke of seem to be random; possibly they reflect measurement and accounting imprecision rather than periods of a gaining lake.
3. I couldn't see much correlation between GW pumping and unaccounted losses, and there seems to be no seasonal variation in unaccounted for losses. Therefore if the losses are affected by pumping the response time is fairly long.
4. There was an apparent increase in GW pumping capacity from the 1930's to the 1960's, and possibly a slight further increase from the 1960's to the 1990's.

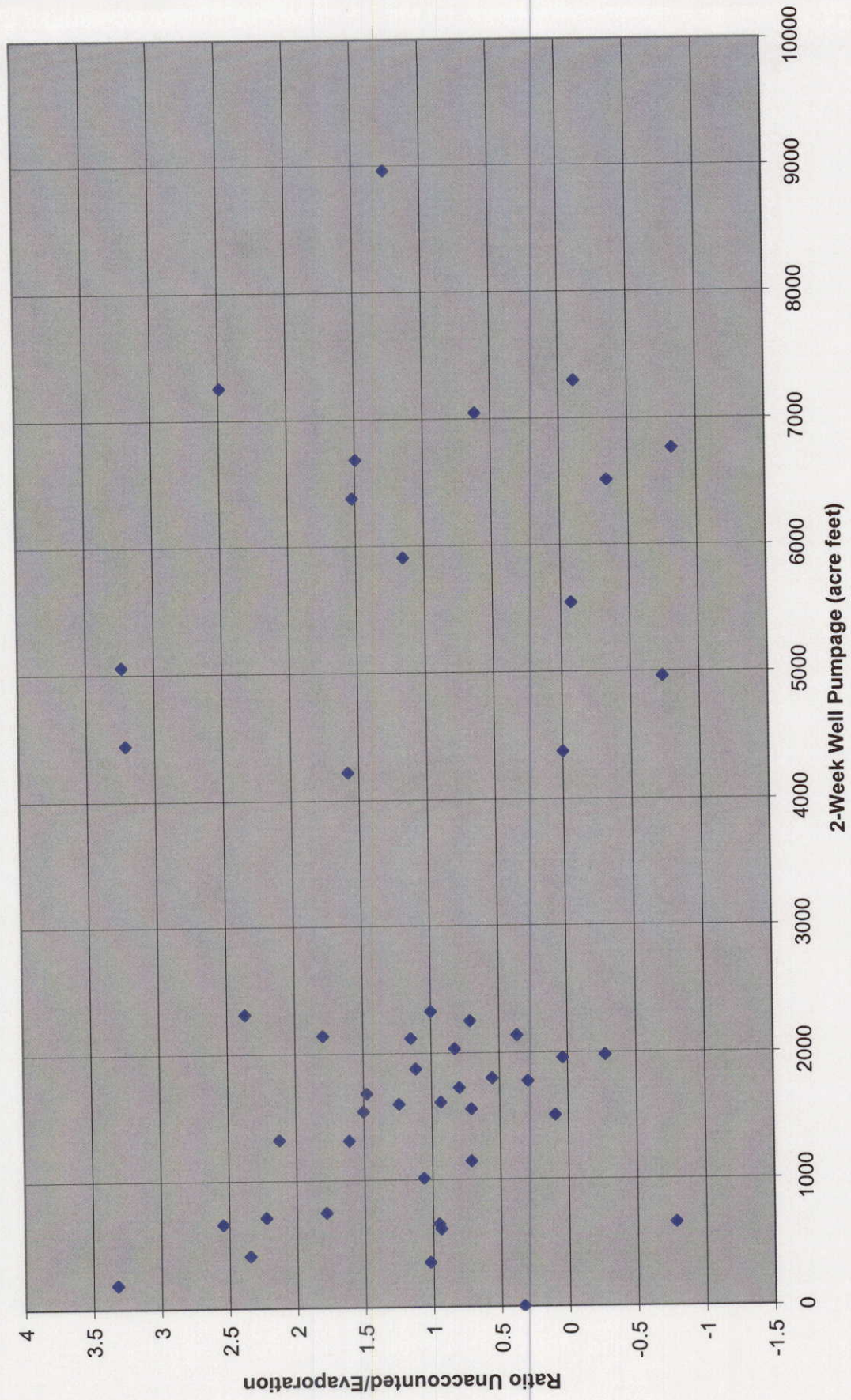


losses v pumping.xls

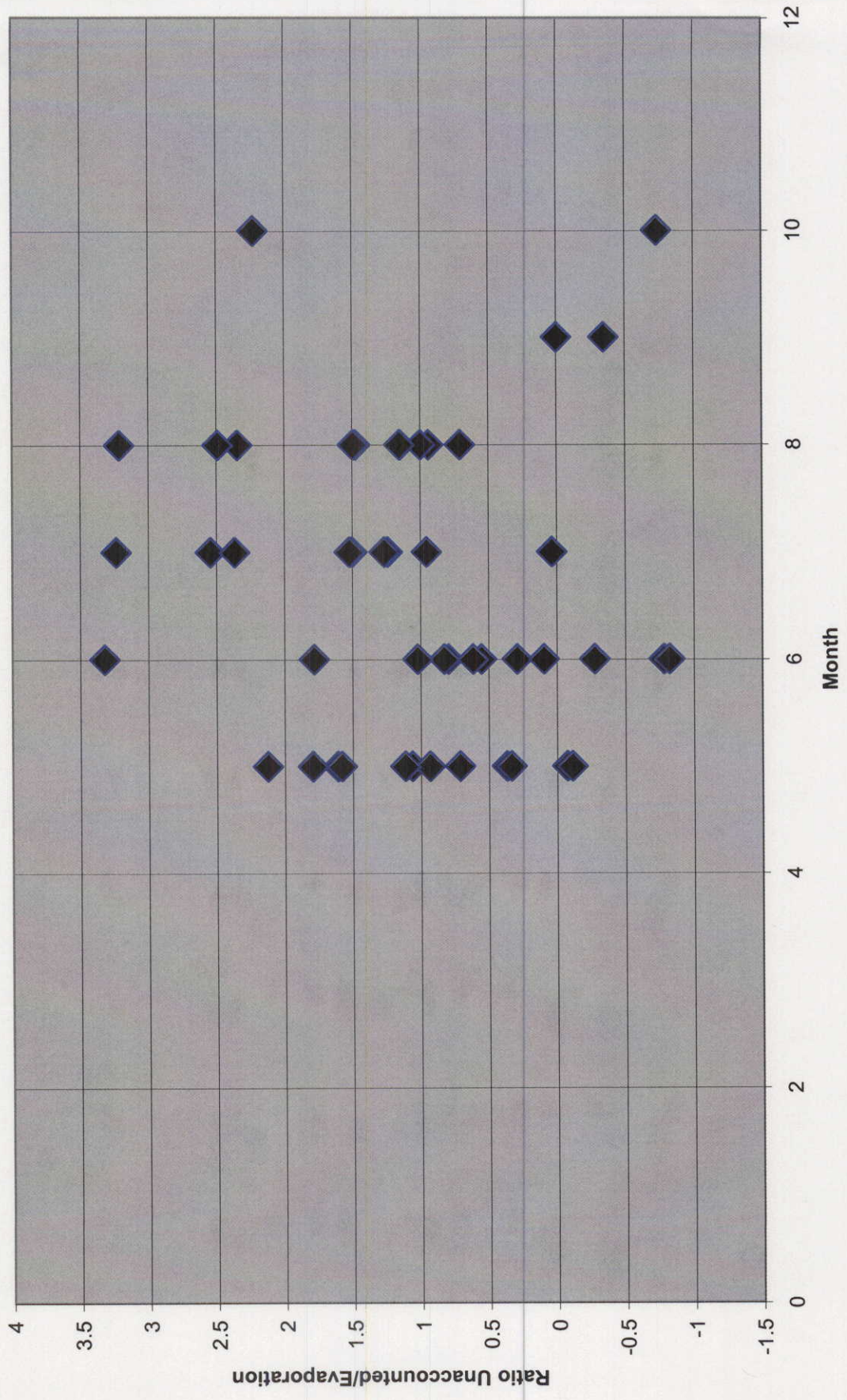
Unaccounted For Loss in Mud Lake



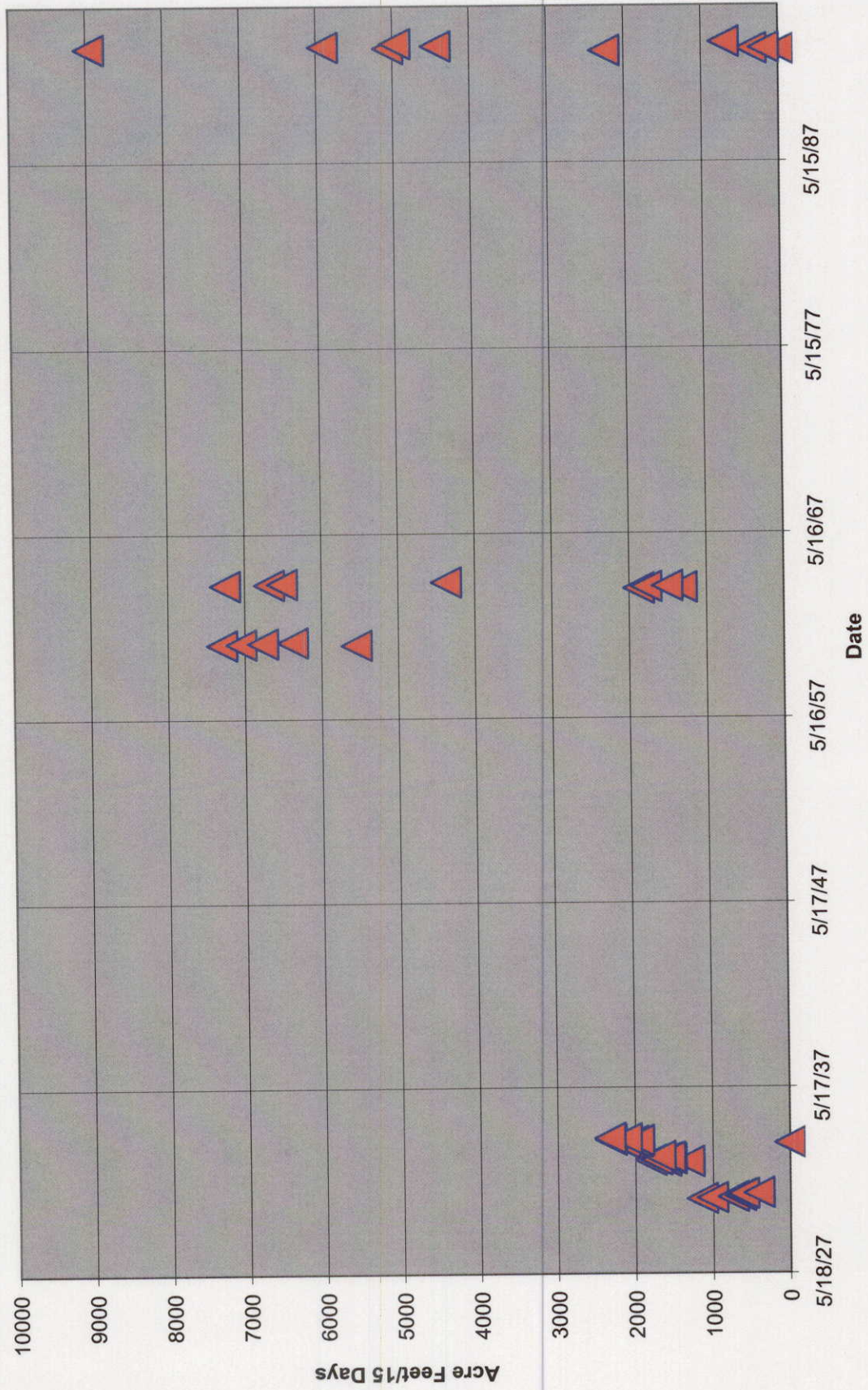
Unaccounted For Loss



Unaccounted Losses by Month



Well Pumpage Into Mud Lake



Contor, Bryce

From: Contor, Bryce

Sent: Wednesday, July 12, 2000 10:38 AM

To: Contor, Bryce; Carlsen, Ernie; Fritschle, Carter; McHugh, Candice

Subject: RE: minor adjustment to Early Season pumping remark

Correction: I meant to add diversion from storage rather than diversion to storage.

-----Original Message-----

From: **Contor, Bryce**

Sent: Wednesday, July 12, 2000 10:36 AM

To: Carlsen, Ernie; Fritschle, Carter; McHugh, Candice

Subject: minor adjustment to Early Season pumping remark

I meant to suggest this yesterday, but forgot:

"The director may authorize pumping to storage, storage, and diversion from storage under this right as early as..."

In my mind this is necessary because our proposed season of use for all those elements for the beneficial use storage claims begins May 1, and all of those functions may in fact be utilized prior to May 1 if early pumping occurs.

Contor, Bryce

From: Contor, Bryce
Sent: Wednesday, July 12, 2000 10:32 AM
To: Carlsen, Ernie
Cc: McHugh, Candice; Fritschle, Carter
Subject: remark for GW storage

I wonder if we need an EXP remark on the GW storage recommendations clarifying that they are subject to the shrink? How about lifting language from Gen. Prov. 1b:

"Water stored under this right shall be charged its proportionate part of the evaporation and other losses in the lake."

Contor, Bryce

From: Contor, Bryce
Sent: Tuesday, July 11, 2000 3:46 PM
To: Contor, Bryce; Carlsen, Ernie; Fritschle, Carter; McHugh, Candice
Subject: RE: SW rights diverted via "allotment system."

Corrections.

1) Larsen appears on this list with a SW claim out of the lake, but I don't believe he has GW storage in the lake or GW diverted via the lake (except as a shareholder of Mud Lake Water Users).

I haven't researched Larsen's SW claim. I don't think it is valid. If he has a GW claim, I doubt it is valid, either – the watermaster didn't identify him as a party w/ GW storage in the lake.

2) Except for Dobson, the private individuals on the list only have GW storage in the lake as members of Independent Water Users. So the list of GW storage holders is short: Mud Lake Water Users, Dobson, Independent Water Users.

-----Original Message-----

From: Contor, Bryce
Sent: Tuesday, July 11, 2000 3:39 PM
To: Carlsen, Ernie; Fritschle, Carter; McHugh, Candice
Subject: SW rights diverted via "allotment system."

The attached summary of AJ claims was generated on the VAX w/ a selection file by POD on Mud Lake, or Camas Creek below "Bybee Bridge" (the beginning of the lake for administrative purposes).

I can't remember the exact QA process I went through, but it included comparison with the decree and a review of claimants' other claims. I think this is a good list.

These are the SW rights that would be recommended as a storage volume instead of a diversion rate.

Holley, Jackett, and MWA have all merged into "Mud Lake Water Users," so there are only seven claimants involved.

If you take this list of claimants and substitute "Independent Water Users" for "Level Canal," then you have the list of claimants with GW storage in the lake.

Bryce

<< File: Diversion from Lake or Creek.xls >>

Contor, Bryce

From: Contor, Bryce
Sent: Tuesday, July 11, 2000 3:39 PM
To: Carlsen, Ernie; Fritschle, Carter; McHugh, Candice
Subject: SW rights diverted via "allotment system."

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I can't remember the exact QA process I went through, but it included comparison with the decree and a review of claimants' other claims. I think this is a good list.

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If you take this list of claimants and substitute "Independent Water Users" for "Level Canal," then you have the list of claimants with GW storage in the lake.

Bryce



Diversion from Lake or
Creek.x...

Mud Lake/Camas Creek Summary
6N 34E, 6N 35E, 7N 34E, 7N 35E

Claim	Claimant	Source	Diversion	Notes
31-00005	Level	Lake	Lake	
31-00006	MLW	Lake	Lake	
31-00019	Shuldberg	Creek	Creek	
31-00026	Burtenshaw	Lake	Lake	
31-00027	Burtenshaw	Lake	Lake	
31-00034	MLW	Lake	Lake	
31-00035	MLW	Lake	Lake	
31-00036	MLW	Lake	Lake	
31-00037	MLW	Lake	Lake	
31-00038	MLW	Lake	Lake	
31-00052	MLW	Lake	Lake	
31-00065	MLW	Lake	Lake	
31-00104	MLW	Lake	Lake	
31-00105	MLW	Lake	Lake	
31-00134	Jackett	Creek	Creek	
31-00135	Jackett	Creek	Creek	
31-00143	Jackett	Creek	Creek	
31-00144	Jackett	Creek	Creek	
31-00147	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00147A	MLW	Lake	Lake	
31-00159	MLW	Lake	Lake	
31-00162	MLW	Lake	Lake	
31-00163	MLW	Lake	Lake	
31-00166	MLW	Lake	Lake	
31-00168	MLW	Lake	Lake	
31-00169	MLW	Lake	Lake	
31-00184	MLW	Lake	Lake	
31-00185	MLW	Lake	Lake	
31-00185Z5	MLW	Lake	Lake	
31-00186	MLW	Lake	Lake	
31-00187	MLW	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00188	MLW	Lake	Lake	

31-00189	Level	Lake	Lake	
31-00190	Jackett	Creek	Creek	Claimed 7N 35E 7, above Bybee. Probably should be 6N 35E 3.
31-00191	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00192	Jackett	Lake	Creek	
31-00206	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00207	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00208	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00209	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00210	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00211	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00212A	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00213	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00232	MLW	Lake	Lake	
31-00237	MLW	Lake	Lake	
31-00243	Burtenshaw	Lake	Lake	Claimed section 12 POD - actually in section 1
31-00263	MLW	Lake	Lake	Two POD on lake
31-00328	MLW	Lake	Wells	Claimed in error - GW decree
31-00344	Holley	Creek	Creek	
31-00345	Holley	Creek	Creek	
31-00354	Holley	Creek	Creek	
31-00355	Holley	Creek	Both	
31-00360	Holley	Creek	Lake	
31-00361	Holley	Creek	Creek	
31-00363	MLW	Lake	Lake	
31-02276	MLW	Lake	Lake	Claimed in section 10 - canal fr. lake originates in 1
31-07005	MLW	Lake	Wells	Claimed in error - GW license
31-10957	Holley	Creek	Creek	
31-10958	Holley	Creek	Creek	
31-10959	Holley	Creek	Creek	
31-10960	Holley	Creek	Lake	
31-10961	Holley	Creek	Creek	
31-10962	Holley	Creek	Creek	
31-11199	Larsen	Lake	Lake	Claimed in section 10 - not on lake - needs research. Old rights 164, 165
31-11335	Level	Lake	Lake	
31-11337	Shuldberg	Creek	Creek	

Contor, Bryce

From: Contor, Bryce
Sent: Thursday, June 29, 2000 11:17 AM
To: McHugh, Candice; Tuthill, Dave; Hamlin Nygard, Susan; Carlsen, Ernie; Fritschle, Carter; Music, Vicky
Subject: RE: Basin 31 General Provisions

I like it, I'll be ready for the discussion on July 11th.

The irrigation-season storage of GW comes from the fact that the GW has to flow through the lake, due to the physical location of the POD's and POU's. Because of this fact, and because all the GW users are also owners of surface water storage ("allotment storage") in the lake, there is no direct linkage between diverting from GW and application to beneficial use. Typically, as a user anticipates depletion of his/her allotment storage, the well pumps are turned on. The watermaster records and logs the pumped volumes into the "well balance" allotment system, and drafts are charged against the balance as the water is used. If the user stops irrigating for a week to cut hay, he/she may or may not shut off the well pumps, depending on perception of future needs and adequacy of remaining balances. Therefore, at many times during the season, the watermaster will be carrying on his "well balance" account in the allotment system, more than 24hrs worth of irrigation volume from the GW rights. That's why I propose recommending a beneficial use in-season storage right for the GW users. I suspect this practice goes back to the beginning of the allotment system, and there is one particular early allotment sheet (1933 or 1934, I think) that appears to specifically reference it. That's the one I plan to rely on for priority date. It is these beneficial use rights for storage of GW that I supposed we would attach the "early pumping" remarks to.

-----Original Message-----

From: McHugh, Candice
Sent: Thursday, June 29, 2000 8:57 AM
To: Tuthill, Dave; Hamlin Nygard, Susan; Carlsen, Ernie; Fritschle, Carter; Contor, Bryce; Music, Vicky
Subject: Basin 31 General Provisions

Here is the latest draft of the Basin 31 General Provisions along with the remark about early season pumping and seasons of use for the different rights.

Please review and be ready to discuss any questions or concerns you may have at the meeting scheduled for July 11th at 2:00 p.m.

Thanks.

<< File: BASIN 31 General Provisions3.doc >>

Candice

DRAFT #3

BASIN 31 General Provisions

1. Allotment System:

- a. On or about May 1st of each year, the Director of the Idaho Department of Water Resources ("Director") shall compute the amount of water available in Mud Lake for diversion and use. This computation shall be made from the United States Geological Survey gauge located at the mouth of Camas Creek. To this calculation, the Director shall add the estimated inflow volume from Camas Creek between the period of May 1st to September 1st. The amount of water in the lake, plus said estimated inflow, shall be the amount of waters of Mud Lake available for use that irrigation season. On or about May 1st of each year, the Director shall compute in acre feet the allotment of water necessary to fill each right from May 1st to September 1st in the order of their respective priorities.
- b. Beginning on May 1st of each year and at least every 15 days from May 1st until the end of the irrigation season, the Director shall compute the amount of water used by each right, including the amount of water used prior to May 1st and the amount of water remaining available to fill such rights. The Director shall take into consideration actual accretion to the lake from natural inflow. Each right shall be charged its proportionate part of the evaporation and other losses in the lake. At such time that all rights cannot be completely filled through September 1st, the junior right(s) shall be cut off.

2. 35% per month limitation.

If the total demand for water from Mud Lake is made that would be greater than the volume of the lake as determined in 1(a) above, then the Director may determine that the water user(s) may not withdraw more than 35% of his/her total right in any calendar month. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's seasonal allotment.

END
Remainder ID.
source of
for calc. of
volume

add no canyon

10 Apr Friday 21st

Basin 31 Remark

*to storage, and
diversion from
storage*

Early Season Pumping: The director may authorize pumping to storage under this right as early as March 1. Any pumping prior to May 1 shall be subject to a "pumping plan" authorized by the director and shall bear a priority date of June 5, 1961.

OTHER THOUGHTS:

Season of Use

Storage: 11/1 to 10/31

Irrigation from Storage: 5/1 to 10/31 at volume from decreed right

Irrigation at the decreed diversion rate: 5/1 to 10/31

OR

Surface Water Storage

Surface Storage: ~~11/1 to 10/31~~

11/1 - 12/31

Irrigation from Storage: 4/1 to 10/31 at volume from decreed right

Irrigation at the decreed diversion rate: [no season needed because historically administered purely as a storage right with a volume only]

Groundwater Storage (w/ priority in 1930s)

Groundwater Storage: 5/1 to 10/31 (w/ remark allowing early storage)

Irrigation from Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

Diversion to Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

[I'm a little confused about the groundwater storage SOU. I didn't think groundwater was pumped and stored during the irrigation season at all.]

Priority Date

Early season storage has a 1961 priority date [No longer needed due to the remark]

Contor, Bryce

From: Contor, Bryce
Sent: Thursday, June 22, 2000 11:00 AM
To: McHugh, Candice; Hamlin Nygard, Susan; Fritschle, Carter; Carlsen, Ernie; Music, Vicky
Subject: RE: Basin 31 General Provisions/Remarks

More thoughts upon more carefull reading:

Two separate kinds of storage, w/ separate seasons of use:

Surface Storage:

Storage: 11/1 to 10/31
Irr fr. Storage: 4/1 to 10/31 at volume decreed
Irr at decree diversion rate: See below

Irr from surface storage I changed to 4/1 start date instead of 5/1 due to 1) clear indication from decree that diversion earlier than 5/1 was allowable, 2) watermaster indication that historically "April drafts" have occurred, and 3) the fact that the IDWR standard for this area is 4/1 - 10/31. Note that the 5/1-9/1 period in the decree does not appear to be a period of use but a baseline period for purposes of calculation.

My understanding of the outcome of the conversation w/ Carter regarding the surface rights managed under the allotment system is that they have historically been administered purely as storage rights and therefore we are not going to recommend a diversion rate but only a volume. If that is son, then there will be no irrigation at the diversion rate and therefore no need for a season for that.

GW Storage:

Storage: 5/1 to 10/31 (w/ remark allowing early storage)
Irr fr. Storage: 5/1 to 10/31 (w/ remark allowing early diversion)
Diversion to Storage: 5/1 to 10/31 (w/ remark allowing early diversion)

GW storage, is a beneficial use growing out of the operation of the Suave Decree. I suggest its period of use begin on May 1 to correspond to the requirements of the Bauerly Decree, and end on 10/31 to correspond to the long-standing practice of no carry-over of well balances in the allotment system. Its priority will date from the 1930's (I need to review the documentation again to get a year). We can't divert to storage earlier than May 1, w/o violating the original interpretation of Bauerly. Since no carryover of well balances is allowed, prior to May 1 there can't be any stored volume, and therefore no diversion from storage.

The "early season" pumping appears to be a modification of the interpretation of Bauerly, which occurred in 1961. Therefore any diversion to storage, storage, or diversion from storage, prior to May 1, has to be a part of the "new" practice of early season pumping adopted in '61 and referenced by the remark.

If we take this approach, the Early Season Pumping remark needs to

authorize not only "pumping to storage," as I had earlier suggested, but also "storage" and "diversion from storage."

-----Original Message-----

From: McHugh, Candice
Sent: Thursday, June 22, 2000 10:27 AM
To: Hamlin Nygard, Susan; Fritschle, Carter; Carlsen, Ernie; Contor, Bryce; Music, Vicky
Subject: Basin 31 General Provisions/Remarks

Everyone --

I thought I would send you the latest version of the Basin 31 General Provisions/Remarks. The editing was done very nicely by Bryce. I had a few questions that I put in red. I think the next step is to have a meeting to discuss this latest version with Dave T. What do you think are we ready for that or do we need further discussion first?

<< File: BASIN 31 General Provisions2.doc >>

Candice

Contor, Bryce

From: Contor, Bryce
Sent: Thursday, June 22, 2000 10:37 AM
To: McHugh, Candice; Hamlin Nygard, Susan; Fritschle, Carter; Carlsen, Ernie; Music, Vicky
Subject: RE: Basin 31 General Provisions/Remarks

For my two bits worth, I think we're ready to meet w. Mr. Tuthill.

A couple of responses:

The reason for including "pumping plan" in the remark was to clarify that early season pumping was to be regulated as to timing and quantity, by the watermaster. Maybe "a" Pumping Plan rather than "the" Pumping Plan. The historical background is that early season pumping only occurs after the watermaster and water users consult and agree, and then a Pumping Plan is adopted for that season and that season only. The plan is very specific, as to dates, quantities, and the target gauge height. The negotiations, it appears from the documentation, are quite detailed. One year, for instance, it appears that there was a good deal of discussion as to whether a 7.0 foot or 7.5 foot gauge height was an appropriate target. The next year, the selected target was 4.5 feet. Anyway, I think we need to avoid the idea that we are now relaxing the standards and letting people pump at will anytime the Director declares early pumping is OK.

I think the priority and period of use for early pumping storage is not an issue any more, my understanding was that with the adoption of the above remark on the in-season storage rights, a second right would not be required for early pumping. The volumes and periods of use from storage for the in-season rights are appropriate for early pumping, it is only the early diversion to storage that would be different, and this is addressed in the remark.

Anyway, I like what you've put together here.

-----Original Message-----

From: McHugh, Candice
Sent: Thursday, June 22, 2000 10:27 AM
To: Hamlin Nygard, Susan; Fritschle, Carter; Carlsen, Ernie; Contor, Bryce; Music, Vicky
Subject: Basin 31 General Provisions/Remarks

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<< File: BASIN 31 General Provisions2.doc >>

Candice

DRAFT #2

BASIN 31 General Provisions

1. Allotment System:

- a. On or about May 1st of each year, the Director of the Idaho Department of Water Resources ("Director") shall compute the amount of water available in Mud Lake for diversion and use. This computation shall be made from the United States Geological Survey gauge located at the mouth of Camas Creek. To this calculation, the Director shall add the estimated inflow volume from Camas Creek between the period of May 1st to September 1st. The amount of water in the lake, plus said estimated inflow, shall be the amount of waters of Mud Lake available for use that irrigation season. On or about May 1st of each year, the Director shall compute in acre feet the allotment of water necessary to fill each right from May 1st to September 1st in the order of their respective priorities.
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2. 35% per month limitation.

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Basin 31 Remark

Early Season Pumping: The director may authorize pumping to storage under this right as early as March 1. Such early pumping prior to May 1 shall be subject to the Pumping Plan authorized by the director and shall bear a priority date of June 5, 1961. [What is the “pumping plan”? Should we define it or is it something of common knowledge?]

OTHER THOUGHTS:

Season of Use

Storage: 11/1 to 10/31

Irrigation from Storage: 5/1 to 10/31 at volume from decreed right

Irrigation at the decreed diversion rate: 5/1 to 10/31

Priority Date

Early season storage has a 1961 priority date w/ a season of 3/1 to 4/30 [I was unclear whether this was still necessary?]

Gauging Station on Camas Creek /
Mud Lake 7N 35E 32 SE 1/4



photos taken by B. Carter 5/1/2000

Contor, Bryce

From: Contor, Bryce

Sent: Friday, June 02, 2000 11:39 AM

To: McHugh, Candice; Carlsen, Ernie

Cc: Music, Vicky

Subject: Diversions from Mud Lake

Attached is a spreadsheet of claims diverted below the Bybee Bridge.

1) I reviewed all the rights listed on the 1931 and 1934 allotment sheets, and the individual Holley surface rights listed in Holley v Kulp. Only five of these are not included on the attached list, because they are not claimed in the AJ. They are:

31-00170, 31-00171, 31-00222, 31-00223, and 31-00341.

2) All the SW irrigation rights in 6N 34E, 6N 35E, 7N 34E, and 7N 35E are included on the list except the USA claims.

3) In summary:

Source	Diversion	Count
Creek	Creek	16
Creek	Lake	2
Creek	Both	1
Lake	Creek	0
Lake	Lake	45
Lake	Well	2

The two diversions with source = lake and diversion = well are claimed in error; one is a decreed well right and one is a licensed well right.

4) My opinion is to recommend the two GW rights as GW. All the lake/lake and creek/creek claims ~~others~~, recommend as claimed.

This leaves the two with source=creek and diversion=lake. Looking at the WR database record on those two, it appears the original decree included 4 points of diversion. One appears to be the Holley creek pump just below the Bybee Bridge, two appear to be alternate descriptions of the Bybee Bridge itself, and the last is the point of

rediversion on the lake. I'd like to recommend the Bybee Bridge and the creek pump as POD's, the mouth of Camas Creek as a PO Injection, and the lake diversion as a PO Rediversion.

Mud Lake/Camas Creek Summary
6N 34E, 6N 35E, 7N 34E, 7N 35E

Claim # 076

Claim	Claimant	Source	Diversion	Notes
31-00005	Level	Lake	Lake	
31-00006	MLW	Lake	Lake	
31-00019	Shulberg	Creek	Creek	
31-00026	Burtenshaw	Lake	Lake	
31-00027	Burtenshaw	Lake	Lake	
31-00034	MLW	Lake	Lake	
31-00035	MLW	Lake	Lake	
31-00036	MLW	Lake	Lake	
31-00037	MLW	Lake	Lake	
31-00038	MLW	Lake	Lake	
31-00052	MLW	Lake	Lake	
31-00065	MLW	Lake	Lake	
31-00104	MLW	Lake	Lake	
31-00105	MLW	Lake	Lake	
31-00134	Jackett	Creek	Creek	
31-00135	Jackett	Creek	Creek	
31-00143	Jackett	Creek	Creek	
31-00144	Jackett	Creek	Creek	
31-00147	Dobson	Lake	Lake	
31-00147A	MLW	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00159	MLW	Lake	Lake	
31-00162	MLW	Lake	Lake	
31-00163	MLW	Lake	Lake	
31-00166	MLW	Lake	Lake	
31-00168	MLW	Lake	Lake	
31-00169	MLW	Lake	Lake	
31-00184	MLW	Lake	Lake	
31-00185	MLW	Lake	Lake	
31-00185Z5	MLW	Lake	Lake	
31-00186	MLW	Lake	Lake	
31-00187	MLW	Lake	Lake	
31-00188	MLW	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1

31-00189	Level	Lake	Lake	
31-00190	Jackett	Creek	Creek	Claimed 7N 35E 7, above Bybee. Probably should be 6N 35E 3.
31-00191	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00192	Jackett	Lake	Creek	
31-00206	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00207	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00208	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00209	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.
31-00210	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00211	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00212A	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00213	Potter	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00232	MLW	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1
31-00237	MLW	Lake	Lake	
31-00243	Burtenshaw	Lake	Lake	Claimed section 12 POD - actually in section 1
31-00263	MLW	Lake	Lake	Two POD on lake
31-00328	MLW	Lake	Wells	Claimed in error - GW decree
31-00344	Holley	Creek	Creek	
31-00345	Holley	Creek	Creek	
31-00354	Holley	Creek	Creek	
31-00355	Holley	Creek	Both	
31-00360	Holley	Creek	Lake	
31-00361	Holley	Creek	Creek	
31-00363	MLW	Lake	Lake	
31-02276	MLW	Lake	Lake	Claimed in section 10 - canal fr. lake originates in 1
31-07005	MLW	Lake	Wells	Claimed in error - GW license
31-10957	Holley	Creek	Creek	
31-10958	Holley	Creek	Creek	
31-10959	Holley	Creek	Creek	
31-10960	Holley	Creek	Lake	
31-10961	Holley	Creek	Creek	
31-10962	Holley	Creek	Creek	
31-11199	Larsen	Lake	Lake	Claimed in section 10 - not on lake - needs research. Old rights 164, 165
31-11335	Level	Lake	Lake	
31-11337	Shuldberg	Creek	Creek	

Mud Lake/Camas Creek Summary
6N 34E, 6N 35E, 7N 34E, 7N 35E

Sumner/Diversion order

Claim	Claimant	Source	Diversion Notes
31-00355	Holley	Creek	Both
31-00019	Shuldberg	Creek	Creek
31-00134	Jackett	Creek	Creek
31-00135	Jackett	Creek	Creek
31-00143	Jackett	Creek	Creek
31-00144	Jackett	Creek	Creek
31-00190	Jackett	Creek	Creek
31-00344	Holley	Creek	Claimed 7N 35E 7, above Bybee. Probably should be 6N 35E 3.
31-00345	Holley	Creek	Creek
31-00354	Holley	Creek	Creek
31-00361	Holley	Creek	Creek
31-10957	Holley	Creek	Creek
31-10958	Holley	Creek	Creek
31-10959	Holley	Creek	Creek
31-10961	Holley	Creek	Creek
31-10962	Holley	Creek	Creek
31-11337	Shuldberg	Creek	Creek
31-00360	Holley	Creek	Lake
31-10960	Holley	Creek	Lake
31-00192	Jackett	Lake	Creek
31-00328	MLW	Lake	Creek <i>was</i> Claimed in error - GW decree
31-00005	Level	Lake	Lake
31-00005	MLW	Lake	Lake
31-00026	Burtenshaw	Lake	Lake
31-00027	Burtenshaw	Lake	Lake
31-00034	MLW	Lake	Lake
31-00035	MLW	Lake	Lake
31-00036	MLW	Lake	Lake
31-00037	MLW	Lake	Lake
31-00038	MLW	Lake	Lake
31-00052	MLW	Lake	Lake
31-00065	MLW	Lake	Lake

31-00104	MLW	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.	
31-00105	MLW	Lake	Lake		
31-00147	Dobson	Lake	Lake		
31-00147A	MLW	Lake	Lake		
31-00159	MLW	Lake	Lake		
31-00162	MLW	Lake	Lake		
31-00163	MLW	Lake	Lake		
31-00166	MLW	Lake	Lake		
31-00168	MLW	Lake	Lake		
31-00169	MLW	Lake	Lake		
31-00184	MLW	Lake	Lake	Claimed in section 11 - canal fr. Lake originates in 1	
31-00185	MLW	Lake	Lake		
31-00185Z5	MLW	Lake	Lake		
31-00186	MLW	Lake	Lake		
31-00187	MLW	Lake	Lake		
31-00188	MLW	Lake	Lake		
31-00189	Level	Lake	Lake		
31-00191	Dobson	Lake	Lake		
31-00206	Dobson	Lake	Lake		
31-00207	Dobson	Lake	Lake		
31-00208	Dobson	Lake	Lake	Claimed section 12 POD - pumps in 12, canal fr. lake originates in 1 or 6.	
31-00209	Dobson	Lake	Lake		
31-00210	Potter	Lake	Lake		
31-00211	Potter	Lake	Lake		
31-00212A	Potter	Lake	Lake		
31-00213	Potter	Lake	Lake		
31-00232	MLW	Lake	Lake		
31-00237	MLW	Lake	Lake		
31-00243	Burnshaw	Lake	Lake		
31-00263	MLW	Lake	Lake		
31-00363	MLW	Lake	Lake	Claimed section 12 POD - actually in section 1 Two POD on lake	
31-02276	MLW	Lake	Lake		
31-11199	Larsen	Lake	Lake		
31-11335	Level	Lake	Lake		
31-07005	MLW	Lake	Wells		
					Claimed in section 10 - canal fr. lake originates in 1 Claimed in section 10 - not on lake - needs research. Old rights 164, 165 Claimed in error - GW license

OD-5813
AJS613NP
SELECTION FILE: 6M34E-SW

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION WATER MASTER REPORT
BY WATER SOURCE/CURRENT OWNER LAST NAME

DATE: 06/01/00
TIME: 14:57:28
PAGE: 1

*MPOD: Y = Multiple Pts of Diversion, Pod Diversion Rate(s) is 0
U = Multiple Pts of Diversion, Pod Diversion Rate(s) Not 0
N = No Multiple Pts of Diversion (1 or less)

WATER RIGHT NUMBER	CURRENT OWNER NAME	PRIORITY DATE	T G	S POINT OF DIVERSION	F TOTAL DIVERSION	L POD DIVERSION NAME	D E
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WATER SOURCE: CANAS CREEK

A31-00360	HOLLEY WATER USERS ASSN	11/17/1918	D	06N 34E 1	SESESE	3.000 CFS	Y 01
A31-00354	HOLLEY WATER USERS ASSN	12/14/1914	D	07N 35E 36	SENNMW	0.800 CFS	Y 01
A31-10960	HOLLEY WATER USERS ASSN	11/05/1917	D	06N 34E 1	SESESE	2.360 CFS	Y 01
A31-10962	HOLLEY WATER USERS ASSN	01/01/1924	D	07N 35E 36	SENNMW	1.600 CFS	Y 01
A31-00855	HOLLEY WATER USERS ASSN	12/03/1916	D	07N 35E 36	SENNMW	0.800 CFS	Y 01
A31-00854	HOLLEY WATER USERS ASSN	11/12/1913	D	07N 35E 36	SENNMW	1.700 CFS	Y 01
A31-10957	HOLLEY WATER USERS ASSN	02/20/1913	D	07N 35E 36	SENNMW	2.500 CFS	Y 01
A31-10958	HOLLEY WATER USERS ASSN	11/01/1914	D	07N 35E 36	SENNMW	2.700 CFS	Y 01
A31-00845	HOLLEY WATER USERS ASSN	03/04/1914	D	07N 35E 36	SENNMW	0.800 CFS	Y 01
A31-10959	HOLLEY WATER USERS ASSN	06/16/1916	D	07N 35E 36	SENNMW	7.980 CFS	Y 01
A31-00366	HOLLEY WATER USERS ASSN	05/24/1920	D	07N 35E 36	SENNMW	2.400 CFS	Y 01
A31-10961	HOLLEY WATER USERS ASSN	01/11/1918	D	07N 35E 36	SENNMW	6.180 CFS	Y 01

WATER SOURCE: MUD LAKE

A31-00243	BURTENSHAW, DON M	09/18/1914	D	06N 34E 12	NNNNMW	2.600 CFS	N 01
A31-00027	BURTENSHAW, DON M	12/03/1916	D	06N 34E 1	SSMSMW	3.000 CFS	N 01
A31-00026	BURTENSHAW, VAN	06/01/1915	D	06N 34E 1	SSMSMW	1.000 CFS	N 01
A31-00209	DOBSON RANCH PARTNERSHIP	05/01/1927	D	06N 34E 12	SENNENE	0.700 CFS	N 01
A31-00207	DOBSON RANCH PARTNERSHIP	05/01/1912	D	06N 34E 12	SENNENE	0.200 CFS	N 01
A31-00147	DOBSON RANCH PARTNERSHIP	04/15/1912	D	06N 34E 12	SENNENE	7.000 CFS	N 01
A31-00191	DOBSON RANCH PARTNERSHIP	04/15/1912	D	06N 34E 12	SENNENE	7.000 CFS	N 01
A31-00208	DOBSON RANCH PARTNERSHIP	05/01/1926	D	06N 34E 12	SENNENE	0.300 CFS	N 01
A31-00206	DOBSON RANCH PARTNERSHIP	05/01/1911	D	06N 34E 12	SENNENE	0.600 CFS	N 01
A31-11199	LARSEN, BLAINE L	12/31/1919	D	06N 34E 10	SENNENE	1.800 CFS	Y 01
A31-00169	MUD LAKE WATER USERS INC	12/10/1917	D	06N 34E 1	NESE	1.600 CFS	Y 01
A31-00147A	MUD LAKE WATER USERS INC	07/21/1913	D	06N 34E 1	SESW	4.000 CFS	Y 01
A31-00052	MUD LAKE WATER USERS INC	09/06/1913	D	06N 34E 1	SESW	2.500 CFS	Y 01
A31-00263	MUD LAKE WATER USERS INC	10/14/1912	D	06N 34E 1	SESW	2.680 CFS	Y 01
A31-02276	MUD LAKE WATER USERS INC	01/17/1969	D	06N 34E 11	NESE	10.000 CFS	Y 01
A31-00188	MUD LAKE WATER USERS INC	03/09/1911	D	06N 34E 1	SESW	1.600 CFS	Y 01
A31-00232	MUD LAKE WATER USERS INC	05/01/1923	D	06N 34E 1	SESW	1.600 CFS	Y 01
A31-00159	MUD LAKE WATER USERS INC	06/24/1916	D	06N 34E 1	NESE	2.440 CFS	Y 01
A31-00184	MUD LAKE WATER USERS INC	04/15/1912	D	06N 34E 1	SESE	80.800 CFS	Y 01
A31-00034	MUD LAKE WATER USERS INC	05/01/1920	D	06N 34E 1	SESW	3.200 CFS	Y 01
A31-00104	MUD LAKE WATER USERS INC	10/18/1913	D	06N 34E 1	SESW	3.000 CFS	Y 01
A31-00163	MUD LAKE WATER USERS INC	12/03/1916	D	06N 34E 1	SESW	72.600 CFS	Y 01
A31-00186	MUD LAKE WATER USERS INC	08/11/1924	D	06N 34E 1	NESE	75.000 CFS	Y 01
A31-00166	MUD LAKE WATER USERS INC	09/05/1912	D	06N 34E 1	NESE	1.720 CFS	Y 01
A31-00105	MUD LAKE WATER USERS INC	12/15/1913	D	06N 34E 1	SESW	1.600 CFS	Y 01
A31-00035	MUD LAKE WATER USERS INC	05/01/1921	D	06N 34E 1	NESE	6.400 CFS	Y 01
A31-00168	MUD LAKE WATER USERS INC	10/03/1910	D	06N 34E 1	SESW	1.600 CFS	Y 01

OD-5813
AJ5813MP
SELECTION FILE: 6N34E-SH

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION WATER MASTER REPORT
BY WATER SOURCE/CURRENT OWNER LAST NAME

DATE: 06/01/00
TIME: 14:57:59
PAGE: 2

*NP00: Y = Multiple Pts of Diversion, Pod Diversion Rate(s) is 0
U = Multiple Pts of Diversion, Pod Diversion Rate(s) Not 0
N = No Multiple Pts of Diversion (1 or less)

WATER RIGHT NUMBER	CURRENT OWNER NAME	PRIORITY DATE	T G	S POINT OF DIVERSION	F L	TOTAL DIVERSION	POD DIVERSION NAME	*M P U O S D E
A31-00036	MUD LAKE WATER USERS INC	05/01/1922	D	06N 34E 1	SESW	9.600 CFS		Y 01
A31-00038	MUD LAKE WATER USERS INC	06/28/1924	D	06N 34E 1	SESW	0.800 CFS		Y 01
A31-00037	MUD LAKE WATER USERS INC	05/01/1923	D	06N 34E 1	SESE	6.400 CFS		Y 01
A31-00065	MUD LAKE WATER USERS INC	10/03/1910	D	07N 34E 34	SWSW	1.600 CFS		Y 01
A31-00363	MUD LAKE WATER USERS INC	08/28/1926	D	06N 34E 1	SWSW	6.400 CFS		Y 01
A31-00237	MUD LAKE WATER USERS INC	11/28/1919	D	06N 34E 1	NESE	2.400 CFS		Y 01
A31-00162	MUD LAKE WATER USERS INC	06/01/1916	D	06N 34E 1	SESW	1.000 CFS		Y 01
A31-00185	MUD LAKE WATER USERS INC	12/02/1916	D	06N 34E 1	SESW	72.600 CFS		Y 01
A31-00006	MUD LAKE WATER USERS INC	12/10/1917	D	06N 34E 1	SESW	1.400 CFS		Y 01
A31-00187	MUD LAKE WATER USERS INC	05/01/1921	D	06N 34E 1	SESW	25.000 CFS		Y 01
A31-00210	POTTER JR, JOSEPH B	05/01/1911	D	06N 34E 11	NESENE	0.800 CFS		N 01
A31-00211	POTTER JR, JOSEPH B	05/01/1912	D	06N 34E 11	NESENE	0.200 CFS		N 01
A31-00213	POTTER JR, JOSEPH B	05/01/1928	D	06N 34E 11	NESENE	0.400 CFS		N 01
A31-00212A	POTTER JR, JOSEPH B	05/01/1927	D	06N 34E 11	NESENE	0.600 CFS		N 01

00-5813
AJS613NP
SELECTION FILE: 6M35E-SM

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION WATER MASTER REPORT
BY WATER SOURCE/CURRENT OWNER LAST NAME

DATE: 06/01/00
TIME: 14:44:43
PAGE: 1

*MPOD: Y = Multiple Pts of Diversion, Pod Diversion Rate(s) is 0
U = Multiple Pts of Diversion, Pod Diversion Rate(s) Not 0
N = No Multiple Pts of Diversion (1 or less)

WATER RIGHT NUMBER	CURRENT OWNER NAME	PRIORITY DATE	T	G	POINT OF DIVERSION	L	F	TOTAL DIVERSION	POD DIVERSION NAME	*M P U O S D E
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WATER SOURCE: CAMAS CREEK

A31-00143	JACKETT CANAL COMPANY	03/29/1911	D	06N	35E	3	MMNW	4	1.000 CFS	Y 01
A31-00144	JACKETT CANAL COMPANY	09/21/1912	D	06N	35E	3	MMNW	4	1.000 CFS	Y 01
A31-00135	JACKETT CANAL COMPANY	06/10/1912	D	06N	35E	3	MMNW	4	2.500 CFS	M 01
A31-00134	JACKETT CANAL COMPANY	03/20/1911	D	06N	35E	3	MMNW	4	3.500 CFS	Y 01
A31-10649	MARTY JOSEPH	06/01/1980	J	06N	35E	4	MMNW	4	0.110 CFS	Y 01
A31-11337	SHULDBERG, KEITH C	04/01/1980	J	06N	35E	4	MMNW	4	0.630 CFS	N 01
A31-00019	SHULDBERG, KEITH C	04/22/1908	D	06N	35E	4	MMNW	4	1.700 CFS	N 01

WATER SOURCE: MUD LAKE

A31-00192	JACKETT CANAL COMPANY	09/08/1917	D	06N	35E	3	MMNW	4	3.000 CFS	Y 01
A31-00276	MUD LAKE WATER USERS INC	01/17/1909	D	06N	34E	11	NESE		10.000 CFS	Y 01

OD-5813
A15813NP
SELECTION FILE: 7N34E-SW

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION WATER MASTER REPORT
BY WATER SOURCE/CURRENT OWNER LAST NAME

DATE: 06/01/00
TIME: 14:51:44
PAGE: 1

*MPOD: Y = Multiple Pts of Diversion, Pod Diversion Rate(s) is 0
U = Multiple Pts of Diversion, Pod Diversion Rate(s) Not 0
N = No Multiple Pts of Diversion (1 or less)

WATER RIGHT NUMBER	CURRENT OWNER NAME	PRIORITY DATE	S T G	F L G	POINT OF DIVERSION	TOTAL DIVERSION	POD DIVERSION NAME	M P O D E
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WATER SOURCE: CANAL SEEPAGE

A31-02420 JEFFERSON IRRIGATION COMPANY

04/02/1965 L 07N 34E 20 NESEW

15.000 CFS

Y 01

WATER SOURCE: JEFFERSON LAKE

A31-02134 JEFFERSON IRRIGATION COMPANY

02/01/1914 L 07N 34E 17 SESESE

38.400 CFS

N 01

WATER SOURCE: JOHNSTON LAKE

A31-10996 AMERICA ACTING THROUGH, UNITED STAT 01/01/1880 J 07N 34E 11 NMSW
31-10996 AMERICA ACTING THROUGH, UNITED STAT 01/01/1880 J 07N 34E 11 NMSW

1.000 AFA
1.000 AFA

Y 04
Y 04

WATER SOURCE: MUD LAKE

R31-00189	LEVEL CANAL CO INC	09/17/1912 D 07N 34E 33 SUSESE			22.400 CFS	LEVEL CANAL	N 01
A31-00189	LEVEL CANAL COMPANY INC	09/17/1912 D 07N 34E 33 SESESE			22.400 CFS		Y 01
A31-00005	LEVEL CANAL COMPANY INC	10/03/1910 D 07N 34E 33 SESESE			1.600 CFS		Y 01
A31-11335	LEVEL CANAL COMPANY INC	05/01/1952 J 07N 34E 33 SMSMSW		R	11.090 CFS		Y 01
A31-00474	MUD LAKE WATER USERS INC	05/01/1952 D 06N 34E 1 SESW			1.600 CFS		Y 01
A31-00052	MUD LAKE WATER USERS INC	07/21/1913 D 06N 34E 1 SESW			4.000 CFS		Y 01
A31-00263	MUD LAKE WATER USERS INC	09/06/1913 D 06N 34E 1 SESW			2.500 CFS		Y 01
A31-00187	MUD LAKE WATER USERS INC	10/14/1912 D 06N 34E 1 SESW			2.680 CFS		Y 01
A31-00159	MUD LAKE WATER USERS INC	05/01/1921 D 06N 34E 1 SESW			25.000 CFS		Y 01
A31-00134	MUD LAKE WATER USERS INC	06/24/1916 D 06N 34E 1 NESE			2.440 CFS		Y 01
A31-00104	MUD LAKE WATER USERS INC	05/01/1917 D 06N 34E 1 SESW			3.200 CFS		Y 01
A31-00165	MUD LAKE WATER USERS INC	10/16/1913 D 06N 34E 1 SESW			3.000 CFS		Y 01
A31-00183	MUD LAKE WATER USERS INC	12/02/1916 D 06N 34E 1 SESW			72.600 CFS		Y 01
A31-00185	MUD LAKE WATER USERS INC	12/02/1916 D 06N 34E 1 SESW			72.600 CFS		Y 01
A31-00166	MUD LAKE WATER USERS INC	09/05/1912 D 06N 34E 1 NESE			1.720 CFS		Y 01
A31-00105	MUD LAKE WATER USERS INC	12/15/1913 D 06N 34E 1 SESW			1.600 CFS		Y 01
A31-00035	MUD LAKE WATER USERS INC	05/01/1921 D 06N 34E 1 NESE			6.408 CFS		Y 01
A31-00168	MUD LAKE WATER USERS INC	10/03/1910 D 06N 34E 1 SESW			1.600 CFS		Y 01
A31-00036	MUD LAKE WATER USERS INC	05/01/1922 D 06N 34E 1 SESW			9.600 CFS		Y 01
A31-00037	MUD LAKE WATER USERS INC	08/28/1924 D 06N 34E 1 SESE			0.800 CFS		Y 01
A31-00184	MUD LAKE WATER USERS INC	05/01/1923 D 06N 34E 1 SESE			6.400 CFS		Y 01
A31-00184	MUD LAKE WATER USERS INC	04/15/1912 D 06N 34E 1 SESE			80.800 CFS		Y 01
A31-00184	MUD LAKE WATER USERS INC	06/07/1910 D 06N 34E 1 SESW			1.000 CFS		Y 01
A31-07005	MUD LAKE WATER USERS INC	12/04/1967 D 07N 34E 13 SUNE			13.260 CFS		Y 01
A31-00996	MUD LAKE WATER USERS INC	12/19/1917 D 06N 34E 1 SESW			1.400 CFS		Y 01
A31-00408	MUD LAKE WATER USERS INC	03/09/1911 D 06N 34E 1 SESW			1.600 CFS		Y 01

OD-5813
AJS813NP
SELECTION FILE: 7N34E-SW

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION WATER MASTER REPORT
BY WATER SOURCE/CURRENT OWNER LAST NAME

DATE: 06/01/00
TIME: 14:53:02
PAGE: 2

*MPOD: Y = Multiple Pts of Diversion, Pod Diversion Rate(s) is 0
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N = No Multiple Pts of Diversion (1 or less)

WATER RIGHT NUMBER	CURRENT OWNER NAME	PRIORITY DATE	T G	POINT OF DIVERSION	L G	TOTAL DIVERSION	POD DIVERSION NAME	Y D E	*M P U O S D E
A31-00363	WAB LAKE WATER USERS INC	08/28/1926	D	06N 34E 1	SNSE	6.400 CFS		Y 01	
A31-00237	WAB LAKE WATER USERS INC	11/28/1919	D	06N 34E 1	NESE	2.400 CFS		Y 01	
A31-00065	WAB LAKE WATER USERS INC	10/03/1910	D	07N 34E 34	SWSW	1.600 CFS		Y 01	
A31-00186	WAB LAKE WATER USERS INC	08/14/1924	D	06N 34E 1	NESE	75.000 CFS		Y 01	

WATER SOURCE: WASTE WATER

A31-02420 JEFFERSON IRRIGATION COMPANY 04/02/1965 L 07N 34E 20 NESENU 15.000 CFS Y 01

OD-5813
AJS813MP
SELECTION FILE: 7N35E-SW

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION WATER MASTER REPORT
BY WATER SOURCE/CURRENT OWNER LAST NAME

DATE: 06/01/00
TIME: 14:55:29
PAGE: 1

*MPOD: Y = Multiple Pts of Diversion, Pod Diversion Rate(s) is 0
U = Multiple Pts of Diversion, Pod Diversion Rate(s) Not 0
N = No Multiple Pts of Diversion (1 or less)

WATER RIGHT NUMBER	CURRENT OWNER NAME	PRIORITY DATE	S T	G	POINT OF DIVERSION	F L	G	TOTAL DIVERSION	POD DIVERSION NAME	D E
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WATER SOURCE: CAMAS CREEK

A31-00226	AMERICA, ACTING THROUGH, UNITED STA 04/01/1883 D 07N 35E 1	1	1	700	CFS	Y 16
A31-00220	AMERICA, ACTING THROUGH, UNITED STA 04/01/1884 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00269	AMERICA, ACTING THROUGH, UNITED STA 04/01/1883 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00280	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00284	AMERICA, ACTING THROUGH, UNITED STA 04/01/1887 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00225	AMERICA, ACTING THROUGH, UNITED STA 04/01/1887 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00281	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 07N 35E 1	1	1	500	CFS	Y 16
A31-00278	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 07N 35E 1	1	1	500	CFS	Y 16
A31-00271	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 07N 35E 1	1	1	500	CFS	Y 16
A31-00283	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 07N 35E 1	1	1	500	CFS	Y 16
A31-00273	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 07N 35E 1	1	1	500	CFS	Y 16
A31-00274	AMERICA, ACTING THROUGH, UNITED STA 04/01/1885 D 07N 35E 1	1	1	500	CFS	Y 16
A31-00270	AMERICA, ACTING THROUGH, UNITED STA 04/01/1887 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00272	AMERICA, ACTING THROUGH, UNITED STA 04/01/1887 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00282	AMERICA, ACTING THROUGH, UNITED STA 04/01/1886 D 08N 34E 32	1	1	500	CFS	Y 16
A31-00361	HOLLEY WATER USERS ASSN	05/21/1920 D 07N 35E 36	SEMI	2,400	CFS	Y 01
A31-00354	HOLLEY WATER USERS ASSN	12/14/1914 D 07N 35E 36	SEMI	0,800	CFS	Y 01
A31-00344	HOLLEY WATER USERS ASSN	11/12/1913 D 07N 35E 36	SEMI	1,700	CFS	Y 01
A31-00961	HOLLEY WATER USERS ASSN	01/11/1918 D 07N 35E 36	SEMI	6,180	CFS	Y 01
A31-00960	HOLLEY WATER USERS ASSN	11/05/1917 D 08N 34E 1	SEMI	2,360	CFS	Y 01
A31-00958	HOLLEY WATER USERS ASSN	11/11/1916 D 08N 34E 1	SEMI	3,000	CFS	Y 01
A31-00345	HOLLEY WATER USERS ASSN	11/01/1914 D 07N 35E 36	SEMI	2,700	CFS	Y 01
A31-00355	HOLLEY WATER USERS ASSN	03/04/1914 D 07N 35E 36	SEMI	0,800	CFS	Y 01
A31-10957	HOLLEY WATER USERS ASSN	12/03/1916 D 07N 35E 36	SEMI	0,800	CFS	Y 01
A31-10956	HOLLEY WATER USERS ASSN	01/01/1924 D 07N 35E 36	SEMI	1,940	CFS	Y 01
A31-10959	HOLLEY WATER USERS ASSN	02/20/1913 D 07N 35E 36	SEMI	2,500	CFS	Y 01
A31-00190	JACKETT CANAL COMPANY	06/16/1916 D 07N 35E 36	SEMI	7,980	CFS	Y 01
A31-00144	JACKETT CANAL COMPANY	10/14/1913 D 07N 35E 7	SEMI	5,900	CFS	Y 01
A31-00134	JACKETT CANAL COMPANY	09/21/1912 D 08N 35E 3	SEMI	1,000	CFS	Y 01
A31-00143	JACKETT CANAL COMPANY	03/20/1914 D 08N 35E 3	SEMI	3,500	CFS	Y 01
A31-00142	JACKETT CANAL COMPANY	03/29/1914 D 08N 35E 3	SEMI	1,000	CFS	Y 01
A31-10949	SMITH, JOSEPH N	08/07/1920 J 07N 35E 33	SEMI	0,110	CFS	Y 01
A31-10948	SMITH, ELWOOD	12/31/1942 J 07N 35E 36	SEMI	0,880	CFS	Y 01
A31-10947	VADNATE, TED L	05/01/1908 J 07N 35E 36	SEMI	0,230	CFS	Y 01
A31-10946	VADNATE, TED L	05/01/1908 D 07N 35E 36	SEMI	0,230	CFS	Y 01

WATER SOURCE: MUD LAKE

A31-00192	JACKETT CANAL COMPANY	09/08/1917 D 08N 35E 3	SEMI	3,000	CFS	Y 01
A31-07005	MUD LAKE WATER USERS INC	12/04/1967 D 07N 34E 13	SEMI	13,260	CFS	Y 01
A31-00328	MUD LAKE WATER USERS INC	09/05/1912 D 07N 35E 25	SEMI	100,000	CFS	Y 01

Decree
Allotment Right Nos WR #

7	31-00019 ✓	1.7 yrs	1908
13	31-00226 ✓, 31-00227 ✓	1.0	1915, 3.0 1916
28	31-0052 ✓	2.5	1913
53	31-0104 ✓	3.0	1913
54	31-0105 ✓	1.6	1913
57	31-0362 ✓, 354 ✓, 355 ✓	1.6	1923, 0.8 1914, 0.8 1916
70	31-00134 ✓, 135 ✓	3.5	1911, 2.5 1912
75	31-00143 ✓, 144 ✓	1.0	1911, 1.0 1912
78	31-00147 ✓	4.0	1913
81	31-00159 ✓	2.44	1916
84	31-00162 ✓, 163 ✓	1.0	1915, 1.0 1916
97	31-00184 ✓, 188 ✓	80.8	1912, 72.6 1916, 75 1924, 25 1921, 1.6 1911
98	31-00184 ✓	22.4	1912
99	31-00190 ✓, 191 ✓, 192 ✓	5.9	1913, 7.0 1912, 3.0 1917
106	31-206 ✓ - 209 ✓	0.6	1911, 0.2 1912, 0.3 1926, 0.7 1927
107	31-210 ✓ - 213 ✓	0.8	1911, 0.2 1912, 0.6 1927, 0.4 1928
113	31-00222 ✓, 223 ✓	2.0	1915, 1.2 1919
129	31-00243 ✓	2.6	1914

not claimed

Allotment Secrecy #

WR #

138

31-0026[✓]

2.68 1912

2

31-0005[✓], 31-0006[✓]

1.6 1910, 1.4 1917

* 33

31-00062, 63

21.2 1917, 8.8 1928

88

31-00168[✓], 169[✓]

1.6 1910, 1.6 1917

89

31-170, 171
not claimed

1.2 1916, 1.2 1919

35 (Hanson)

31-00065[✓]

3.0 1910

* Hammer Canal - error / mis-read

Holley v. Kulp

Nielson 1.72 1912

McClain 0.80 1913

Cope 1.70 1913

Holley

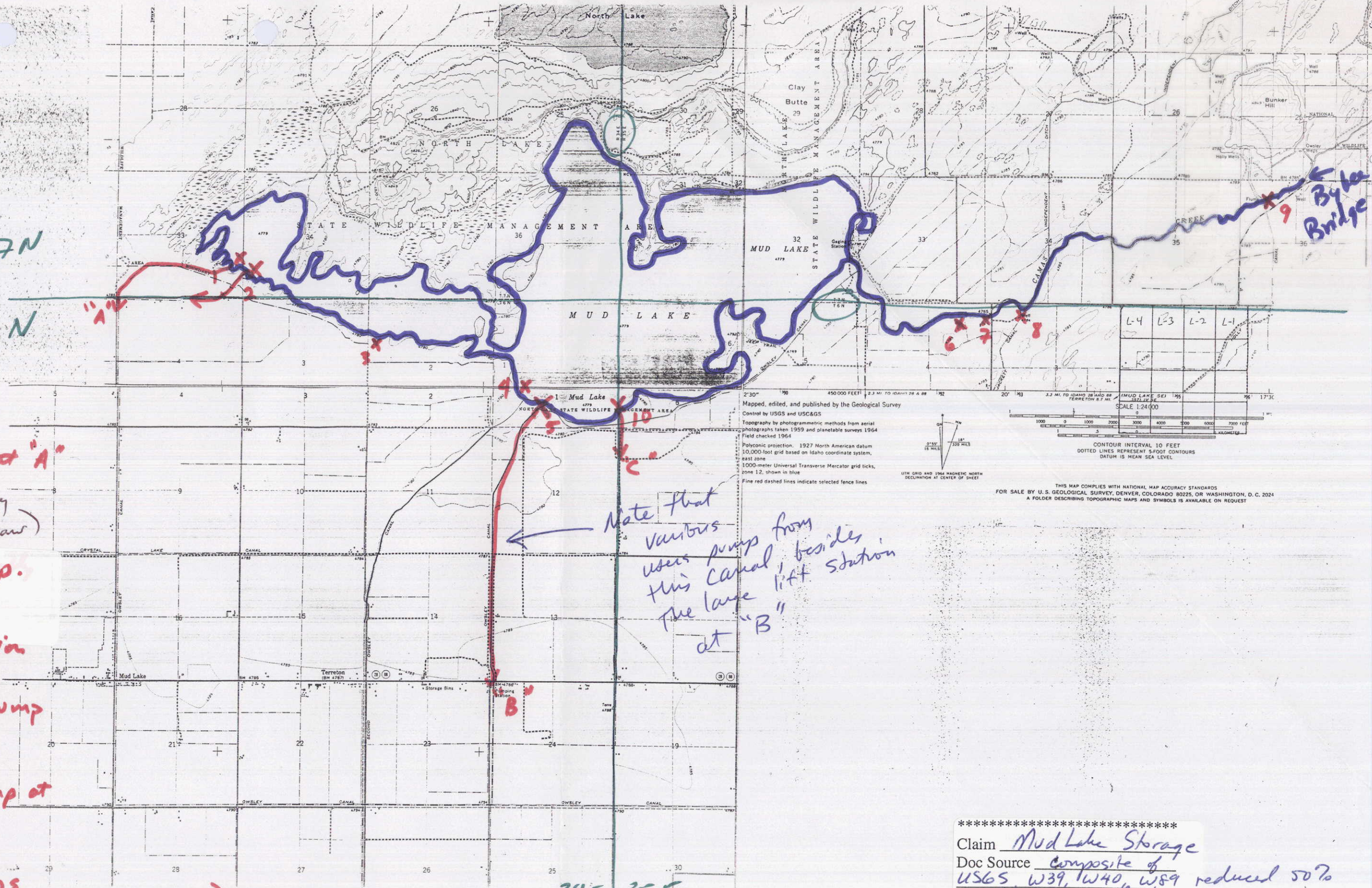
} 31-10957 / 31-00342, 343

- 1) Owsley - pump at "A"
- 2) Level { Shively
- 3) ^(David Burtenshaw) Shively Pump. Probably an Owsley Diversion
- 4) Burtenshaw pump
- 5) Owsley - pump at "B"
- 6) Unknown pumps
- 7) Shuldburg pump
- 8) Jackett Diversion & pumps
- 9) Holley creek pump
- 10) Dobson - pump at "C"

7N
6N

34E 35E

Note that various pumps from users this canal, besides the large lift station at "B"



 Claim Mud Lake Storage
 Doc Source Composite of
USGS W39, W40, W89 reduced 50%
 Date 6/2/00 Sig. B. Conner

DRAFT

BASIN 31 General Provisions

1. Allotment System (~~Do we want to call this calculation of storage water?~~):

- a. On or about May 1st of each year, the Director of the Idaho Department of Water Resources ("Director") shall compute the amount of water available in Mud Lake for diversion and use. This computation shall be made from the United States Geological Survey gauge located at the mouth of Camas Creek. To this calculation, the Director shall add the estimated inflow volume from Camas Creek between the period of May 1st to September 1st. The amount of water in the lake, plus said estimated inflow, shall be the amount of waters of Mud Lake available for use that irrigation season. On or about May 1st of each year, the Director shall compute in acre feet the allotment of water necessary to fill each right from May 1st to September 1st in the order of their respective priorities.
- b. Beginning on May 1st of each year and at least every 15 days from May 1st until ~~September 1st~~ the end of the irrigation season, the Director shall compute the amount of water used by each right, including the amount of water used prior to May 1st and the amount of water remaining available to fill such rights. The Director shall take into consideration actual accretion to the lake from natural inflow. Each right shall be charged its proportionate part of the evaporation and other losses in the lake. At such time that all rights cannot be completely filled through September 1st, the junior right(s) shall be cut off.

2. 35% per month limitation.

If the total demand for water from Mud Lake is made that would be greater than the volume of the lake as determined in 1(a) above, then the Director may determine that the water user(s) may not withdraw more than 35% of his/her total right in any calendar month. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's seasonal allotment.

Basin 31 Remark

Early Season Pumping: ~~If, based on the discretion of the Director of the Idaho Department of Water Resources, ("Director") the natural inflows to Mud Lake will not be sufficient to fill the lake and supply all of the rights to the use of water from Mud Lake, then the Director may allow groundwater to be pumped prior to May 1st to augment the flows into Mud Lake. The groundwater user may commence pumping, when authorized by the Director, at such rates as set by the Director, at the groundwater user's cost and expense. The groundwater user shall allow the water pumped to flow into Mud Lake to fill the lake to the maximum height on the United States Geological Survey gauge located on Mud Lake at the mouth of Camas Creek. The Director shall keep accurate records of all amounts of water pumped prior to May 1st, and shall record the same as a separate item on the record kept by him/her known as the "Mud Lake Allotment Sheet," under the heading "Well Water Balances." All such amounts pumped prior to May 1st, after deducting the amount for transmission and storage losses, shall be credited to the account of the groundwater user doing such pumping. The groundwater user shall be entitled to use this pumped water shown as a credit on the "Mud Lake Allotment Sheet" in addition to all amounts which may annually accrue and which the groundwater user might be entitled under this water right to divert and use during the irrigation season. No such credit shall be carried past November 1st of each year. The director may authorize pumping to storage under this right as early as March 1. Such early pumping prior to May 1 shall be subject to the Pumping Plan authorized by the director and shall bear a priority date of June 5, 1961.~~

To: Mud Lake Storage File
Fr: Bryce A. Contor *Bryce*
Date: 6/1/2000

Re: Items for conference call.

1. Allotment System General Provision

Looks very good to me.

I think we want to call it "allotment system" as this is the historical name used and known by the water users.

2. 35% Limitation

While this is less restrictive than Suave Decree, it is more restrictive than current practice and therefore in my opinion a good compromise.

3. Basin 31 Remark

The gauge height goal is a sensitive issue (sub, flooding, cost of spilling water on desert) and therefore instead of "The groundwater user shall allow the water... to fill the lake to the maximum height..." I suggest "to the height determined by the Director..."

Sometimes early pumping is not due to expected lack of volume, but due to timing of Camas Creek Inflows. Therefore I propose adding to the first line "or if the expected timing of natural inflows will not allow commencement of irrigation on May 1..."

I had originally contemplated two beneficial use claims corresponding to each GW user, one w/ 1931 priority for in-season storage, and one w/ 1961 priority for early-season storage. However, if this B31 remark included the statement "The priority date for such early-season pumping shall be March 1, 1961," could the remark be attached to the in-season storage claims and a second claim not needed?

*If we had
included diversion
rate*

*Bryce
Plot pd v. source
Camas Lake,
By the Bridge*

To: Mud Lake Storage File
Fr: Bryce Contor
Date: 5/18/00
Re: photos



Mud Lake Water Users
Main Pumping Station,
6N 34E 24 NENE.

Looking east, north
side of pumping plant



Staff Gage

Photos taken last week of April 2000 by B. Contor » «

DRAFT

BASIN 31 General Provisions

1. Allotment System (Do we want to call this calculation of storage water?):

- a. On or about May 1st of each year, the Director of the Idaho Department of Water Resources ("Director") shall compute the amount of water available in Mud Lake for diversion and use. This computation shall be made from the United States Geological Survey gauge located at the mouth of Camas Creek. To this calculation, the Director shall add the estimated inflow volume from Camas Creek between the period of May 1st to September 1st. The amount of water in the lake, plus said estimated inflow, shall be the amount of waters of Mud Lake available for use that irrigation season. On or about May 1st of each year, the Director shall compute in acre feet the allotment of water necessary to fill each right from May 1st to September 1st in the order of their respective priorities.
- b. Beginning on May 1st of each year and at least every 15 days from ~~May 1st until September 1st~~, the Director shall compute the amount of water used by each right, including the amount of water used prior to May 1st and the amount of water remaining available to fill such rights. The Director shall take into consideration actual accretion to the lake from natural inflow. Each right shall be charged its proportionate part of the evaporation losses in the lake. At such time that all rights cannot be completely filled through September 1st, the junior right(s) shall be cut off.

2. 35% per month limitation.

If the total demand for water from Mud Lake is made that would be greater than the volume of the lake as determined in 1(a) above, then the Director may determine that the water user(s) may not withdraw more than 35% of his/her total right in any calendar month. All water, whenever used, including water used prior to May 1st and after September 1st, shall be charged against the water user's seasonal allotment.

Basin 31 Remark

Early Season Pumping: If, based on the discretion of the Director of the Idaho Department of Water Resources, ("Director") the natural inflows to Mud Lake will not be sufficient to fill the lake and supply all of the rights to the use of water from Mud Lake, then the Director may allow groundwater to be pumped prior to May 1st to augment the flows into Mud Lake. The groundwater user may commence pumping, when authorized by the Director, at such rates as set by the Director, at the groundwater user's cost and expense. The groundwater user shall allow the water pumped to flow into Mud Lake to fill the lake to the maximum height on the United States Geological Survey gauge located on Mud Lake at the mouth of Camas Creek. The Director shall keep accurate records of all amounts of water pumped prior to May 1st, and shall record the same as a separate item on the record kept by him/her known as the "Mud Lake Allotment Sheet," under the heading "Well Water Balances." All such amounts pumped prior to May 1st, after deducting the amount for transmission and storage losses, shall be credited to the account of the groundwater user doing such pumping. The groundwater user shall be entitled to use this pumped water shown as a credit on the "Mud Lake Allotment Sheet" in addition to all amounts which may annually accrue and which the groundwater user might be entitled under this water right to divert and use during the irrigation season. No such credit shall be carried past November 1st of each year.

DISCUSSION OF
MUD LAKE STORAGE
AND
ALLOTTMENT SYSTEM

1. Necessary process, used annually.

2. Unique process.

3. Guidance Provided by:

Suave v. Abbot, 1930

Owsley Canal v. Bauerly, 1940

Early Pumping Agreement, 1982¹

IDWR Administrative Direction

4. Do we need general provisions?

5. Process/Timetable?

6. Camas Creek estimates for initial allotment do not follow decreed method.

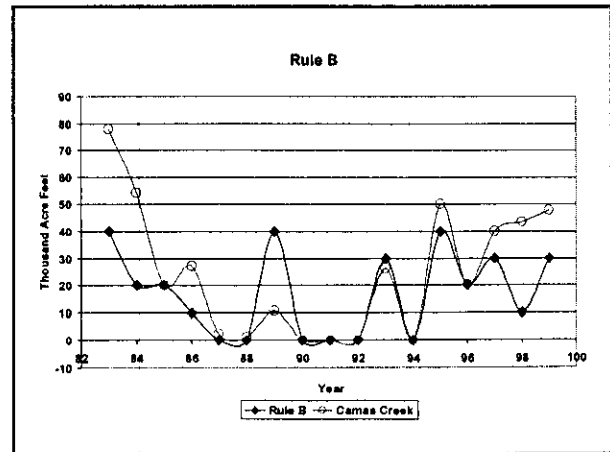
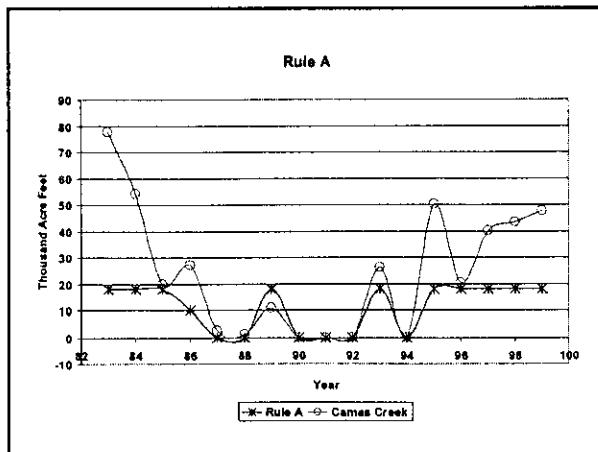
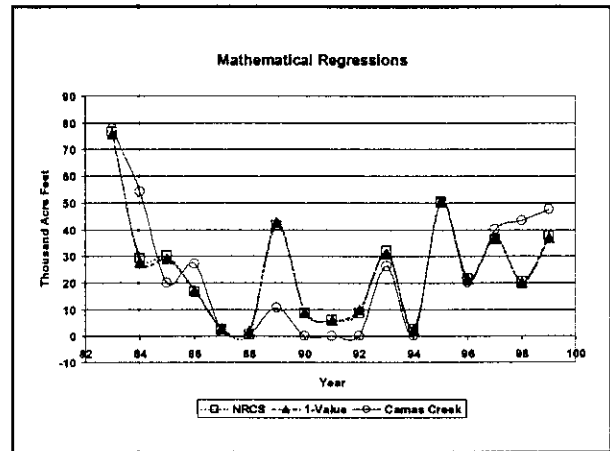
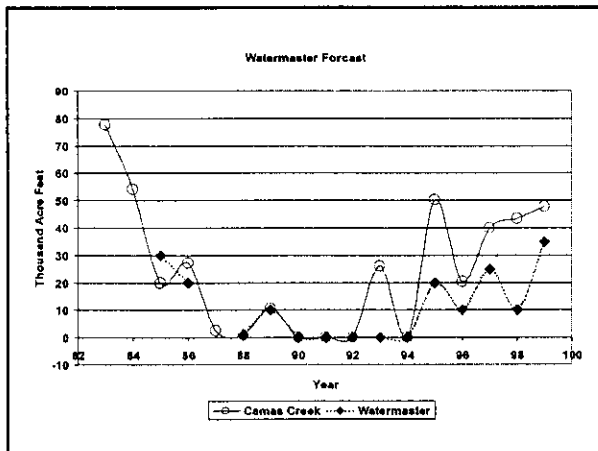
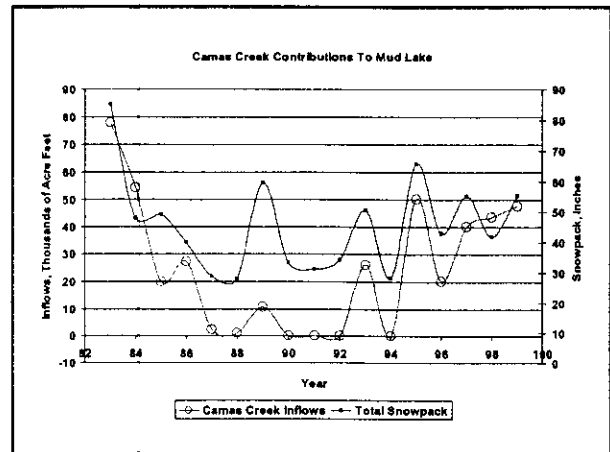
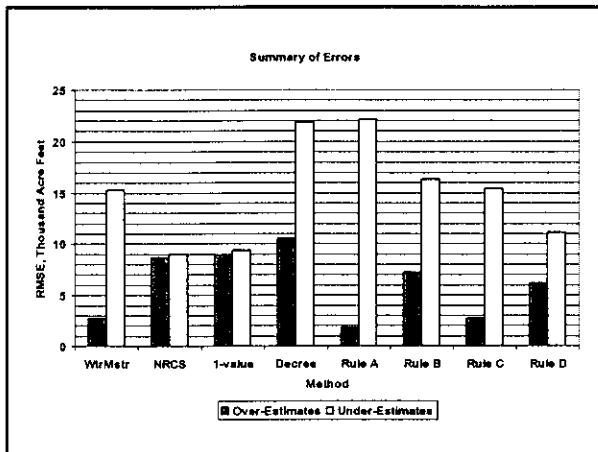
7. Over-estimate = large potential for injury.

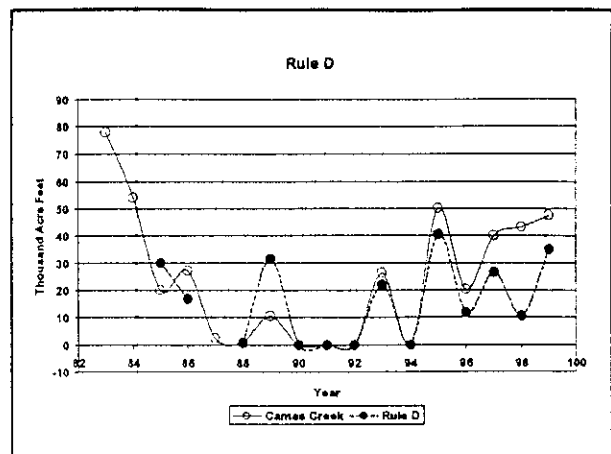
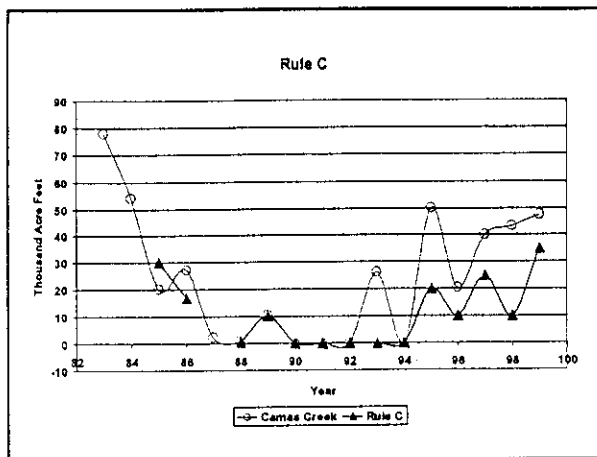
8. Under-estimate = very low potential for injury.

9. Watermaster estimates far better than decreed method.

10. Comparison of possible decision rules.

¹ Practice dates to 1961 or earlier





Forecasts May 1, 2000

Watermaster _____

NRCS 16,735

1-Value 16,907

Rule A 10,000

Rule B 10,000

Rule C Zero to 16,907 at Watermaster's Discretion

Rule D 6,907 to 16,907 at Watermaster's Discretion

Contor, Bryce
From: Contor, Bryce
Sent: Monday, May 22, 2000 8:14 AM
To: McHugh, Candice; Carlsen, Ernie
Subject: RE: General Provision Discussion

I'm sorry I'll be missing the discussion.

- 1) I'll fax the minutes of the advisory meeting. Actually, it is a meeting of the Owsley Canal directors. And what we have is a computer printout of the watermaster's summary. Presumably the watermaster has or had the original. Do we need to get our hands on it?
- 2) There are corresponding GW rights for all the surface rights delivered from the lake, but ownership is not always one to one. Mud Lake Water Users is the result of the merger of Owsley, Holley, and Jackett Canal Companies. Those three all owned both GW and SW rights. Dobson Farms owns both GW and SW rights delivered from/through the lake. Finally, Independent Water Users is an organization that owns only GW rights, but all of its members individually own SW rights. One of Independent's owners is a canal company - Level Canal - and the rest are individuals.
- 3) I'll fax a copy of the 1982 agreement. It appears to cover all the SW and GW rights out of the lake, but I don't remember that it actually specifies the rights.
- 4) Correct me if I'm wrong, Ernie, but I think Bauerly addresses all of the owners of wells flowing into the lake. The Bauerly appeared to authorize continued development, and there are a number of wells that deliver water to the lake that did not exist in 1940. However, I believe all the wells that do deliver into the lake are handled per Bauerly. Also, there are a few wells - Lundholm's, some of the Jackett wells now owned by Marty - that no longer are delivered through the lake.

Clear as Mud? I'll be in the office most of the day today, then back on the 31st or June 1st.

-----Original Message-----

From: McHugh, Candice
Sent: Friday, May 19, 2000 4:32 PM
To: Carlsen, Ernie
Cc: Contor, Bryce

|Subject: General Provision Discussion

Ernie --

Susan and Carter are going to be phoned in for the General Provision Discussion scheduled for Thursday, May 25 from 8:30 to 12:00ish. Just want to let you know. Also, there are several things that I would need to review or know: 1) the minutes of the Advisory Committee that set the priority date for early season pumping at 1961; 2) does every surface water right holder also have a ground water right?; 3) Does the 1982 agreement cover all surface water rights from Mud Lake? 4) Does the Baurele Decree contain all the wells that flow into Mud Lake?

Thanks.

Candice

To: Mud Lake Storage Files
Fr: Bryce A. Contor
Date: 5/18/2000
Re: Phone conversation w/ Loy Johnson

This morning I visited on the phone with Loy Johnson on the phone about the practice of early-season pumping.

1. Mr. Johnson was watermaster until 1960.
2. He is certain that early-season pumping occurred during his tenure, but he can't remember what years.
3. During his tenure, all early season pumping was accounted as natural flow into the allotment system, exactly as artesian flow was accounted per the Bauerly Decree. Johnson was certain of this and repeated it several times.
4. Any early season pumping that occurred was per a private agreement among the water users, and not per the watermaster. The watermaster was not involved in the discussion or decision. The watermaster did not measure or account for pumped inflows prior to May 1.
5. If there was any compensation to pumpers for power bills, the watermaster was not involved nor was the water district. Mr. Johnson doesn't know if any private arrangements were made for power bill compensation.
6. After May 1, the watermaster measured and accounted for all well inflows per the Bauerly Decree. He specifically recalled measuring the contributions to the Buck Springs Ditch at the POD and at the Keucher Bridge, and accounting the Well Balance accordingly. He recalls that the Buck Springs Water Users and Merritt Owsley used the Buck Springs/Independent Ditch, and he measured and accounted their contributions separately.

Based on the above, it appears that any right for early-season pumping storage with individual ownership would have to date to the Carter memo referred to in the Owsley minutes of 1961:

"Carter of the Dept. of Reclamation told Don Shenton and Jack Gerard that the water master should give Owsley Canal Co. credit for water pumped from wells not mentioned in the decree before May 1, until someone proves differently."

Condition / remove
pumpers to pumped
only?

Basin 31
Season of Use

Decreed Rights

Sauve v Abbott

1. Natural flow and ground water
 - Regular irrigation rights- (no season specified) follow IDWR standard
Note: According to W.M. this is consistent with historic deliveries.
 - High water right (spring high water season) (no season specified)
 - Wild hay rights decree states from beginning of irrigation season to July 1
2. Storage in Mud, allocated on May 1 and is component of certain decreed surface rights, refer W.M. allotment sheet (no season specified)
 - Irrigation Storage Nov 1 to Oct 31 (complies with resolution for no carry over)
 - Irrigation from Storage April 1 to Oct 31 (complies with historical practice and IDWR standard)

Owsley v Bauerle

Ground water designates May 1 to Nov 1 limited to rights listed in decree.

Holley Waterusers Association v Kulp

Jackett v Henninger

Lundholm v Henninger

No season specified, refer to recommended season for similar rights in Sauve v Abbott and Owsley v Bauerle

Beneficial Use

- Natural flow and ground water- Use IDWR standard unless previously designated by administrative action. In cases where administrative action designates a season of use shorter than standard be sure to include USE Remark to extend season so it is compatible with IDWR standard.
 - S02** dates April 1 to October 31
 - S06** dates April 15 to October 31
 - S01** dates May 1 to October 31
- Storage
 1. Early season ground water pumping , priority 1961 per minutes of Advisory Committee Meeting and reference to letter from G. Carter.

Diversion to storage	March 1 to April 30
Irrigation storage	March 1 to October 31
Irrigation from storage	April 1 to October 31
 2. In season ground water pumping , priority 1952 per water district minutes.

Diversion to storage	May 1 to October 31
Irrigation storage	May 1 to October 31
Irrigation from storage	May 1 to October 31

Claim Mud Lake Storage
Doc Source e-mail fr.
Ernie Carlson
Date 5/11/00 Sig. D. Coulton

Licensed/Transfer

Use IDWR standard unless previously designated by administrative action. In cases where administrative action designates a season of use shorter than standard be sure to include USE Remark to extend season so it is compatible with IDWR standard.

S02 dates April 1 to October 31

S06 dates April 15 to October 31

S01 dates May 1 to October 31

Date 5/11/00 Sig. B. Conner

Claim Mud Lake Storage
Doc Source e-mail fr.
Emie Carlsen

Contor, Bryce

From: Contor, Bryce

Sent: Thursday, May 11, 2000 8:44 AM

To: Carlsen, Ernie; McHugh, Candice; Music, Vicky

Subject: Bauerly Decree Diversion Volumes

I went through a second, more detailed analysis of losses in the Mud Lake system (though still not a "full" analysis). It still looks like the Bauerly Decree volumes are appropriate.

I was a little generous in some of my assumptions, so the loss calculations point to slightly higher volumes than the decree. However, actual diverted volumes per watermaster records are still significantly less than decreed.

When I put together the beneficial use claims for storage of groundwater, do I need a volume component for "diversion to storage?"

If I do put a volume on "diversion to storage," I assume this volume will be measured at the point of diversion, whereas the stored volume will be the volume required in the lake. The Independent, Jackett, and Owsley North Lake diversions all have significant ditch losses between the diversion and the lake, so I would have to recommend a larger diverted volume than stored volume. Is that going to trip some red flags somewhere?

Thanks, Bryce.

To: Mud Lake Storage File
Fr: Bryce A. Contor
Date: 5/10/2000

Re: Early-season well water storage.

I. PRIORITY DATE

1. Early season pumping agreement, 1982, asserts the practice began "commencing about 1960."
2. Meeting minutes of the [Owsley Canal?] board of directors, June 1961, provided by the WD 31 Watermaster, state:

"Mr. Carter of the Department of Reclamation in Boise stated that the watermaster should give us credit for water pumped from any wells not mentioned in the decree before May into the lake until someone proves different."

3. Meeting minutes of the board of directors, January 1957, provided by the WD 31 Watermaster, state:

"Frank Jackett asked about starting the Bybee Wells to build up the lake level and all of the lake users on the creek pump their wells too. Vurgal Johnson asked that the matter go for a month before deciding and find out if we can legally begin to pump this early there and at North Lake."

4. Don Parker has talked to Loy Johnson, former watermaster, on the phone. Loy served in the 1950's, up until 1960. Loy is "pretty sure" they did go ahead and early pump in 1957, but not sure enough to testify in court or put it in writing. Parker reports that Loy is sure the practice did occur during his tenure.
5. Don will send me Loy's phone number, and I plan to call him. **Depending on what he says the conversation, I plan to recommend 1957, 1960, or 1961 priority date.**

II. STORAGE VOLUME

1. Independent water users pumped 6,012 acre feet of early pumping in 1996.
2. Owsley and Jackett combined pumped 26,394 acre feet of early pumping in 1991.
3. Because Independent's wells deliver through a long and leaky canal, the reported volumes are volumes delivered to the lake. Therefore, actual pumped volumes will be higher. If we need to recommend a separate volume for "diversion to storage" and

"storage," the "diversion to storage" volume will need to be higher.

4. Combining these two historical maximum early-pumping volumes gives a historical maximum stored volume of $(26,394 + 6,012) = 32,406$ acre feet.
5. Garth Soderquist states he has seen the lake as low as -1.0 gauge height in early spring. Greg Shenton has seen as low as 1.5 gauge height.
6. There are years when it is anticipated that no Camas Creek inflows will occur. Per Greg, the desired lake level then to enter the season would be 7.5 - 8.0 feet gauge height. March 1996 minutes of Mud Lake Water Users meeting indicate that pre-season goals of 6.5 to 7.5 feet were discussed, with a final decision to pump to 7.0 feet gauge height.
7. Per the rating chart supplied by the watermaster, 8.0 feet corresponds to 37,930 acre feet, 7.5 corresponds to 34,700, 1.5 feet corresponds to 6714, and -1.0 corresponds to 1790 acre feet.

The minimum possible required volume would be $(34,700 - 6,714) =$ approximately 28,000 acre feet. The maximum possible required volume would be $(37,930 - 1790) =$ approximately 36,000 acre feet.

8. Per the attachment to the 1982 early pumping agreement, *about 26,000 acres are irrigated from the lake. $28,000/26,000 \approx 1.08$ af/acre, $32,400/26,000 \approx 1.24$ af/acre, and $36,000/26,000 \approx 1.38$ af/acre.*
For Independent alone, $6,012/4,803 \approx 1.25$ af/acre. For Owsley/Jachett alone, $26,394/21,200 \approx 1.24$ af/acre.

9. Based on the above, I plan to recommend 1.25 acre ft/acre for early-season storage. Diversion to storage will need to be adjusted for ditch loss. See loss calculation in "Diversion Volume" memo

10. Diversion to storage for Independent

$$= \frac{1.25 \text{ af/acre}}{.61} \approx 2.05 \text{ af/acre}$$

11. Diversion to storage for Mud Lake Water Users.

$$\text{Jackett} = \frac{2,800}{21,200} = 13\%$$

$$\text{North Lake} = \frac{5,600}{21,200} = 26\% \quad (\text{see "Div. Volume" memo p 3})$$

$$\text{Bybee/Holley} = 100\% - (13\% + 26\%) = 61\%$$

$$\text{Jackett} \quad \frac{1.25}{.61} \times .13 = 0.27 \text{ af/acre}$$

$$\text{North Lake} \quad \frac{1.25}{.796} \times .26 = 0.41 \text{ af/acre}$$

$$\text{Bybee/Holley} \quad 1.25 \times .61 = \underline{0.76} \text{ af/acre}$$

$$\text{Weighted avg.} = 1.44 \text{ af/acre}$$

12. Agle Ernie is a volume dependent user needed for the diversion to storage element.

Bybee A. Contor

5/10/00

TABLE 14.--PHYSICAL AND CHEMICAL PROPERTIES OF SOILS--Continued

Soil name and map symbol	Depth	Permeability	Available water capacity	Soil reaction	Salinity	Shrink-swell potential	Risk of corrosion		Erosion factors		Wind erodibility group
							Uncoated steel	Concrete	K	T	
	In	In/hr	In/in	pH	Mmhos/cm						
Rock outcrop: 1106*: Rock outcrop part.											
Rexburg part----	0-12	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-----	High-----	Low-----	0.37	5	5
	12-60	0.6-2.0	0.19-0.21	7.4-8.4	<2	Low-----	High-----	Low-----	0.37		
Terreton: 107, 108-----	0-6	2.0-20	0.06-0.10	7.9-8.4	<2	Low-----	High-----	Low-----	0.17	5	3
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
109, 110-----	0-6	0.6-2.0	0.14-0.18	7.9-8.4	<2	Moderate	High-----	Low-----	0.32	5	4L
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
111, 112-----	0-6	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37	5	4L
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
1113*: Terreton part----	0-6	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37	5	4L
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
Bereniceton part	0-7	0.6-2.0	0.19-0.21	7.9-8.4	<2	Low-----	High-----	Low-----	0.37	3	4L
	7-14	0.6-2.0	0.16-0.18	8.5-9.0	<2	Low-----	High-----	Low-----	0.28		
	14-46	0.2-0.6	0.19-0.21	8.5-9.0	<2	Moderate	High-----	Low-----	0.20		
	46	---	---	---	---	---	---	---	---		
1114*: Terreton part----	0-6	0.6-2.0	0.14-0.18	7.9-8.4	<2	Moderate	High-----	Low-----	0.32	5	4L
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
Bereniceton part	0-7	2.0-6.0	0.11-0.13	7.9-8.4	<2	Low-----	Moderate	Low-----	0.17	2	3
	7-14	0.6-2.0	0.16-0.18	8.5-9.0	<2	Low-----	Moderate	Low-----	0.28		
	14-46	0.2-0.6	0.19-0.21	8.5-9.0	<2	Moderate	High-----	Low-----	0.20		
	46	---	---	---	---	---	---	---	---		
Rock outcrop part.											
1115*: Terreton part----	0-6	0.6-2.0	0.14-0.18	7.9-8.4	<2	Moderate	High-----	Low-----	0.32	5	4L
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
Rock outcrop part.											
1116*: Terreton part----	0-6	2.0-20	0.06-0.10	7.9-8.4	<2	Low-----	High-----	Low-----	0.17	5	3
(loamy sand)	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
Terreton part----	0-6	0.6-2.0	0.14-0.18	7.9-8.4	<2	Moderate	High-----	Low-----	0.32	5	4L
(sandy clay loam)	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
1117*: Terreton part----	0-6	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37	5	4L
	6-60	0.06-0.2	0.16-0.18	7.9-8.4	<2	High-----	High-----	Low-----	0.37		
Zwiefel part----	0-3	2.0-6.0	0.05-0.07	7.9-8.4	<2	Low-----	Low-----	Low-----	0.10	4	1
	3-21	2.0-6.0	0.05-0.07	7.9-8.4	<2	Low-----	Low-----	Low-----	0.10		
	21-28	0.06-0.2	0.15-0.17	7.9-9.0	<2	Moderate	High-----	Low-----	0.20		
	28-60	0.06-0.2	0.15-0.17	8.5-9.0	<2	High-----	High-----	Low-----	0.32		
Urban land: 118*.											
Wardboro: 119-----	0-2	2.0-6.0	0.11-0.13	7.4-8.4	<2	Low-----	Low-----	Low-----	0.17	1	3
	2-60	>20	0.03-0.05	7.4-8.4	<2	Low-----	Low-----	Low-----	0.10		

See footnote at end of table.

Date 5/11/00 sig. L. Conner

Claim Mud Lake StorageDoc Source Jeff. County IdSoil Survey - USDA NRCS

To: Mud Lake Storage File.

Fr: Bryce A. Contor

Date: 5/10/00

Re: Diversion Volumes, Mud Lake GW rights

I. Losses in Lake

- 1) Maximum seasonal loss identified by Watermaster is 29,730 acre feet in 1996.
- 3) $29,730 / 26,000 \approx 1.14$ af/acre lake loss

II. Losses in North Lake

- 1) USGS study 1994 identifies 22.8 cfs of loss out of 111.5 cfs developed.
- 2) $22.8 / 111.5 \approx 20.4\%$ loss
- 3) Assume North Lake = $\frac{1}{3}$ of Owensley Capacity, based on deemed wr ≈ 390 cfs. and Calculated Capacities of ≈ 270 cfs (see file)

III Losses in Ind. Ditch - wells to Lake

- 1) USGS study 1981 $\approx 39\%$
- 2) USGS study 1994 $\approx 30\%$
- 3) use 39%

IV Quick analysis of losses in distribution system

This is a quick analysis to evaluate appropriateness of Bureau, decree. If justified, re-do w/ Worstell Analysis.

- 1) Assume Dwsley $\approx 12 \text{ miles} \times 35 \text{ ft.}$

$$\frac{12 \times 35 \times 5280}{43560} \approx 50 \text{ acres}$$

- 2) Assume Ind & Jader $\approx 12 \text{ miles} \times 20 \text{ ft}$

$$\frac{12 \times 20 \times 5280}{43560} \approx 34 \text{ acres}$$

- 3) Assume 0.5 ft/day seepage.

$$84 \text{ acres} \times 0.5 = 42 \text{ af/day}$$

$$42 \text{ af/day} \times 214 \text{ days} = 9,000 \text{ acre ft}$$

$$9,000 / 26,000 \approx 0.35 \text{ af/acre}$$

Note: per soil survey, expected seepage 0.06 - 0.2 in/hr $\approx 1.44 - 4.8 \text{ in/day} \approx 0.12 - 0.4 \text{ ft/day}$

$$\frac{9,000 \text{ acre ft}}{26,000} \approx 0.31 \text{ acre ft/acre}$$

IV Annual Div Volume req. for Ind Ditch

- 1) Field Headgate req. 3.5 af/acre
- 2) $3.5 + 0.35 = 3.85$ af/acre req. from Lake.
- 3) $3.85 + 1.14 = 4.99$ af/acre req. to Lake
- 4) $.61 X = 4.99$

$$X = \frac{4.99}{.61} = 8.2 \text{ af/acre req. @ diversion}$$
- 5) Bawerly Decree calls for = 7 af/acre. As 3.5 af/acre is very generous, this is probably adequate.

VI Annual Div volume req. for Owsley/Holley/Jackoff

- 1) 4.99 af/acre req. to lake per above
- 2) North Lake loss applies to $\frac{1}{3}$ of original Owsley rights. $17,000 \times 0.33 \approx 5,600$ acres
 $5,600 \times 4.99 \approx 27,900$ acre ft req. to lake

$$\frac{27,900}{.796} \approx 35,100 \text{ acre ft req. to pump}$$

$$\frac{35,100 - 27,900}{21,200} \approx 0.34 \text{ acre ft/acre for North Lake loss}$$

- 3) Jachett/Ind. losses apply to = 2800 acres of original Jachett rights

$$2,800 \times 4.99 = 13,900 \text{ acre ft. req. to lake}$$

$$\frac{13,900}{.61} = 22,800 \text{ acre ft. req. to pump}$$

$$\frac{22,800 - 13,900}{21,200} = 0.42 \text{ af/acre for Jachett ditch losses.}$$

- 4) Bybee & Holley wells deliver directly to lake - no loss attributed.

- 5) Total Mud Lake Water users req.

$$\begin{array}{r} 4.99 \text{ req. in lake} \\ .34 \text{ North Lake loss} \\ .42 \text{ Jachett loss} \\ \hline 5.75 \text{ af/acre req. diversion vol.} \end{array}$$

VII Total

Total Bawley decree volumes for Mud Lake Water users

Owsley	73,000	acre ft
Holley	18,400	acre ft
Jachett	8,300	acre ft
Total	99,700	

(assumes 1/2 of original Bawley volume to Manty)

$$\frac{99,700}{21,200} = 4.75 \text{ af/acre}$$

VII Conclusion

While the rough analysis shows slightly more req. volume than the Bawerly decree, It is probably still appropriate to use the Bawerly volumes for the following reasons:

- 1) Bawerly volumes are roughly proportional to calculated volumes for both users.
- 2) Bawerly decree has been affirmed by later dept administrative action.
- 3) 3.5 af/acre is very generous, and these volumes are not far off.
- 4) Water users / watermaster seem comfortable w/ using Bawerly volumes.
- 5) My estimates of after-lake losses are probably generous for the typical clay-bottom canals in these systems.
- 6) These losses assume 100% of irr. needs are to be met from GW pumping. In reality, even in a dry year there will be some

initial balance in lake (either natural flow, or from early pumping), so the entire volume does not have to come from these in-season GW rights.

7) In 1996, the Bawerly Volumes would have been adequate for actual usage:

Drafts fr. Lake	82,430
Lake Loss	<u>29,730</u>
Total reg	112,160
- Allotments	<u>21,260</u>
Reg. fr. GW	90,900
Early pumping	
Ansley 12,044	
Ind <u>6,012</u>	
Total early	<u>18,056 -</u>
In-season reg.	72,844

$$\frac{72,844}{26,000} \approx 2.8 \text{ af/acre}$$

8) Had there been no water in the lake nor any Camas Creek carryover, in 1996 the Bawerly Volumes still would have been adequate w/ early pumping:

8) continued

Drafts fr. Lake	82,430
Lake loss	<u>29,730</u>
Total req.	112,160
Early pumping	<u>18,056</u>
	94,104

$$\frac{94,104}{26,000} \approx 3.6 \text{ af/acre}$$

9) This is consistent w/ earlier calculations based on 1961 & 1964 allotment records.

Byron A. Contor
5/10/00

To: Mud Lake Storage File
Fr: Bryce A. Contor
Date: 5/10/2000

Re: In-season storage of well water.

I. PRIORITY DATE

1. Suave v. Abbot, 1930, Part I, Section 5, next-to-last paragraph, states:

"In computing the capacity of Mud Lake, and the available water supply therein contained... likewise shall be disregarded any waters brought into Mud Lake from independent or non-tributary sources of supply."

2. Owsley v. Bauerly, 1940, clarifies that artesian wells are tributary during the non-irrigation season but non-tributary during the irrigation season.
3. Items one and two considered together imply a need to separately account for well water balance and surface water balance in the lake. This would point to a priority date at least as early as 1940.
4. 1934 allotment sheet for the periods Aug 1-15 and Aug 15 - 31 clearly notes a "balance" for the "Ind plus Holley" well water accounting. This points to a priority date at least as early as 1934.
5. 1931 allotment sheet "notes," item b, states "40,452 acre feet equals the lake contents May 1 plus 18,000 ac. ft. minus the independent storage." The sheet also identifies "wells" as part of the "independent" supply. This points to a priority date of 1931.

Note that this indicates either a carried-over balance from 1930, or early-season pumping. There seems to be no other evidence for early-season pumping as early as 1931, so I do not plan to recommend a 1931 priority on the early-season well storage.

6. **I Plan to recommend May 1, 1931 priority date for in-season well storage.**

II. VOLUME

1. Maximum well balance of 1993 allotment sheet is 20,370 acre feet, the ending balance for May 1 - 15.
2. Well balance of 14,378 on June 15, 1961 allotment sheet.
3. A review of 1931, 1933, 1934, and 1993 allotment sheets seems to indicate that a gauge height of 4.5 feet is adequate to allow diversion. This corresponds to a lake

content of 18,090 acre feet per the rating supplied by the watermaster.

4. The attachment to the 1982 pre-season pumping agreement indicates approximately 26,000 acre feet are irrigated from the rights delivered through the lake.
5. I calculate $20,400/26,000 = 0.78$.
6. **I plan to recommend volumes of 0.78 acre feet/irrigated acre for in-season irrigation storage. If any of the GW rights are overlapping one another, I plan to recommend the total volume for the combined POU, pro-rated to the rights on a per-cfs basis.**

Be sure to
subtract 5,000
af. of Deced
Holley Storage
fr. Ben. Use
Storage !!!

2-2 2-2 2-2

5 Wells. Back Springs

IND. USERS (3) 30.61
Jankott Canal (2) 21.84
Buckhorn (2) 52.45

Marty Field 12.47
#3 & #4 well

total ind. Flow (7) 64.92

	Wells	Flow	Loss	Lake Flow
North Lake	(9)	82.68	—	82.68
Bybee wells	(3)	66.10	—	66.10
Jankott Canal	(2)	12.47	4.82	7.65
Marty Field				
Jankott Canal (2)	(2)	21.84	8.44	13.40
IND water user (3)	(3)	30.61	11.82	18.79
Totals (19)		213.70	25.08	188.62
Totals - IND Ditch		64.92	25.08	39.84

Flow IND Ditch 64.92

Flow at storage 39.84

Ditch loss 25.08

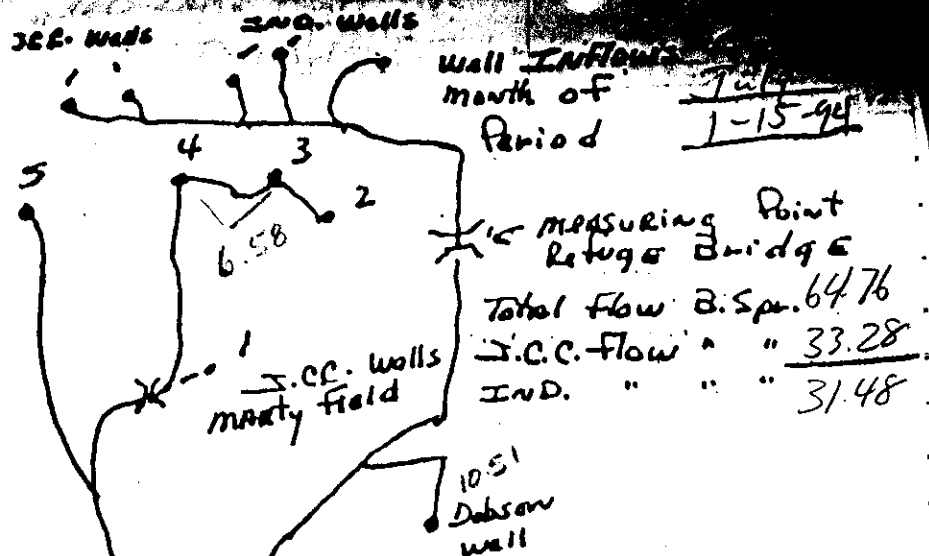
.3863 % loss IND Ditch

Sept 1 to Sept. 15 Report
1981

Date 5/8/00 sig. B. Conton

Claim Mud Lake Storage

Doc Source Watermaster
WD 31



OWNER	No. Pumps	CFS. Flow	CFS. loss	C.F.S. Inlet Flow
Dixie C. N. Larr	9	62.12	0	62.12
" " Bybee	8	120.63	0	120.63
J.C.C. B. Spr.	3	33.28	10.10	23.18
J.C.C. mostly F	2	6.58	2.00	4.58
INDUSERS. B Sp.	4	31.48	9.55	21.93
Totals Dobson Ditch	1	10.51	3.19	7.32
Totals All Wells	10	81.85	24.84	57.01
Total All Wells	27	264.60 (24.84)		239.76

Rating Station

57.01

Percent loss IND. Ditch. 30.3481979
 loss C.F.S. IND. Ditch 24.84

TO: Don Benton,

FROM: R.W. Erickson and D. Cole
U.S. Geological Survey, Idaho Falls Field Office
366 D Street 529-4287

SUBJECT: Discharge measurements made of various Jefferson County delivery channels within the jurisdiction of the Owsley N. Lake Company.
Measurements made by U.S.G.S. Idaho Falls Field Office, May 31, 1994.

Measurement Start Time	Site No.	Location/Description	Pump Status	Measured CFS
1040	No. 1	Blw pump No. 1	pumping	6.9
		Pump No. 2	not pumping	
1125	No. 3	Blw pump No. 3	pumping	14.1
1210	No. 4	Flow abv 4 minus flow blw 4 (C1)	pumping	13.6**
1300	No. 5	Flow abv 5 (C1) minus flow blw 5	pumping	9.0**
0945	No. 6	Blw pump No. 6	pumping	10.6
0905	No. 7	Blw pump No. 7	pumping	13.4
0855	No. 8	Blw pump No. 8	pumping	12.2
0800	No. 9	Blw pump No. 9	pumping	9.2
0805	No. 10	Blw pump No. 10	pumping	13.7
1410	No. 11	Blw pump No. 11	pumping	8.8

Point A (55.1) to point B (52.6) (wells 6-10 above the confluence with wells 1-5) yields a 2.5 cfs loss.

Wells 6-10 (59.1) up to point A (55.1) yield a 4.0 cfs loss.

Wells 1-4 (34.6) just ahead of the confluence with well No. 5 (30.5) yields a loss of 4.1 cfs.

From well No. 11 (8.8) to the point of confluence with the N. Lake Ditch (6.3) a 2.5 cfs loss was determined.

From point B (92.1 - the accumulated flows of point B, 52.6, plus the accumulated flow blw pumps, 39.5) to C (84.7 - the accumulated flow of wells 1-10 near the old bridge) a 7.4 cfs loss was determined.

From point C to E (final reach of the N. Lake Ditch less the inflow of No. 11 in the old rock ditch) a 2.3 cfs loss was determined.

Total flow from all wells (including No. 11) yielded 111.5 cfs.

Total losses of all reaches yielded 22.8 cfs.

**Cfs for pump Nos. 4 & 5 was determined by measuring above and below the pumps.

Please refer to this office if there are any questions. All measurements were made with a Price AA S-70 meter or a USGS Pygmy meter. Standard U.S.G.S. measuring procedures were used in all measurements.

Date 5/8/02 sig. B. Conlon

Claim Mud Lake Storage
Doc Source Plateau
WP 3/

ISLEY CANNAL NORTH LA. Wells

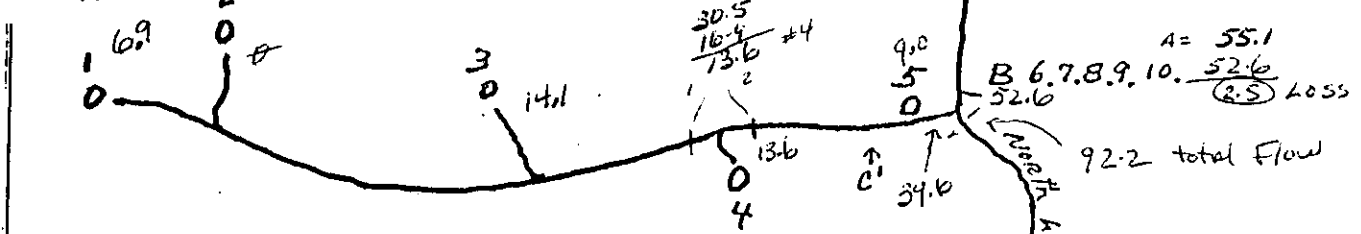
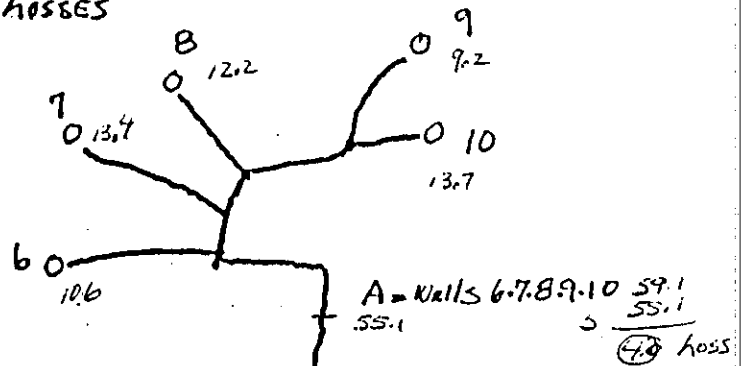
0 = well

Well Flows

Seepage losses

Well Flows C.F.S.

# 1 =	6.9
# 2 =	0
# 3 =	14.1
# 4 =	13.6
# 5 =	9.0
# 6 =	10.6
# 7 =	13.4
# 8 =	12.2
# 9 =	9.2
# 10 =	13.7
# 11 =	8.8



Date measured = 5/31/94

By People Below
Bob Erickson 4595.
Don Cole 1565.
Don Shanton Dist # 31
0 4595

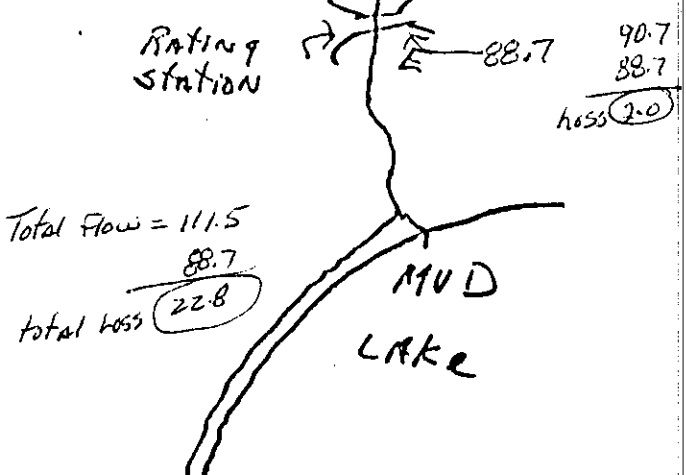
Old Rock Ditch

North Lake Ditch to Mud Lake

C = Wells 1 thru 10
 Old Bridge 84.4
 92.2
 94.4
 7.8 loss

Seepage losses Stream stretches

	loss	C.F.S.
Wells 6 thru 10 to Point A	4.0	"
Wells 1 thru 4 to Point B	4.0	"
Point A to Point B	2.5	"
Point Well 11 to D	2.5	"
Point B to Point C	7.8	"
Point C to Point E	2.0	"
Total Flows All Wells	111.5	"
Total losses all Reaches	22.8	"



Date 5/9/00 sig. to Carter
 Claim Mud Lake Storage
 Doc Source Watermaster
 WD 31

Bryce

Don Parker called & said
that Loy Johnson was
contacted. Loy said he couldn't
provide anything in writing but
his remembrance was that in
56 or 57 when the canal discussed
turning on the wells to store
water, he thinks they did just
that.

WJF

P.S. Don said he would try to
come in next week on the
Independent Transcon.

Don -

5/8/00

If you can get Loy
Johnson to put in a letter to me
just what he told you, I'll try
to make it fly. Have him
phrase the letter "I saw..." or
"I did" (not "I believe")

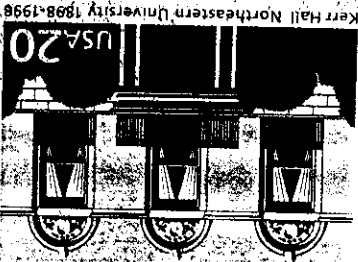
Bryce

83440.

Lexburg ID

2032 W 4200 S

Don Parker



IDWIL
900 N Skyline St A
Idaho Falls ID
83402

Contor, Bryce

From: Contor, Bryce

Sent: Monday, May 08, 2000 7:43 AM

To: McHugh, Candice; Carlsen, Ernie; Music, Vicky

Subject: 35% limitation re-visited

I think I've stumbled upon another reason the 35%/month limitation was imposed on withdrawals in the Suave decree, and it may be significant enough to warrant leaving it in:

Because the allotment system includes the allocation of an estimate of future flows, on May 1 the sum of allotted volumes is greater than the total contents of the lake.

This means that physically, it would be impossible for all the water users to demand their full allotted volume immediately.

Apparently this demand has never been made, but if it were to be made, either the watermaster would have to make the deliveries in priority order, or invoke the 35%/month rule. And if he made the deliveries in priority order, the whole estimation process would be meaningless & could be discarded; juniors would have no right to divert Camas Creek inflows until they actually occurred.

If this line of thinking isn't flawed somewhere, at least theoretically the monthly limitation is needed to make the estimated contribution meaningful.

To: Mud Lake Storage
 Fr: Bryce Contor
 Date: 5/1/000

Re: Site Visit

This morning I stopped at several Mud Lake sites on my way in to work.

- 1) Owsley pump station at 1400 E 1500 N. Gauge height 6.08, pumps running.
- 2) USGS gage at mouth of Camas Creek. Gauge height > 6.50, gauge buried in mud on shoreline. Per phone call to Jake Jacobsen at USGS, there are several USGS gauges & some are inactive, maybe this was on of the inactive ones. All gauges including the one at Owlsey pump station are set to same datum.
- 3) Independent/Jackett canal at approximately 1820 East 1900 North. Water in canal, but I could not tell if this was backed-up lake water or water from the Buck Springs wells.
- 4) Holley Canal at 2010 East 1900 North. Some water backed up from downstream contributions but no pumping from main Holley well field.
- 5) Holley Canal immediately south of Camas Creek flume. Canal running, water appeared greenish; probably Camas Creek pump is operating. It looked like the single well next to Camas Creek was also operating.
- 6) Bybee Wells. Artesian basin was closed, head in creek approximately two feet higher than head in artesian basin. Camas Creek flowing. Pumped wells not operating.

7) Bridge @ Shuldbugs 7PM Gauge height 6.20
 8) 5/2/00 Sheraton reported using gauge height 6.20 for allotment.
 USGS rating 6.00 25740
 6.08 > 0.08 > 0.50 26196
 6.50 28590 > 2850

$$25740 + \frac{.08}{.15} \times 2850$$

$$\begin{array}{r} 26196 \\ - 1790 \\ + 10000 \\ \hline 35406 \end{array}$$

Summary of Minimum Capacity B. Corton 4/28/00

Note that these calculations assume operation for the full period. If pumps were not operated continuously then instantaneous capacity could be higher.

Independent

Ind. 1995[~]
(61 cfs based on estimate)

69.2 cfs	1989	early pumping
69-70 cfs	1996	early pumping
22.4 cfs	1961	Allotment sheet
28.6 cfs	1964	Allotment sheet

Owsley

3 10 cfs 1995
early pumping
(may include Jachett)

152 cfs	1989	early pumping
269 cfs	1992	early pumping
233.5 cfs	1993	allotment
148 cfs	1961	allotment sheet
178 cfs	1961	allotment sheet
180 cfs	1961	allotment sheet
156 cfs	1964	allotment sheet

Jachett

52 cfs	1990	early pumping
21.5 cfs	1961	allotment
18.3 cfs	1964	allotment

» «

Analysis of Owsley & Mud Lake Water
Users Capacity B Conton 4/28/00

Independent - Early Pumping Report

April 8 '89 - April 30 '89 22 days 3,020 af.

$$\frac{3020}{22} = 137.3 \text{ af/day}$$

$$\frac{137.3}{1.9835} \approx 69.2 \text{ cfs}$$

April 17th - April 28th 1995 11 days 1335 af estimate

$$\frac{1335}{11} \approx 121 \text{ af/day}$$

$$\frac{121}{1.9835} \approx 61 \text{ cfs}$$

Owsley ~~AP~~ Early Pumping Report
April '89 assume 22 days

North Lake 3380

$$\frac{3380}{22} \approx 154 \text{ af/day}$$

$$\frac{154}{1.9835} \approx 77 \text{ cfs}$$

» »
Capacity p 2

B. Conton

Owsley Early Pumping Report

April 89

assume 22 days

Bybee 3300 of

$$\frac{3300}{22} \approx 150 \text{ of/day}$$

$$\frac{150}{1.9835} \approx 75 \text{ of/s.}$$

$$75 + 77 \approx 152 \text{ of/s}$$

Independent Early Pumping Report

April 96

assume 30 days

4142 of

$$\frac{4142}{30} \approx 138 \text{ of/day}$$

$$\frac{138}{1.9835} \approx 69 - 70 \text{ of/s.}$$

Owsley

North Lulze April 92

6900 AA

assume 30 days

$$\frac{6900}{30} \approx 230 \text{ of/day}$$

$$\frac{230}{1.9835} \approx 116 \text{ of/s}$$

Owsley Buttes Capacity 13
Early Pumping Report

April 1992 assume 30 days 9120 cf.

$$\frac{9120}{30} \approx 304 \text{ cf/day}$$

$$\frac{304}{1.9835} \approx 153 \text{ cfs}$$

Owsley E $116 + 153 \approx 269 \text{ cfs.}$

Fadet Early Pumping Report.

April 1990 assume 30 days 3090 cf.

$$\frac{3090}{30} \approx 103 \text{ cf/day}$$

$$\frac{103}{1.9835} \approx 52 \text{ cfs.}$$

» »

Capacity p 4

1993 Allotment Sheet - Owsley

North Lake July 15-31 16 days 2820 of.

$$\frac{2820}{16} \approx 176 \text{ of/day}$$

$$\frac{176}{1.9835} \approx \overset{88.5}{\cancel{176}} \text{ of}$$

Baybe July 15-31 16 days 4626 of

$$\frac{4626}{16} \approx 290 \text{ of/day}$$

$$\frac{290}{1.9835} \approx 145 \text{ of}$$

$$\Sigma \approx 233.5 \text{ of}$$

1961 Allotment Sheet - Owsley

May 1-15 15 days 4408 of

$$\frac{4408}{15} \approx 295 \text{ of/day}$$

$$\frac{295}{1.9835} \approx 148 \text{ of}$$

Capacity psOwsley 1961 Allotment sheet May 16-31

$$9872 + X - 1684 - 1170 = 12380$$

$$X = 12380 + 1684 + 1170 - 9872 = 5362$$

$$\frac{5362}{15} \approx 357 \text{ g/day}$$

$$\frac{357}{1.9835} \approx 180 \text{ of } s$$

Owsley 1961 Allotment sheetJune 1-15
~~May 16-~~

$$3642 + 1630 = 5272$$

$$\frac{5272}{15} \approx 351 \text{ g/day}$$

$$\frac{351}{1.9835} \approx 178 \text{ of } s$$

Independent 1961 Allotment sheet May 1-15

$$\frac{663}{15 \text{ days}} \approx 44.4 \text{ g/day}$$

$$\frac{44.4}{1.9835} \approx 22.4 \text{ of } s$$

» »

Capacity p 6

Fackett Canal 1961 allotment sheet

June 16-30

$$\frac{638}{15 \text{ days}} \approx 42.5 \text{ af/day}$$

$$\frac{42.5}{1.9835} \approx 21.5 \text{ cfs}$$

Dawley Canal 1964 allotment sheet

Aug 1-15

$$\frac{(2820 + 1830)}{15} \approx 310 \text{ af/day}$$

$$\frac{310}{1.9835} \approx 156 \text{ cfs}$$

Independent 1964 allotment sheet

Aug 16-31

$$\frac{852}{15} \approx 57 \text{ af/day}$$

$$\frac{57}{1.9835} \approx 28.6 \text{ cfs}$$

» »

Capacity p 7

Fadett 1964 allotment sheet Aug 16-31

$$\frac{544}{15} = 36.4 \text{ of/day}$$

$$\frac{36.4}{1.9835} \approx 18.3 \text{ of}$$

Total Capacity Mann 1978 fr. photocopy of
notebook page in files -

$$\frac{12,400 \text{ of.}}{31 \text{ days}} \approx 400 \text{ acre ft/day}$$

$$\frac{400}{1.9835} = 202 \text{ of}$$

See 1995 naty minutes 11 days 1995 = fuel capacity ★

Owsley $\frac{6787}{11} \approx 615 \text{ of/day}$ $\frac{615}{1.9835} \approx 310 \text{ of}$

Post-it® Fax Note 7671

To Ernie Carlsson	Date 4-27-00	# of pages 5
Co./Dept. E. BARN	From Richard Hansen	
	Co. VAULT	

MEMORANDUM

TO: Norm Young *NOT*
 THRU: Glen Saxton, Bob Fleenor *OK*
 FROM: Dave Tuthill *DET*
 DATE: May 28, 1981

RE: Approval of Application for Transfer No. 2303.

The Jackett Canal Company Application for Transfer No. 2303 was originally filed with this Department on July 7, 1978. Since that date many problems have been raised related to the application. The intent of this memo is to (1) identify the two problems that have not yet been clearly resolved, (2) propose a suggested solution for each problem, and (3) list a suggested set of conditions of approval for the transfer.

Problem No. 1

Water rights nos. 31-0336 and 31-0337 represent a major conflict relating to this application for transfer. At the time the Owsley Canal Company vs. Ernest Bauerle decree was signed on October 14, 1940, two of the rights shown to be represented as valid permits were nos. 17690 and 17763. These rights were identified in paragraph V of the decree as follows:

That the defendant Independent Waters Users of Mud Lake, Inc., a corporation, is now the owner by assignment of water permit no. 17690 (31-2253) originally issued by the Department of Reclamation to Frank S. Jackett, for the diversion by means of wells of 32.50 cubic feet per second of underground water in the vicinity of Mud Lake; and is also the owner of water permit No. 17763 (31-2254), originally issued by said Department of Reclamation of Idaho to Merritt M. Owsley, for the diversion by means of wells of 50 cubic feet per second of underground water in the vicinity of Mud Lake.

Decreed right nos. 31-0336 and 31-0337 were assigned to the aforementioned water rights, respectively.

The two rights were also mentioned in part (d) of paragraph XII of the decree as follows:

For all or any of the wells constructed or to be constructed under water permits nos. 17690 and 17763 (both belonging to Independent Water Users of Mud Lake, Inc.), an amount not exceeding in the aggregate the equivalent of 91.8 cubic feet per second, flowing continuously during the irrigation season from May 1st to November 1st of each year.

The descriptions of the two water rights in the decree contain two major discrepancies. First, at the time the decree was signed on October 14, 1940, permit no. 17690 had already been licensed for nearly six months. The license was issued on April 23, 1940 for 28.0 cfs on 1328 acres.

- OK but*
- ① Be sure Skewton's comments on both Xfers are fully addressed.
 - ② Totalizing meters are very costly. Be sure Skewton needs before we require.
 - ③ Give the Judge the benefit of the doubt on the 91.8 cfs *WCD*
 - ④ Emphasize only approving the present practice existing since 1956. No change in status.

TO: Norm Young
 THRU: Glen Saxton, Bob Fleenor
 DATE: May 28, 1981
 PAGE: 2

Therefore, the decree was incorrect in describing water right no. 17690 as a permit for 32.5 cfs.

par. XII describes volume not rate.

The second major discrepancy was that the maximum total rate of flow for the two rights was "limited" to 91.8 in part (d) of paragraph XII of the decree. This quantity was obviously in error considering that the two permits were initially described within the decree as 32.5 cfs and 50.0 cfs, for a total of 82.5 cfs. The clear intent of paragraph XII within the context of the decree was to limit the season of diversion to May 1st through November 1st. No expansion or enlargement of the two permit rights was indicated in any other location within the decree so the total of 91.8 cfs must be considered to be in error, even though it is the contention of Jackett Canal Company that the total of 91.8 cfs be used as a measure of the permit rights.

To further add to the confusion of the extent of the two water rights, permit no. 17763 was cancelled on April 25, 1974 after all mandatory notification procedures were completed by the Department. As stated in a memo from Phil Rassier dated August 28, 1979, the validity of the right represented by decree no. 31-0337 was therefore in question. However, a letter from a Department representative dated June 4, 1974, indicated that "the right to the use of water from the wells proposed by the permit was confirmed by the decree". Thus for many years we have supported the contention that decreed right 31-0337 is valid. Per a draft memo from Phil Rassier dated May 6, 1980, this should have a significant bearing on our current interpretation of validity.

As a solution to the described situation, we can consider that (1) the figure of 91.8 cfs is totally unsubstantiated and was an error in the decree, (2) at the time the decree was signed, the water right represented by decree no. 31-0336 was already licensed for 28.0 cfs, and (3) we are committed to interpreting 31-0337 as a valid decreed right. Therefore, we should recognize the following rates of flow for purposes of this transfer:

31-0336	28.0 cfs
31-0337	<u>50.0 cfs</u>
	78.0 cfs

This interpretation has an effect on the other permits identified in the Owsley Canal Company vs. Ernest Bauerle, et.al. decree. To be consistent, the other permits should be field examined by regional office personnel at the earliest opportunity to determine their current validity. A memo should be attached to decree which identifies the extent to which water rights described by the permits are still being utilized. To the extent they are currently utilized, the permit rights should be considered to be decreed.

TO: Norm Young
THRU: Glen Saxton, Bob Fleenor
DATE: May 28, 1981
PAGE: 3

Problem No. 2

The places of use of the various water rights represent the other major conflict of this transfer application. As shown in Table 1, the total acreage shown on the water rights originally summed 3965. As indicated in Kent Foster's letter dated November 3, 1978, only about 3300 unique acres are included in that total.

The original place of use described in the transfer application for 31-0336 is the place of use shown on license no. 31-2253; 1328 acres within T. 7 N., R. 35 E. and T. 6 N., R. 35 E. The original place of use described in the transfer application for 31-0337 is the place of use shown on permit no. 31-2254; 2619.1 acres within T. 7 N., R. 33-34 E. and T. 6 N., R. 33-35 E. Thus, the sum of acreage under the two water rights is 3947.1 acres. This application for transfer purports to change the place of use of 1/3 of each right (1316 acres total) to all acres served by Jackett Canal Company.

The lands within Jackett Canal Company currently total 3107.23 acres. If the water rights to be transferred were all from the same source there would be no problem with combining all the lands under all the rights. However, in this situation 20% of the rights are from surface water and the remainder are from groundwater. Therefore, if the transfer is approved it would authorize the surface water to be applied to 5 times as many acres as prior to the transfer. This is a problem cited by Ron Carlson in his letter dated October 30, 1978. In spite of the problem, the Director agreed combine the rights in a conference with the applicant's attorney on November 10, 1978. It appears that in light of the other factors associated with this transfer the Director opted to consider this situation to be acceptable. Thus, the solution regarding place of use is to accept the Jackett Canal Company land list as the place of use for the combination of rights being transferred.

Another concern regarding place of use has been the effect this transfer may have on the remaining 2/3 portion of 31-0336 and 31-0337 in the name of Independent Water Users of Mud Lake, Inc. This concern is alleviated by Application for Transfer No. 2461 which proposes to clarify the place of use on the remaining 2/3 portions. This transfer application will be reviewed separately but is mentioned here as an indication that future possible disputes between Independent and Jackett will be reduced via these transfers.

RECEIVED
MAY 29 1981
WATER RESOURCES
DIVISION
SALT LAKE CITY

TABLE NO. 1

WATER RIGHTS OF JACKETT CANAL COMPANY

<u>WATER RIGHT NO.</u>	<u>CFS</u>	<u>ACRES</u>	<u>DATE OF PRIORITY</u>	<u>SOURCE</u>
31-0134	3.5	142	03/20/1911	Camas Creek
31-0135	2.5	320	06/10/1912	Mud Lake
31-0143	1.0	242	03/29/1911	Camas Creek
31-0144	1.0	same as above	09/21/1912	Camas Creek
31-0190	5.9	320	10/14/1913	Camas Creek
31-2289	3.2	160	01/13/1949	Groundwater
31-2290	3.6	240	02/14/1949	Groundwater
31-2297	6.0	340	12/29/1949	Groundwater
31-2310	5.8	290	09/24/1952	Groundwater
31-2317-A	8.08	404	02/28/1953	Groundwater
31-2317-B	1.90	95	10/27/1956	Groundwater
31-2321	1.92	96	04/25/1953	Groundwater
31-0336	9.33*	443*	04/27/1932	Groundwater
31-0337	<u>16.67***</u>	<u>873**</u>	12/15/1932	Groundwater
	70.4	3965		
31-0192	3.0		9/8/1917	MUD LAKE *

(Some overlapping so only 3300 acres are unique)

* This right is claimed by JACKETT CANAL COMPANY AND DELIVERED TO ITS SHARE
HOLDERS. I.E.

* 1/3 of 28 cfs

** 1/3 of 1328 acres

*** 1/3 of 50 cfs

**** 1/3 of 2619 acres

MICROFILMED

SUGGESTED CONDITIONS OF APPROVAL

1. Any future transfer of any of these rights will cause the remaining rights to revert back to the original acreage.*
2. Diversion of water authorized by this transfer shall not exceed 9321 acre feet per anum.
3. Totalizing measuring devices of a type approved by this Department must be permanently installed and maintained at the point of injection into Camas Creek in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 34 T. 7 N., R. 35 E. B.M., and at the points of diversion/rediversion in Lot 4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 3, T. 6 N., R. 35 E. B.M., and SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 33, T. 7 N., R. 35 E., B.M.
4. Use of water under this transfer is subject to control by the water-master of Water District No. 31, Mud Lake and tributaries.

Modified
Per Norm
Young's
Comments

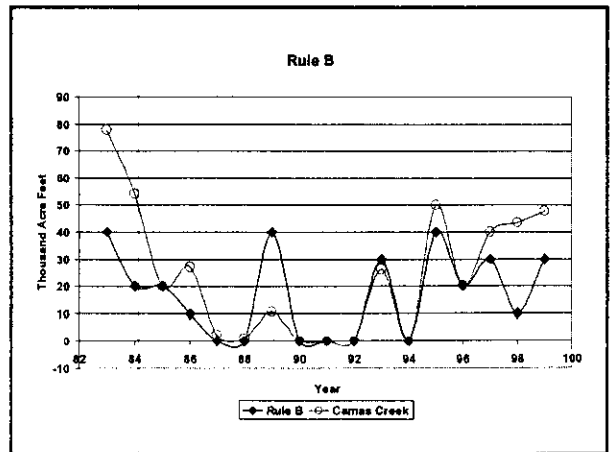
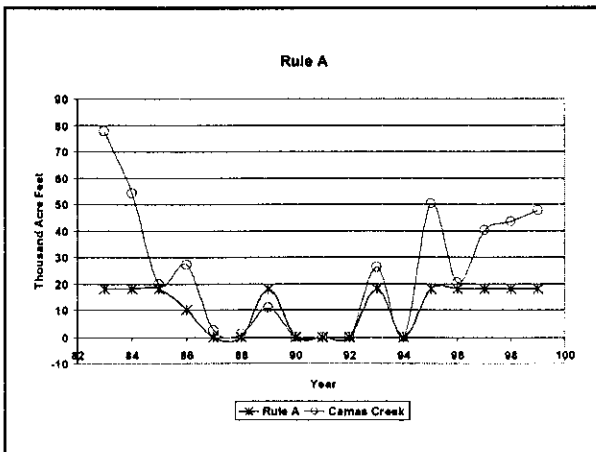
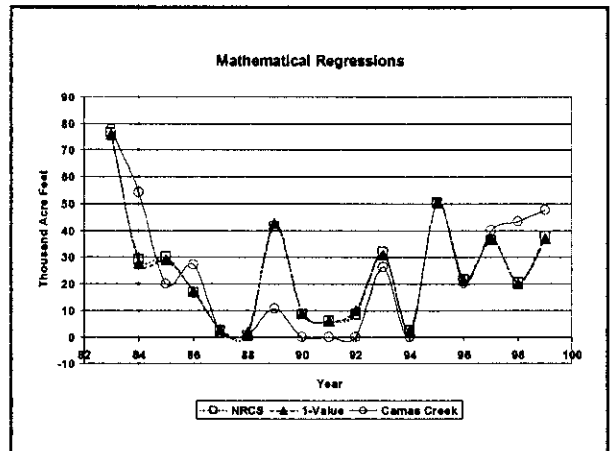
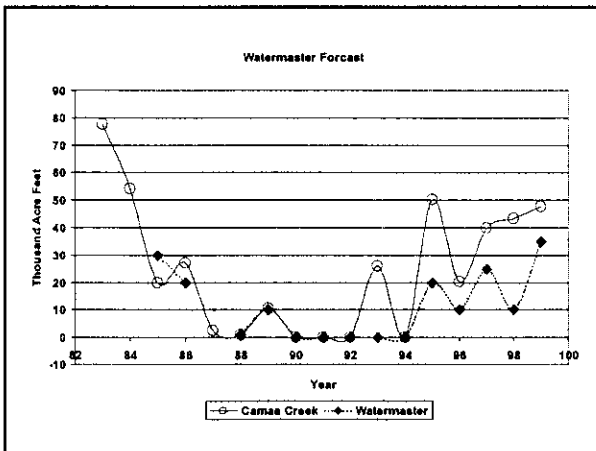
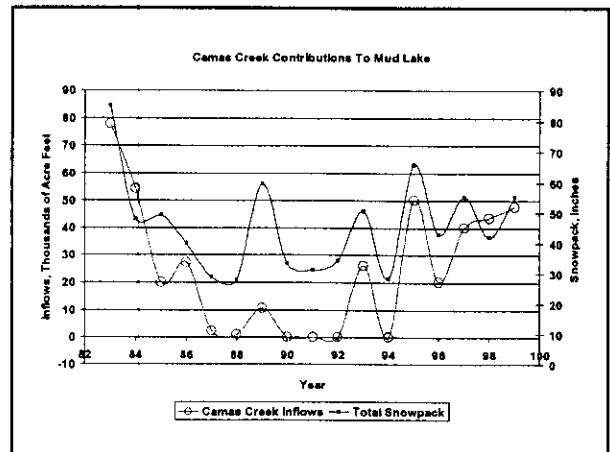
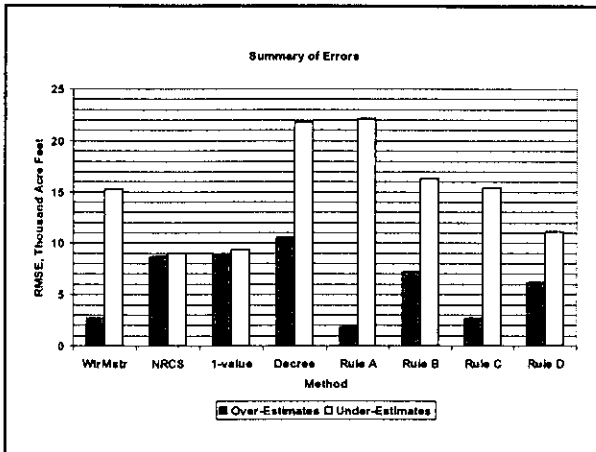
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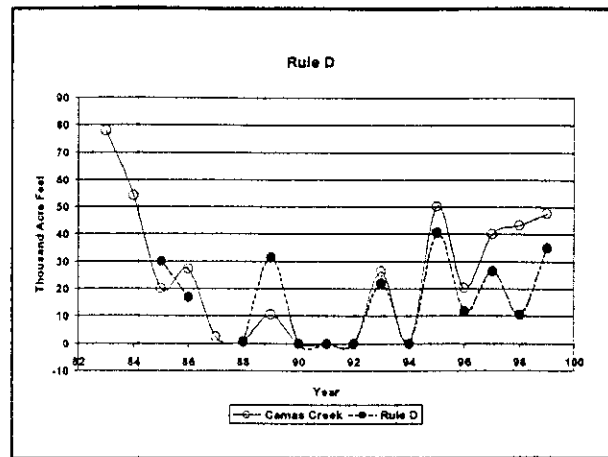
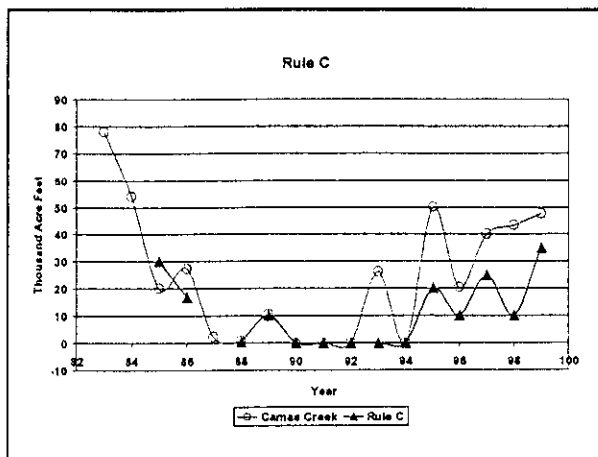
* This condition came from the November 10, 1978 meeting between Allred, Carlson and Foster.

DISCUSSION OF
MUD LAKE STORAGE
AND
ALLOTTMENT SYSTEM

1. Necessary process, used annually.
2. Unique process.
3. Guidance Provided by:
 - Suave v. Abbot, 1930
 - Owsley Canal v. Bauerly, 1940
 - Early Pumping Agreement, 1982¹
 - IDWR Administrative Direction
4. Do we need general provisions?
5. Process/Timetable?
6. Camas Creek estimates for initial allotment do not follow decreed method.
7. Over-estimate = large potential for injury.
8. Under-estimate = very low potential for injury.
9. Watermaster estimates far better than decreed method.
10. Comparison of possible decision rules.

¹ Practice dates to 1961 or earlier





Forecasts May 1, 2000

Watermaster	<u>12,000</u> - 15,000 per phone call 4/27/00
NRCS	16,735
1-Value	16,907
Rule A	10,000
Rule B	10,000
Rule C	Zero to 16,907 at Watermaster's Discretion
Rule D	6,907 to 16,907 at Watermaster's Discretion

Snoell Computations 4/27/00 B Conton

Camp Creek 4/1/00 9.0 inches w.c

Crab Creek 13.4

Lakeview 8.1

Kilgore 9.0

$$\Sigma = 39.5$$

$$I \text{ value: } -33.9499 + 1.287539 \times 39.5 \approx 16,907$$

$$\begin{aligned} \text{NRCS: } & -37.245 + 0.878 \times 13.4 + 1.395 \times 8.1 \\ & + 1.701 \times 9.0 + 1.734 \times 9.0 \approx 16,735 \end{aligned}$$

AGENDA

Basin 31 Action Meeting May 1-2, 2000

Monday, May 1, (1:00 p.m. – 5:00 p.m.) Discussion Topics (Dave Tuthill will arrive late)

- General Overview of the Basin Characteristics -Ernie
- Montevieu Canal Company -Dave
- Diversion Volumes (Bauerle Decree) -Ernie
- Blaine Larsen Rights -Open discussion of issues effecting recommendations.
POU discrepancy ie. 31-07631 -Allen

Tuesday, May 2, (8:00 a.m. to 5:00 p.m.) Discussion Topics (Greg Shenton is invited)

- Season of Use-Ernie
- Allotment System/Mud Lake Storage -Bryce
- Jefferson Irrigation Company -Carter
- Purpose of Use/Wildlife Refuge -Craig, Ernie
- Surface Water to Ground Water Rights -Bryce

This is a proposed agenda for the Basin 31 action meeting on Monday and Tuesday of next week. If you want an item added to the list please let me know. Several staff from Boise will be here to listen and provide input on your questions and concerns. They are coming to help us so we need to be prepared. Individuals listed with the agenda items will lead the discussion for that topic and may need to prepare information/hand outs in advance. The surest way to get your questions answered is to have documentation of actual examples. Realize there may be some changes in how we develop our recommendations.

To: Mud Lake Storage File
Fr: Bryce Contor
Date: 4/21/00
Re: Decision Rules

This is a summary of possible decision rules, to be presented at the meeting May 1 and May 2.

NRCS Regression

This is a multiple linear regression, using inches of water content at each of four SnoTell stations on April 1. The output is thousands of acre feet of forecast inflows of Camas Creek. It was done by Dan Moore of USDA Natural Resource Conservation Service.

$$\text{Inflow} = -37.245 + 0.878 * \text{Crab Creek} + 1.395 * \text{Lakeview Ridge} \\ + 1.701 * \text{Camp Creek} + 1.734 * \text{Kilgore}$$

The R^2 value is 0.72.

1-Value Regression:

This is a single linear regression, using the sum of inches of water content at the four sites on April 1. The output is thousands of acre feet of forecast inflows of Camas Creek:

$$\text{Inflow} = -33.9499 + 1.287539 * \text{Snowpack Sum.}$$

The r^2 value is 0.69. Note that having fewer variables will decrease the R^2 even when predictive value is not impaired, so this is nearly as good a forecast method as the NRCS regression. Note also that over the period of record, this regression and the NRCS regression produced almost identical results. For this reason, the rules below rely on this simpler regression formula.

Rule A:

<u>1-Value Regression</u>	<u>Forecast</u>
Less than 15,000	zero
15,000 - 17,999	10,000
Greater than 18,000	18,000

Copies to:

*Ernie
Candia
Vicky
Greg Shenton*

Rule B:

<u>1-Value Regression</u>	<u>Forecast</u>
Less than 10,000	zero
10,000 - 20,000	10,000
20,001 - 30,000	20,000
30,001 - 40,000	30,000
Greater than 40,000	40,000

Rule C:

In operation, the rule would be "The watermaster may estimate seasonal inflows of Camas Creek, not to exceed the forecast of the 1-value regression."

For testing purposes, the value used was the lesser of the watermaster's prediction or the 1-value regression. Over the period of record, the results of Rule C are nearly identical to the watermaster's forecasts.

Rule D:

In operation, the rule would be "The watermaster shall estimate seasonal inflows of Camas Creek. The estimate shall not exceed the 1-value forecast, and shall not be less than 10,000 acre feet below the 1-value forecast."

For testing purposes, the value used was the watermaster's prediction whenever it would have complied with the rule. Otherwise, the rule value was used.

Recommendation:

The greatest potential for injury occurs when Camas Creek contributions are over-estimated. When this happens, there is a possibility that a large junior user (such as Mud Lake Water Users Association) could rely on the early estimate and draft more water, early on, than could be replenished with later pumping. In such a case, seniors could be deprived of stored water that should have been allotted to them. This is a serious potential for injury.

The other potential for injury occurs when Camas Creek contributions are under-estimated. The worst injury this could cause is to induce juniors to pump early in the season, when perhaps actually they would not have needed to. However, this early pumped volume is carried as a credit in the well balance of the allotment system and can reduce the need for pumping later in the season. Therefore this is a minor potential for injury.

Based on the above, I calculated over-estimates and under-estimates for each of the methods, and ranked them by the average over-estimate¹. The ranking is:

<u>Method</u>	<u>Over-Estimate</u>	<u>Under-Estimate</u>
Rule A	1.8	22.1
Watermaster	2.7	15.3
Rule C	2.7	15.4
Rule D	6.2	11.1
Rule B	7.2	16.3
NRCS	8.7	9.0
1-Value	8.9	9.3
Decree	10.5	21.8

I reject Rule A because its slight advantage in over-estimating comes at the price of being the worst method for under-estimating.

I reject giving the watermaster a free hand because we can't assume that all future watermasters will have the skill and integrity of current and past watermasters.

I recommend Rule C because it is nearly as good as the watermaster's record, yet defines how the estimates are to be made.

If Rule C is rejected because it still gives the watermaster too much freedom, I could support Rule D. While Rule D still gives the watermaster some discretion, it limits his freedom significantly. Its slight improvement over Rule C in under-estimating comes at the price of significantly worse over-estimating.

I reject the other methods because their errors in over-estimation are higher, without significant offsetting advantages.

¹ Root mean square method. This method weights a single large error more heavily than several small errors.

6

Contor, Bryce
From: Scholer, Burke
Sent: Monday, April 24, 2000 12:28 PM
To: Contor, Bryce
Subject: RE: Root Mean Sum

Bryce,,,,,

When you say "Error" I presume that is the same as "Difference" when we check the flow meters. Yes, we square the "Difference" for each of the measurements then sum the Squares then take the square root of the average of the squares. This is the Root Mean Squared method
Burke

-----Original Message-----

From: Contor, Bryce
Sent: Monday, April 24, 2000 10:56 AM
To: Scholer, Burke
Subject: Root Mean Sum

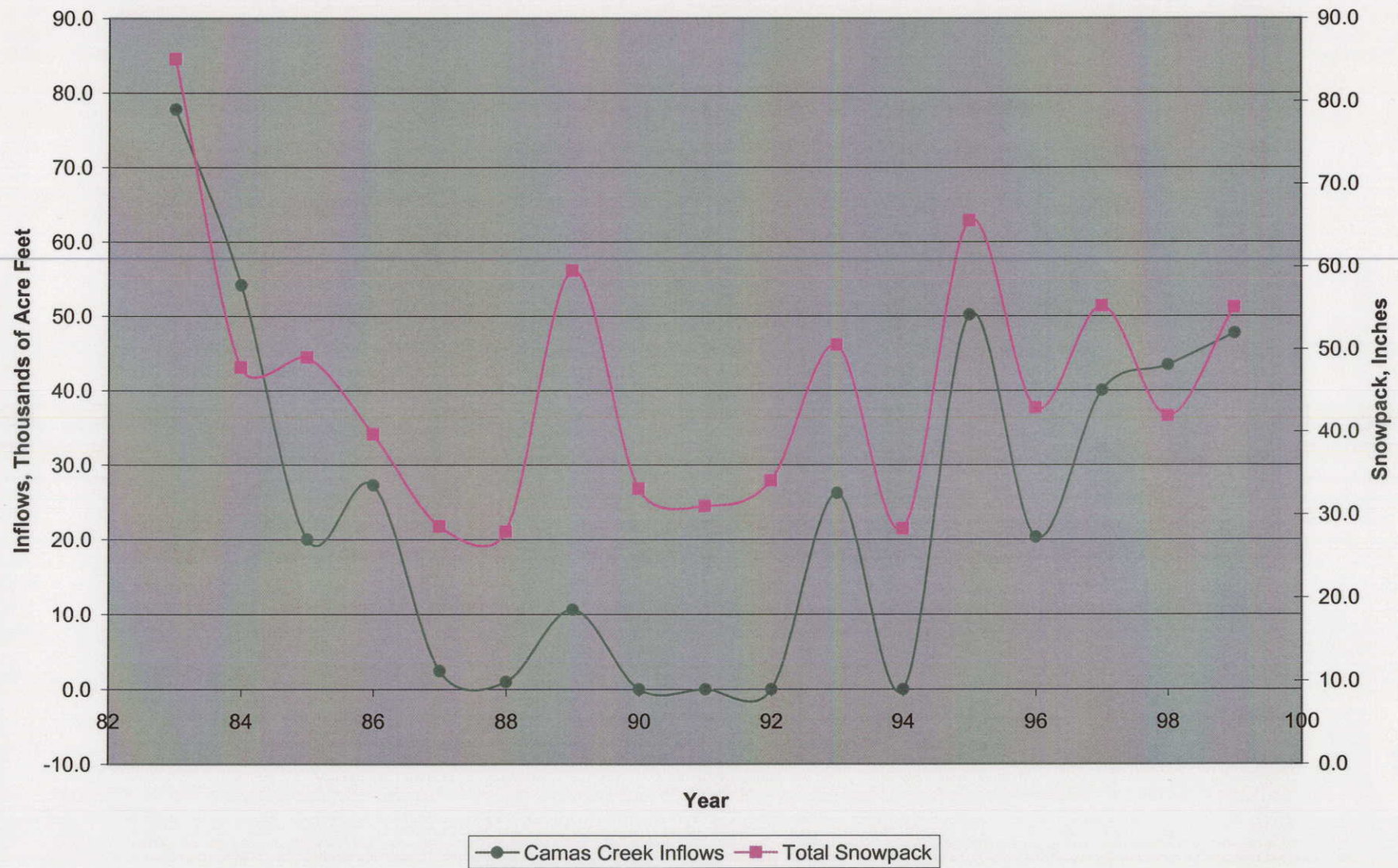
Do I remember this right:

Root Mean Sum Error is:

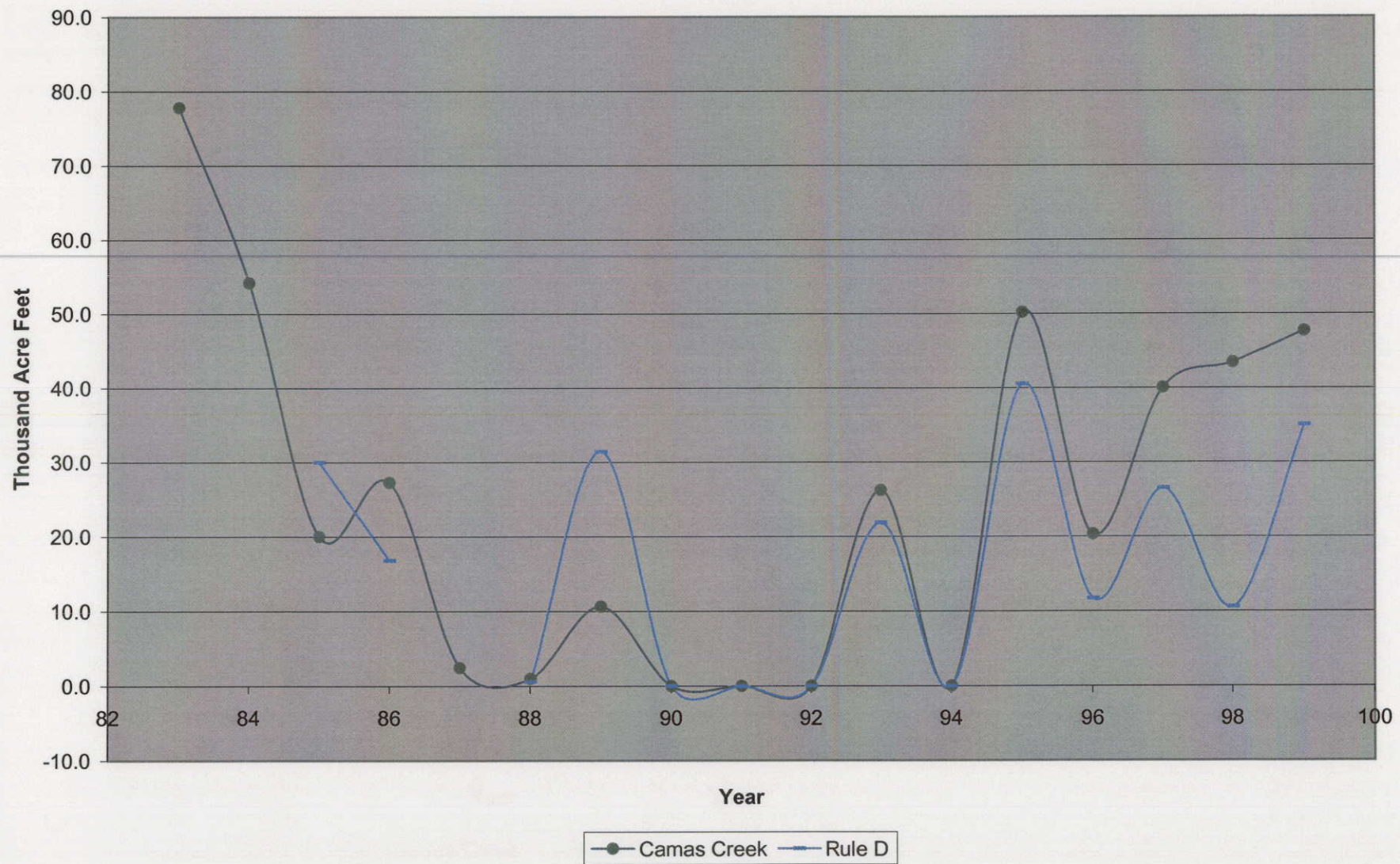
- a) Square each error.
- b) Sum the squares.
- c) Divide the sum by n.(Average)
- d) Take the square root of the quotient.

Thanks, Bryce YOU GOT IT....

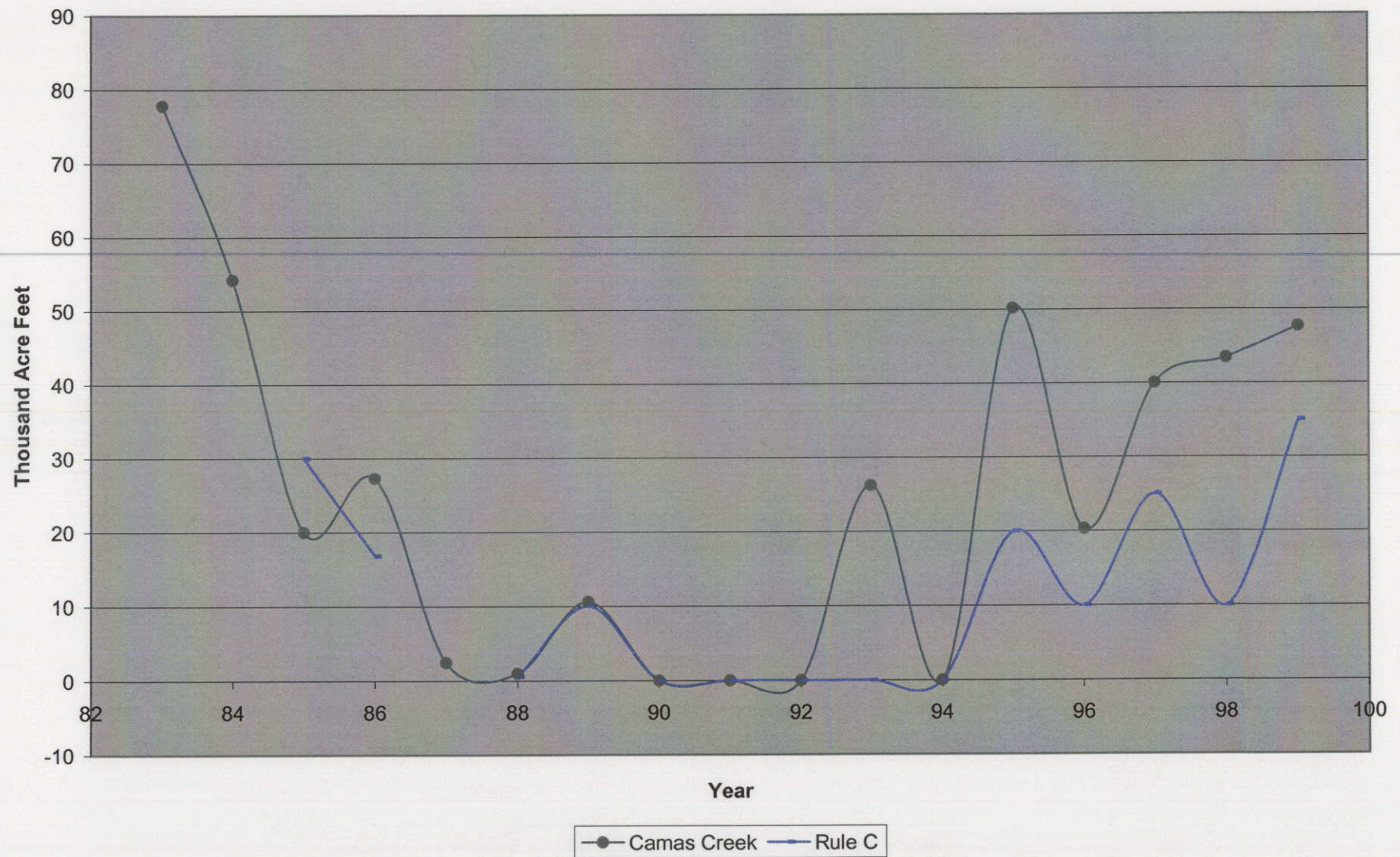
Camas Creek Contributions To Mud Lake



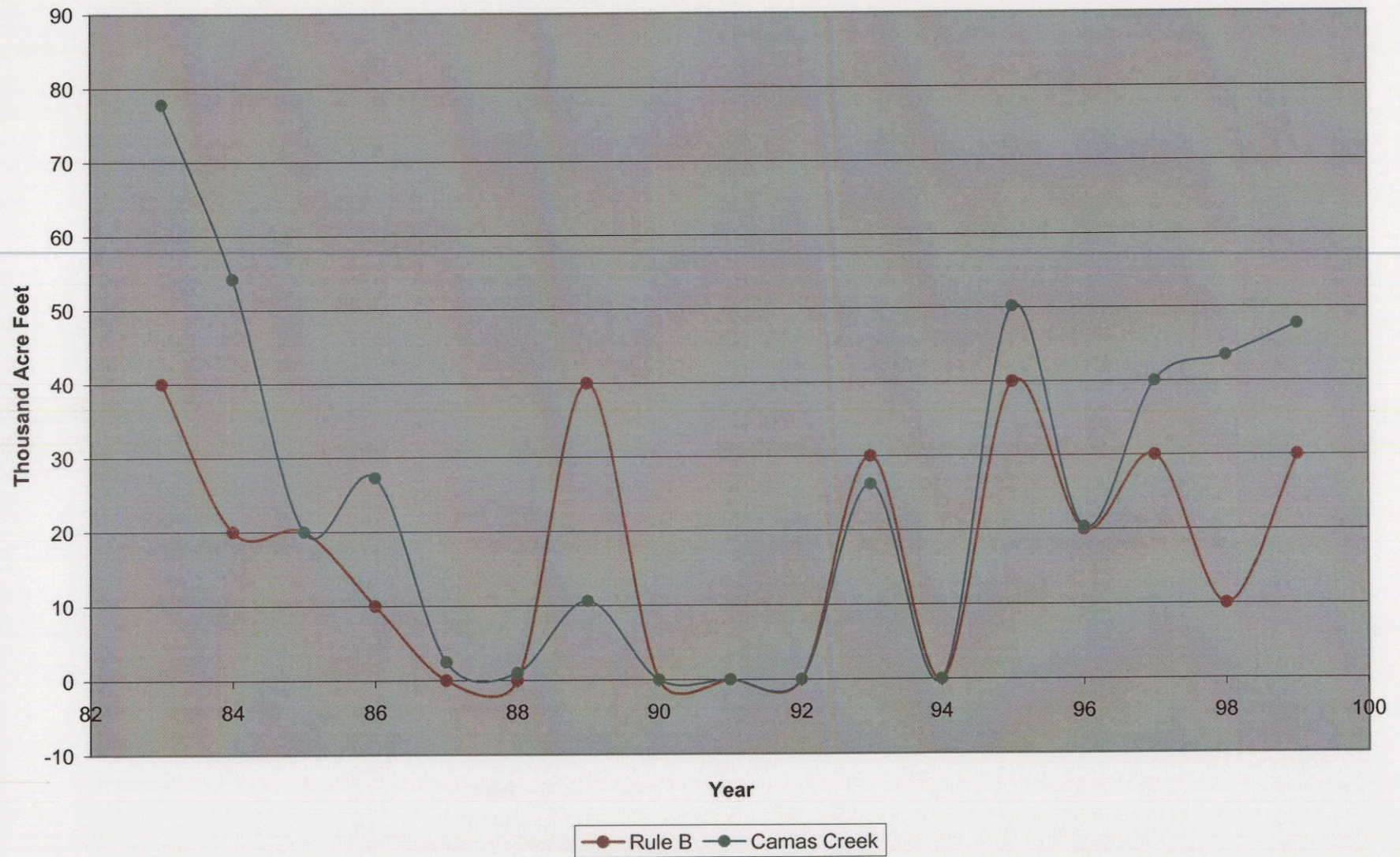
Forecasts, Camas Contributions



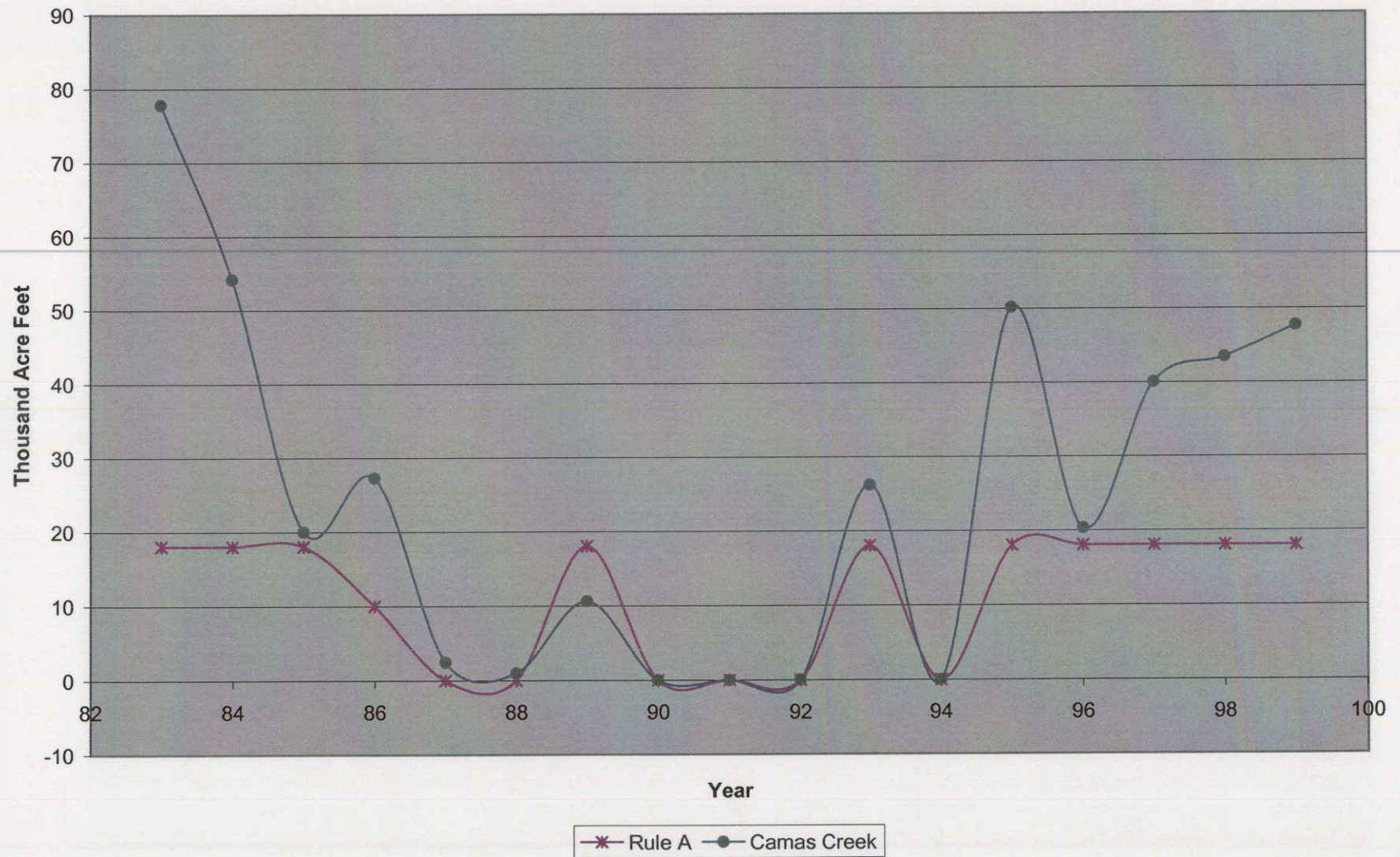
Forecasts, Camas Contributions



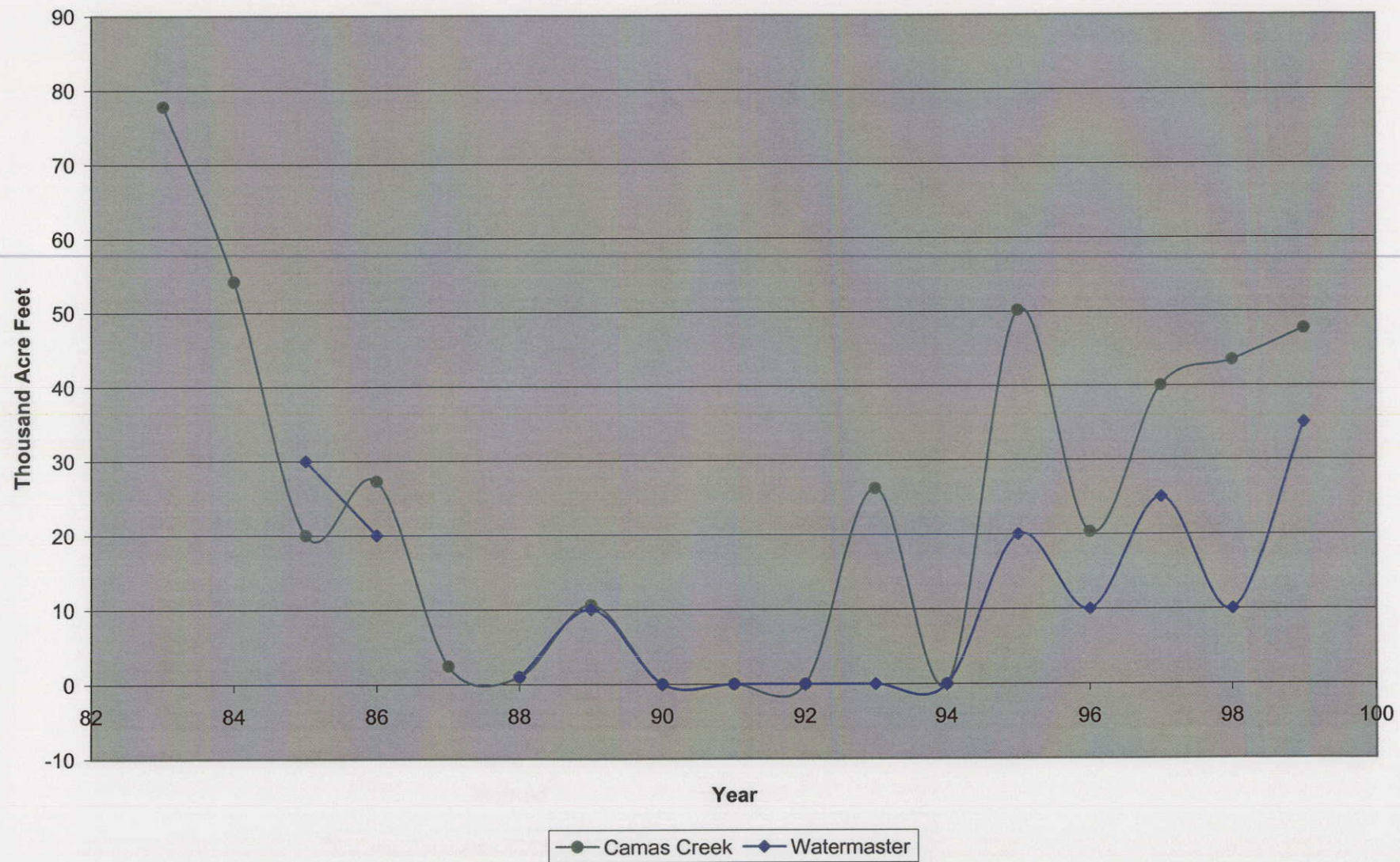
Forcasts, Camas Contributions



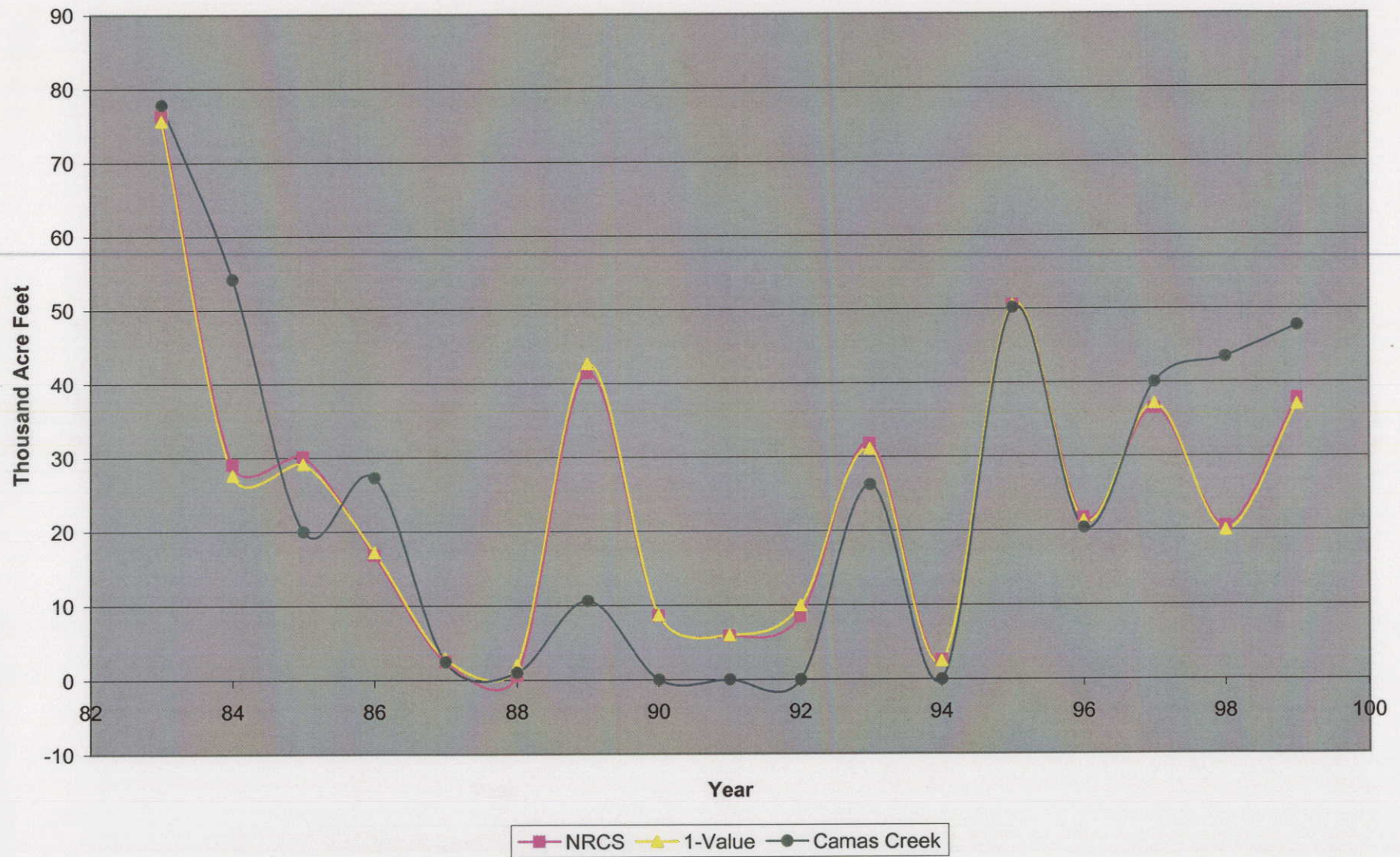
Forecasts, Camas Contributions



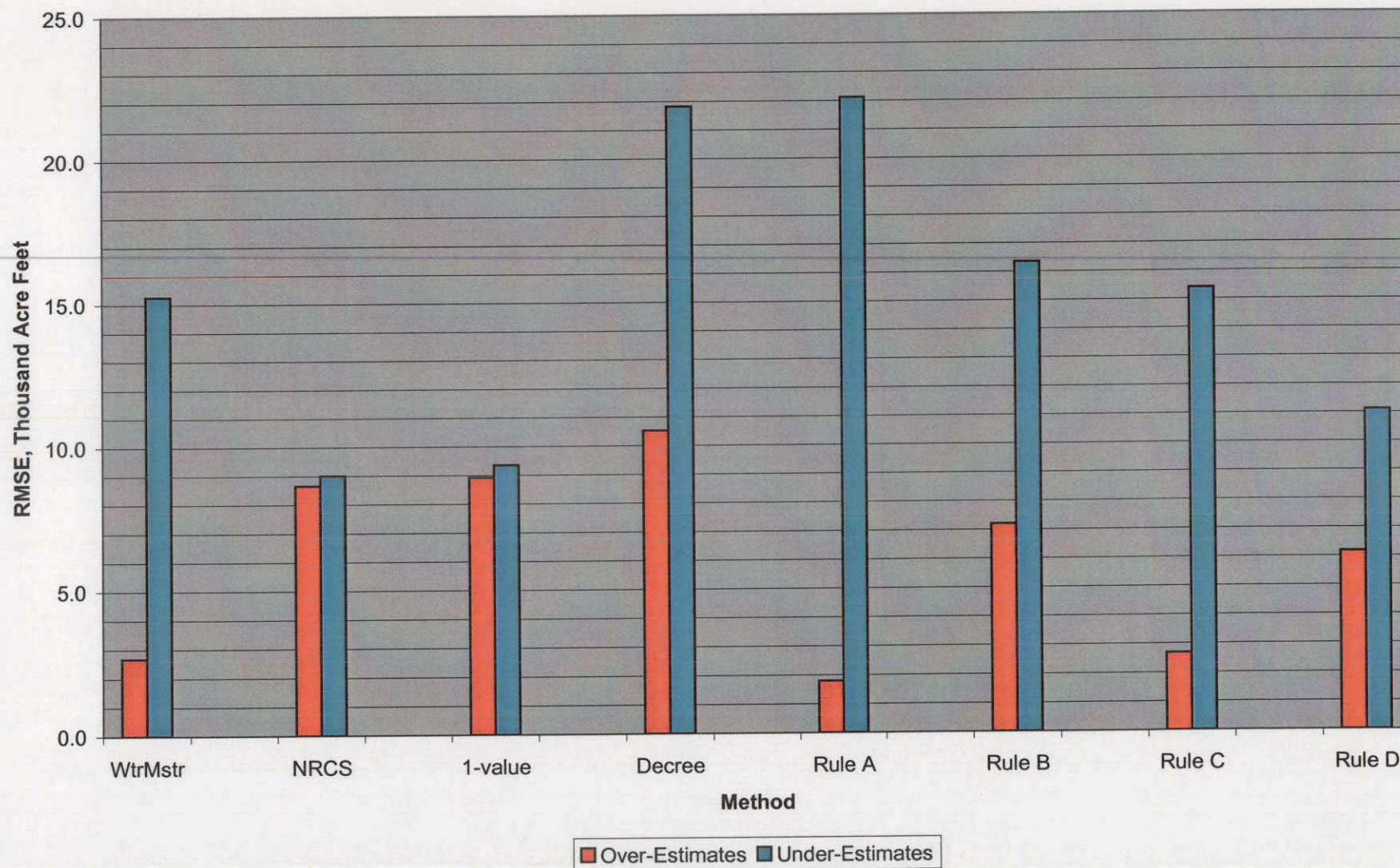
Forcasts, Camas Contributions



Forecasts, Camas Contributions



Summary of Errors



**MUD LAKE ALLOTTMENTS
CAMAS CREEK FLOWS**

YEAR	ESTIMATED CAMAS FLOW	ACTUAL CAMAS FLOW
1985	30,000 A.F	20,000 A.F
1986	20,000 A.F	27,224 A.F
1987		2,444 A.F
1988	1,000 A.F	1,000 A.F
1989	10,000 A.F	10,600 A.F
1990	0 A.F	0 A.F
1991	0 A.F	0 A.F
1992	0 A.F	0 A.F
1993	0 A.F	26,184 A.F
1994	0 A.F	0 A.F
1995	20,000 A.F	50,185 A.F
1996	10,000 A.F	20,302 A.F
1997	25,000 A.F	40,026 A.F
1998	10,000 A.F	35,636 A.F
1999	35,000 A.F	47,692 A.F

Date 4/21/00 sig. B. Coulton

Claim Mud Lake Survey
Doc Source Watermaster,
WD 31

To: Mud Lake Storage File
Fr: Bryce A. Contor
Date: 4/20/2000

Re: Phone conversation w/ Greg Shenton

1. In wet years, watermaster practice has been to allocate more than the decreed 18,000 acre foot estimate. In 1999, approximately 30,000 acre feet were allocated. *See #6 below.*

Bart will research initial estimates of Camas Creek inflow used in allocations from 1983 to 1999 and FAX today or tomorrow.

2. Of the three choices - Regression, Decision Rule, or Watermaster Decision, Greg prefers the "Watermaster Decision" as it reflects historical practice.
3. Important data not considered in our prediction equation include:
 - a) Early-spring diversions at Lone Tree (prior to May 1).
 - b) Rain-on-snow late in April.
 - c) Basin soil moisture conditions (affects extent of early diversions from Camas Creek).

Note that it would be difficult to obtain historical records for some of these data to incorporate into the model.

4. The biggest problem to avoid is over-allocating the first allotment. If this happens, some users can over-draw their allotment, and by the time this is discovered it may be too late in the season to pump enough to replenish the overdraft. Greg believes that this has not occurred for many, many years, *due to the practice of adjusting the estimate for Camas Creek inflows.*
5. If the first allotment is under-allocated, there is no injury. First of all, the allotment is re-calculated every 15 days, so adjustment can be made. Secondly, the likely response of a junior right holder is to pump early. If it turns out that pumping was not needed, the balance can be carried through the season to offset later pumping.

6. The 18,000 a.f. estimate in the decree does not fill all the rights with typical initial lake conditions, so there is a need for a larger estimate, if snowpack justifies it.

Contor, Bryce

From: dan moore [dmoore@wcc.nrcs.usda.gov]
Sent: Wednesday, April 19, 2000 12:45 PM
To: Contor, Bryce
Cc: Abramovich, Ron
Subject: jack knife

Bryce:

The so called "jackknife" technique is employed in our regression program to make a more realistic estimate of the forecasting capability of the equations. The origin of the name apparently relates to a looping back and forth that the program is doing internally. For a normal regression standard error one examines the forecast value versus the observed over the period of record. Each year of the record is predicted by an equation that was derived including that year. In practice that will not be the case, of course. So the jackknife technique adjusts the standard error and correlation coefficient by predicting each year using regression coefficients whose derivation did not include that year.

Every time I try to explain that I look for a new and better way to say it, and nothing is very satisfactory. But that's about the best I can do.

dan

Contor, Bryce
From: Contor, Bryce
Sent: Wednesday, April 19, 2000 11:59 AM
To: 'dan moore'; Contor, Bryce
Cc: Abramovich, Ron
Subject: RE: mud lake

Well, I've had time to look at these. They will be useful, thank you very much.

I confess I don't know what a jack knife regression is but I see it gave very similar results to the standard. The r-value looked pretty decent, does that apply to the standard regression or the jack knife?

The addition of the Montana site helped a great deal; I had used Excel to run a regression of the three sites I had, I think the r-value was closer to 0.3.

Thanks.

-----Original Message-----

From: dan moore [mailto:dmoore@wcc.nrcs.usda.gov]
Sent: Tuesday, April 18, 2000 2:56 PM
To: Contor, Bryce
Cc: Abramovich, Ron
Subject: mud lake

<< File: snow.xls >> << File: Mudlake.txt >> Bryce:

Well, I've found the snow correlates very well, and just based on that you can do a pretty good job of forecasting. The year 1998 hurts us though-- a good amount of inflow and not enough snow to support it. You guys have a rainy spring two years ago?

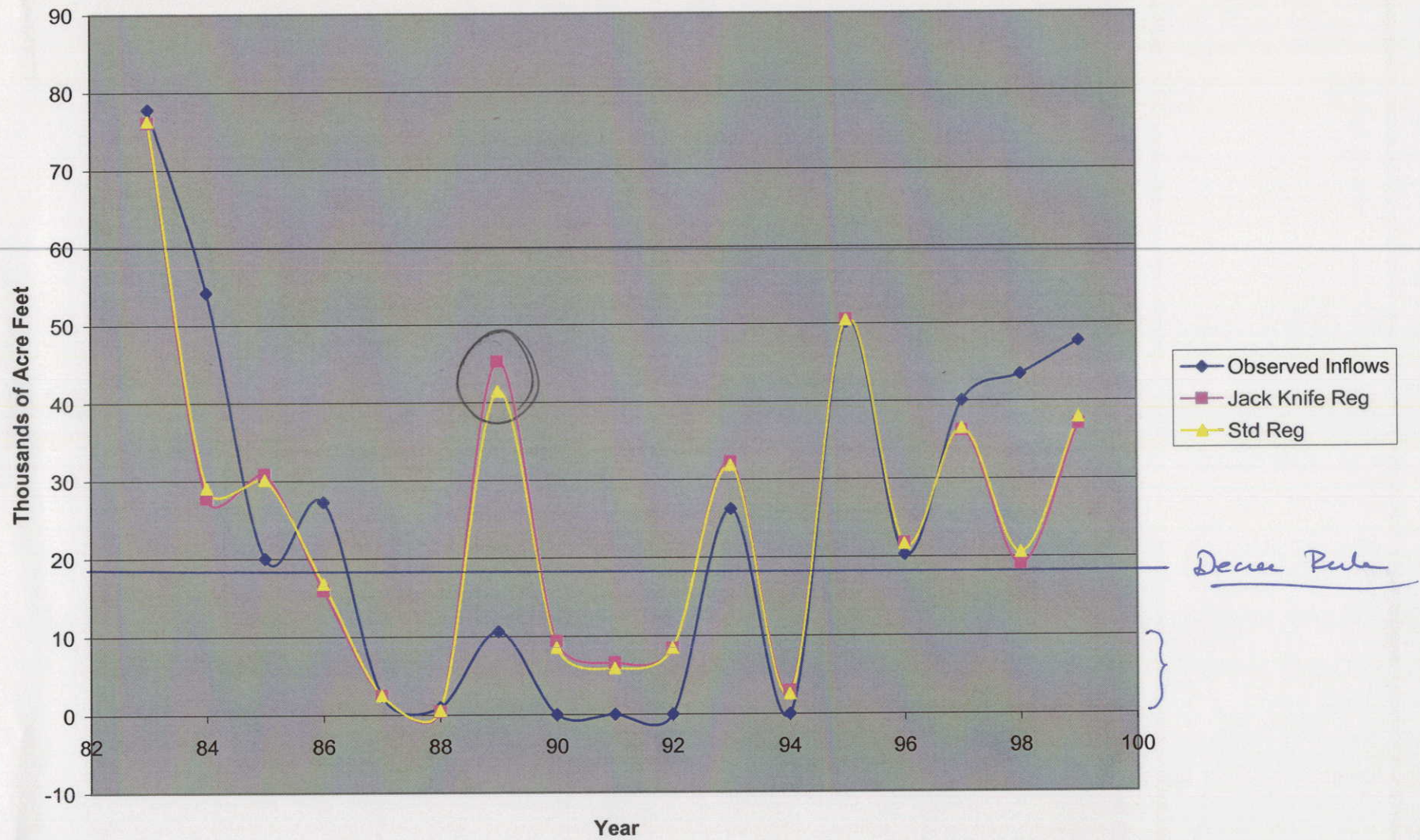
I don't know if there's a precip site in the area that might improve the regression. The other thing is that these snow sites have such long periods of record, we ought to try to find a flow dataset with a period of record that can take advantage of the older snow data.

Anyway, attached are a few things for you to look at.
An Excel file of
the snowpack inflo, and a text file showing snow
correlations and a
regression run for a forecast equation. See what you
think. If you do
some one to one graphs in Excel you'll get a feel for
the correlations.
The four zeroes out of 17 years don't look like they
hurt us.

If you have questions just email or call (503) 414-
3054.

dan

NRCS Regressions



Contor, Bryce

From: Contor, Bryce

Sent: Wednesday, April 12, 2000 2:08 PM

To: 'Ron Abramovich'; dan moore; Contor, Bryce

Subject: RE: camas creek

The "inflow to Mud Lake" is just that -- what is left of Camas Creek, after all upstream diversions. And while it's a nasty data series, it's what we're trying to forecast.

The best way to respond to your question is to describe the purpose of my inquiry. It will be kind of long, I apologize.

The 1930 decree instructs the watermaster to calculate an initial "allocation" of the waters of mud lake, on May 1 of every year. The decreed calculation is "available water = 18,000 acre feet plus contents of lake." The 18,000 acre feet represent the anticipated contributions of Camas Creek, based on the average contribution for the years 1922 through 1929. The decree directed the watermaster further to recalculate the allocation every fifteen days, based upon actual Camas Creek contributions.

What watermasters have found, historically, is that 18,000 acre feet is too high a figure to use on a dry year. If the initial allocation uses an 18,000 acre foot estimate, subsequent allocations have to be made smaller and smaller, and this puts the watermaster in an awkward social situation. Therefore, watermasters have used a lesser number when snowpack is "low" and soil moisture conditions are "dry."

In making recommendations to the Snake River Basin Adjudication Court, I want to incorporate the historical practice. But I need to quantify it, somehow. The most specific I can get from the watermaster iss, "we look at it every year" and "well, if the snowpack is 120% you can count on at least 20,000 acre feet." I need something a little firmer to take to the court.

Initially I had hoped to run a regression relating the four snotell sites to Camas Creek contributions. I got three of the sites off the web & called Ron to get data from the Montana site. He suggested you could help with the forecasting, so I sent you the last e-mail. Then I looked

at the data for the three sites I do have, and saw what you have seen.

I agree that those data won't do us much good. We probably could go back and get the withdrawal data for the period of record, I don't have them right now. But I question the usefulness of including those data in the forecast; the watermaster has to make his decision on May 1 and those data won't be available until later.

The three main variables that drive withdrawals are initial soil moisture conditions, irrigation requirements, and available flow. We may be able to find data to give us a proxy of initial soil moisture, but if we could sit down on May 1 and predict the summer's climate, we wouldn't be working where we do!

In looking over the situation again, the real need isn't so much for a prediction equation as for a rule of operation, describing when the old decree's 18,000 acre foot estimate is adequate and when a smaller estimate should be used.

Even a three-tiered decision rule could work, say a rule that assigns estimates of 18,000 acre feet, 9,000 acre feet, or zero acre feet, according to percent of average snowpack on April 1. Or perhaps the court would buy a rule that allowed some watermaster flexibility: 0 to 9000 acre feet estimate when snowpack is less than X %, 9000 to 18000 acre feet estimate when snowpack is more.

Whatever we do, the model or rule has to be simple and straightforward, and has to use data readily available on May 1 of each year.

I don't know what your resources are or how much time you can justify spending on this project. Thank you for looking at it so far. I welcome any help you can give, but if you need to move on, please send me the Montana data, and other data you suggest we might consider.

Thanks, Bryce

-----Original Message-----

From: Ron Abramovich
[mailto:Ron.Abramovich@id.usda.gov]
Sent: Wednesday, April 12, 2000 8:05 AM

To: dan moore; Contor, Bryce
Subject: Re: camas creek

Dan, I'm going to forward your email on to Bryce. I will be in and out of the office for the next couple of weeks, mostly out. But if you can call Bryce, he can help answer your questions without going through me. His number is (208) 525-7161. One comment, if possible and all or most of the diversions are accountable, maybe we can try to forecast both volumes??

Ron

dan moore wrote:

>
> Ron:
>
> I had a look at the info you sent. Interesting situation. I see that
> the USGS does have gages in the basin. But the data you sent is what
> they want to call inflow to Mud Lake, I guess. Does that info account
> for the upstream diversions? If we could add those in it would be
> better, for one thing, because we could get rid of the zero flows. Too
> many zero years screws up the regression.
>
> dan

--

Ron Abramovich
Water Supply Specialist / Climatic Data Liaison
Phone: (208)378-5741, ext. 2 Fax: (208)378-5735
<http://idsnow.id.nrcs.usda.gov>

SUMMARY OUTPUT

<u>Regression Statistics</u>	
Multiple R	0.507388
R Square	0.257442
Adjusted R	0.204402
Standard E	21289.44
Observatio	16

ANOVA

	df	SS	MS	F	ignificance F
Regressior	1	2.2E+09	2.2E+09	4.853749	0.044837
Residual	14	6.35E+09	4.53E+08		
Total	15	8.55E+09			

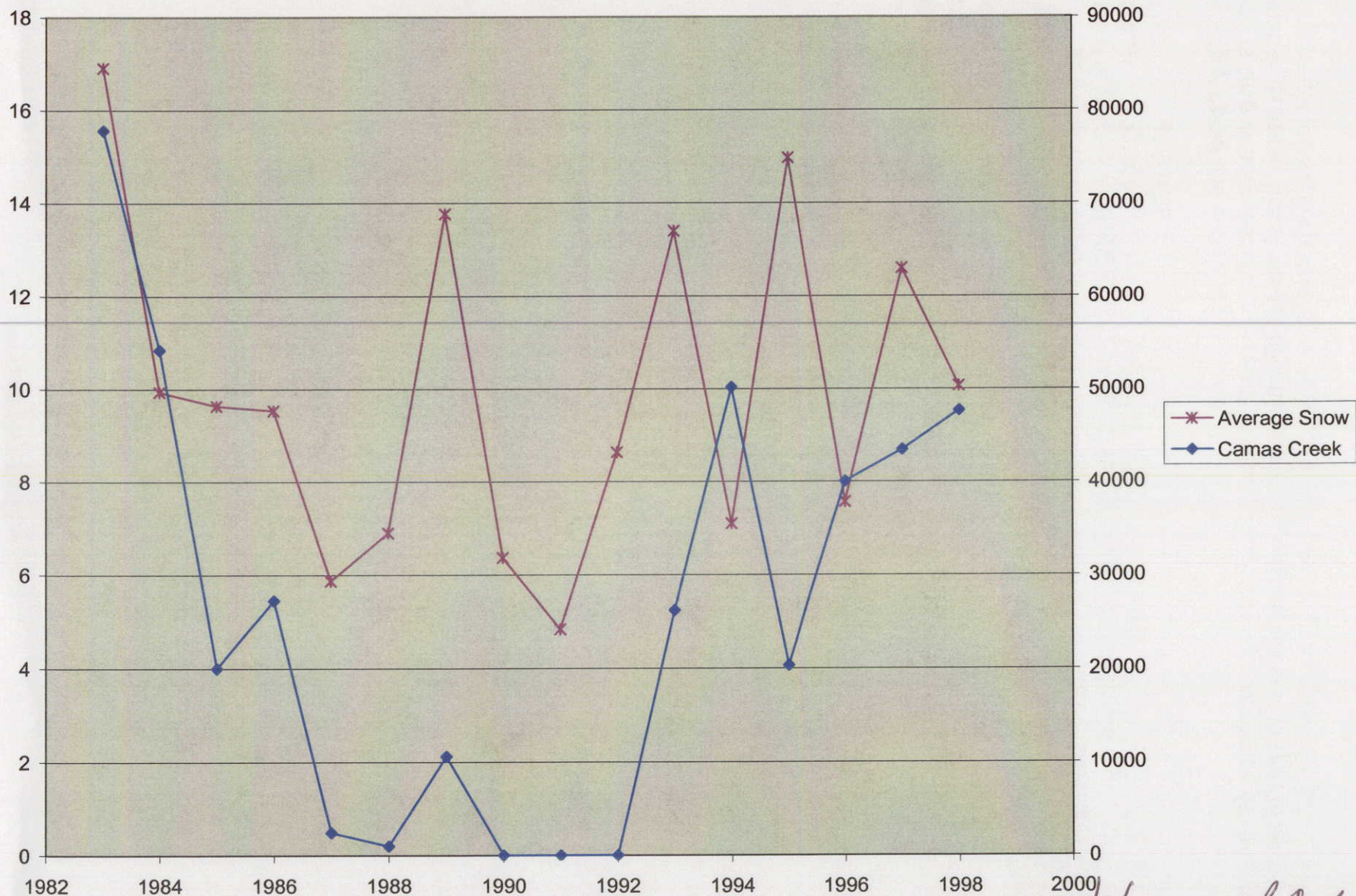
	Coefficient	standard Err	t Stat	P-value	Lower 95%	Upper 95%	ower 95.0%	pper 95.0%
Intercept	-7423.843	16213.72	-0.457874	0.654069	-42198.85	27351.17	-42198.85	27351.17
X Variable	4281.225	1943.253	2.203122	0.044837	113.3575	8449.093	113.3575	8449.093

X = average April 1 snowpack (inches of water content) of 3 sites, Kilgore, Camp Creek, and Crab Creek, yearly data 1983-1998

Y = annual contributions of Canvas Creek to Mud Lake, from Greg Shenton's records.

Date 4/6/00 Sig. B. Couton

 Claim Mud Lake Storage
 Doc Source Canvas Creek, Watermaster
 Snow: NRCS website
 Analysis: B. Couton



Average snow = Water Content (inches) of
Camp Creek, Kilgore, & Crab Creek sites.

Date 4/6/00 Sig. L. Couton

 Claim Mud Lake Storage
 Doc Source Snow: NRCS website
Camas Creek: Watermaster

Barely decue volume

Owsley $200 \text{ of} \times 1.983 \times (4 \times 31 + 2 \times 30)$
 $200 \times 1.983 \times 184 \approx 73,000 \text{ of}$

$$\frac{73,000}{17,600} \approx 4.15 \text{ of/acre}$$

(unconf. agreement)

Holley $50 \text{ of} \times 1.983 \times 184 \approx 18,400 \text{ of}$

$$\frac{18,400}{4,000} \approx 4.60 \text{ of/acre}$$

(unconf. agreement)
(Holley v. Kulp)

Jackett $45.2 \text{ of} \times 1.983 \times 184 \approx 16,600 \text{ of}$

$$\frac{16,600}{2,821} \approx 5.90 \text{ of/acre}$$

(unconf. agreement)

Ind $91.8 \text{ of} \times 1.983 \times 184 \approx 33,500 \text{ of}$

$\nearrow$ error - 58 of

$$\frac{33,500}{4,803} \approx 7.0 \text{ of/acre}$$

(unconf. agreement)

Contor, Bryce

From: Contor, Bryce

Sent: Monday, April 03, 2000 12:26 PM

To: 'Ron.Abramovich@id.usda.gov'

Subject: Contribution of Camas Creek to Mud Lake

Here are the data we discussed on the phone.

To review our discussion, I am working on a recommendation to the court for water rights diverted out of Mud Lake, Idaho.

A 1930 decree directs the watermaster to calculate the available supply on May 1st of each year. The decreed method is to add an estimate 18,000 acre feet of water anticipated from Camas Creek, to the May 1st contents of the lake. The watermasters have found that in dry years, the 18,000 acre foot value is too high. Therefore, historically they have adjusted that value downward when snowpack is less than normal. This has been a somewhat subjective, "seat-of-the-pants" process. The allocation is recalculated when Camas Creek stops contributing to the lake, so there is an opportunity to correct for errors in the estimate. However, it is desirable to have the adjustments as small as possible, an adjusting "up" is easier socially than adjusting "down."

Our goal is to quantify a simple, direct method that we can recommend to the court in lieu of the flat 18,000 acre foot value in the old decree.

The input has to be data readily available to the watermaster on May 1 of every year, and the output needs to model the following historical record of Camas Creek contributions to Mud Lake, after upstream diversions.

Historically, the watermasters have relied on snow data from the Camp Creek, Kilgore, and Crab Creek Idaho sites, and the Lakeview Ridge Montana site. They have also made adjustments based on their perception of soil moisture conditions, which affect upstream diversions as well as reach gains/losses in Camas Creek. However, the more complex the model is the tougher it may be to sell to the court.

For legal purposes, the closer we can stick to the data the watermasters have historically used, the more defensible

our method will be.

I had planned to run a regression of the April 1 moisture content at the four snow sites against the Camas Creek Contributions. I certainly appreciate your willingness to apply your expertise to this problem. Please call me at (208) 525-7161 if you have questions.

Data:

Year August	Camas Creek Contribution to Mud Lake May - (acre feet)
1983	77,778
1984	54,188
1985	20,000
1986	27,244
1987	2,444
1988	1,000
1989	10,600
1990	0
1991	0
1992	0
1993	26,184
1994	0
1995	50,185
1996	20,302
1997	40,026
1998	43,438
1999	47,692

/cdbs/id/snow16

Station : 11E12, KILGORE

Unit = inches

year/ card	January			February			March			April			May			
	date	dep	swe	date	dep	swe	date	dep	swe	date	dep	swe	date	dep	swe	dat
37-1	1/02	20	3.2	2/01	34	7.1	2/28	37	10.3	4/01	39	15.2				
38-1	1/02	15	4.1	2/02	33	7.8	3/01	37	12.0	4/01	46	16.2				
39-1				1/31	26	5.4	2/28	37	9.0	3/30	19	7.8				
40-1	1/01	9	1.8	2/01	18	4.6	3/01	30	9.0	4/01	21	8.8				
41-1	1/01	21	4.0	2/01	30	7.8	3/01	31	9.4	3/28	18	7.6				
42-1	K/27	15	3.2	1/30	34	7.6	2/27	42	10.0	3/30	33	10.4				
43-1	K/28	25	5.8	1/30	47	11.2	2/26	48	14.0	3/28	41	14.8				
44-1	K/28	11	1.4	1/29	17	3.4	2/28	30	7.4	3/28	33	10.8				
45-1	K/29	18	3.8	1/28	23	5.4	2/26	33	9.0	3/29	28	10.0				
46-1	1/02	26	5.9	1/31	35	8.3	3/01	38	11.5	4/01	33	11.7				
47-1	K/29	25	9.8	1/31	33	10.0	2/27	31	11.2	3/30	23	6.0				
48-1	K/31	21	3.4	1/30	20	4.6	2/28	25	6.8	4/01	28	8.0				
49-1	K/24	24	5.2	1/30	27	6.2	2/26	40	9.6	3/25	35	11.2				
50-1				1/28	39	10.0	2/24	33	8.2	3/29	43	15.2	4/28	16	6.6	
51-1	1/02	21	8.8	2/04	25	5.1	3/01	36	7.5	3/29	29	8.5				
52-1	1/03	29	7.8	1/30	44	12.6	2/29	54	15.6	3/31	49	17.4				
53-1	K/31	27	5.8	1/31	27	8.2	3/01	33	10.8	3/30	21	7.4				
54-1	1/01	17	2.6	2/01	18	3.9	3/01	25	6.2	4/01	28	8.6				
55-1				2/02	29	6.8	3/02	33	8.6	4/02	29	8.4				
56-1	1/02	18	3.7	2/02	30	7.7	3/02	32	8.7	4/02	23	7.6				
57-1	1/02	20	3.7	2/01	34	7.4	3/02	31	9.2	4/02	33	10.4				
58-1	1/03	21	4.4	1/31	28	6.2	2/28	27	7.6	3/31	31	10.2				
59-1				2/01	21	3.7	3/01	30	8.9	3/31	28	8.8				
60-1	1/01	14	2.2	1/28	21	5.0	2/29	28	7.5	3/29	20	6.6				
61-1	K/29	20	3.7	1/29	19	4.2	2/26	33	8.2	3/31	31	9.7				
62-1	K/29	27	6.5	1/28	35	8.6	2/28	41	13.0	3/30	46	15.8				
63-1	K/28	9	2.1	1/28	14	3.4	2/27	16	4.0	3/27	12	4.6				
64-1	K/27	17	2.6	1/28	28	5.0	2/28	28	7.1	3/27	36	11.5				
65-1	K/28	30	6.2	1/28	41	11.4	2/26	37	13.0	3/28	36	12.0				
66-1	K/28	16	2.0	1/28	25	6.0	2/26	31	8.7	3/29	24	7.2				
67-1	K/27	16	4.0	1/27	36	8.8	2/26	34	10.4	4/01	35	11.4				
68-1	K/27	25	5.2	1/31	34	8.4	2/27	34	10.8	4/05	25	9.0				
69-1	K/31	28	6.2	2/01	53	15.0	2/27	66	20.0	3/29	53	20.4	5/01	25	15.4	
70-1	K/28	19	3.4	1/28	36	9.8	2/24	34	10.8	3/29	42	14.5				
71-1	K/28	43	10.2	1/28	44	15.0	2/26	48	16.4	3/29	51	19.8				
72-1	K/30	37	7.6	1/31	37	11.4	2/28	34	12.0	3/30	25	9.6				
73-1	K/29	18	3.4	1/30	30	7.6	2/27	36	9.6	3/29	34	10.0				
74-1	1/02	25	5.6	2/01	29	9.0	2/27	35	10.2	3/30	36	13.5				
75-1	K/31	21	4.2	1/31	38	8.0	2/27	41	12.6	3/31	44	14.6				
76-1	K/30	24	5.0	1/28	29	8.0	2/27	34	9.6	3/31	35	11.6				
77-1	1/01	0	0.0	1/27	12	2.2	2/28	14	3.2	3/30	13	3.4				
78-1	K/29	17	4.2	1/28	34	10.0	2/27	43	14.4	3/29	32	13.8				
79-1	K/28	20	3.0	1/28	28	6.8	2/26	41	10.5	3/29	35	12.4				
80-1	K/29	16	2.6	1/28	24	6.2	2/27	30	8.6	3/28	33	11.2				
81-1	K/31	17	4.0	1/28	25	5.8	2/26	27	8.8	3/30	23	7.1				
82-1	1/02	27	6.1	1/30	32	8.4	2/27	32	10.4	3/29	40	13.2				

83-1 K/30	35	8.8	1/29	38	10.9	2/28	52	14.6	3/30	40	15.2
84-1 K/28	28	5.8	1/30	30	8.5	2/27	41	11.2	3/29	40	13.7
85-1 K/29	22	4.8	1/29	27	5.4	2/27	34	8.6	3/30	41	11.0
86-1 K/28	21	6.0	1/30	29	7.8	2/27	35	11.8	3/29	26	10.4
87-1 K/29	9	1.5	1/30	21	3.7	3/01	27	6.2	3/28	21	7.4
88-1 K/31	18	2.4	2/01	29	5.9	2/29	26	6.8	4/01	20	7.2
89-1 K/27	30	6.1	1/30	37	10.5	2/26	42	13.1	4/01	40	14.1
90-1 K/30	7	1.4	1/29	18	3.6	2/28	26	6.8	3/29	25	8.8
91-1 K/29	24	2.4	1/29	21	4.2	2/27	19	5.2	3/29	27	7.1
92-1 K/28	18	4.0	1/26	22	4.6	2/29	33	7.3	3/28	15	4.9
93-1 K/26	23	6.0	1/30	37	10.6	2/27	45	12.8	3/28	29	11.4
94-1 K/29	13	2.2	1/29	19	4.6	2/26	31	7.6	3/30	20	7.8
95-1 K/29	31	8.6	1/28	45	14.2	2/25	40	14.4	3/29	36	14.0
96-1 K/30	11	2.0	1/29	29	5.4	2/28	26	6.8	3/30	32	9.4
97-1 K/30	29	8.2	1/31	38	10.8	2/27	40	12.2	3/29	32	11.8
98-1 K/31	15	2.6	1/31	28	7.0	2/28	35	9.6	3/28	29	9.2
39-2 1/11	21	4.2									

FIRST OF MONTH MEASUREMENTS

average depth and swe :

	21	4.5		30	7.5		35	9.9		31	10.8		20	11.0
years	58	58		62	62		62	62		62	62		2	2
1961-1990 average :														
	21	4.5		30	7.8		35	10.4		33	11.5		25	15.4
years	30	30		30	30		30	30		30	30		1	1

MID-MONTH MEASUREMENTS

average depth and swe :

	21	4.2												
years	1	1		0	0		0	0		0	0		0	0
1961-1990 average :														
years	0	0		0	0		0	0		0	0		0	0

NOTES: O/dd - October, J/dd - November, K/dd - December, E/ST - estimate
 Card type 1 = First of Month, 2 = Mid-Month, and 3 = Special Measurement

/cdbs/id/snow16

Station : 11E37S, CRAB CREEK SNOTEL

Unit = inches

year/ card	January		February		March		April		May				
	date	dep	swe	date	dep	swe	date	dep	swe	date	dep	swe	dat
36-1	E/ST		3.8	E/ST		7.7	E/ST		16.9	E/ST		10.0	
37-1	E/ST		5.5	E/ST		9.5	E/ST		13.2	E/ST		18.5	
38-1	E/ST		5.2	E/ST		7.7	E/ST		18.1	E/ST		27.7	
39-1	E/ST		4.2	E/ST		6.5	E/ST		10.8	E/ST		11.3	
40-1	E/ST		1.8	E/ST		4.9	E/ST		8.9	E/ST		8.8	
41-1	E/ST		6.1	E/ST		9.2	E/ST		12.3	E/ST		13.6	
42-1	E/ST		7.7	E/ST		10.4	E/ST		13.8	E/ST		15.7	
43-1	E/ST		7.4	E/ST		16.0	E/ST		19.7	E/ST		19.1	
44-1				E/ST		3.4	E/ST		7.7	E/ST		15.3	
45-1	E/ST		4.9	E/ST		6.5	E/ST		13.5	E/ST		16.0	
46-1	E/ST		8.3	E/ST		11.4	E/ST		15.1	E/ST		18.8	
47-1	E/ST		12.6	E/ST		14.7	E/ST		16.0	E/ST		13.2	
48-1	E/ST		3.1	E/ST		4.9	E/ST		6.8	E/ST		14.1	
49-1	E/ST		6.5	E/ST		8.6	E/ST		17.5	E/ST		19.7	
50-1	E/ST		8.3	E/ST		16.0	E/ST		20.3	E/ST		24.4	
51-1	E/ST		4.9	E/ST		7.7	E/ST		9.8	E/ST		15.0	
52-1	E/ST		13.5	E/ST		25.2	E/ST		32.6	E/ST		39.7	
53-1	E/ST		11.1	E/ST		16.0	E/ST		19.7	E/ST		20.7	
54-1	E/ST		4.9	E/ST		10.8	E/ST		14.7	E/ST		17.8	
55-1	E/ST		4.3	E/ST		6.5	E/ST		8.9	E/ST		14.4	
56-1	E/ST		8.3	E/ST		13.5	E/ST		15.1	E/ST		16.9	
57-1	E/ST		6.8	E/ST		11.1	E/ST		13.2	E/ST		17.5	
58-1	E/ST		6.5	E/ST		9.5	E/ST		12.3	E/ST		20.7	
59-1	E/ST		2.2	E/ST		6.8	E/ST		13.5	E/ST		15.7	
60-1	E/ST		4.6	E/ST		8.0	E/ST		10.8	E/ST		12.5	
61-1	E/ST		5.2	E/ST		6.1	E/ST		8.0	E/ST		12.2	
62-1	E/ST		9.1	E/ST		11.7	E/ST		16.3	E/ST		21.3	
63-1	E/ST		4.3	E/ST		4.9	E/ST		5.5	E/ST		6.6	
64-1	E/ST		5.2	E/ST		8.8	E/ST		10.6	E/ST		17.2	
65-1	E/ST		11.1	E/ST		22.7	E/ST		22.4	E/ST		23.6	
66-1	E/ST		6.3	E/ST		10.6	E/ST		13.5	E/ST		15.2	
67-1	E/ST		6.0	E/ST		14.9	E/ST		17.8	E/ST		23.1	
68-1	E/ST		8.3	E/ST		13.4	E/ST		15.2	E/ST		18.9	
69-1	E/ST		9.4	E/ST		25.0	E/ST		34.1	E/ST		39.2	
70-1	E/ST		5.8	E/ST		10.9	E/ST		11.1	E/ST		17.2	
71-1	E/ST		16.6	E/ST		21.5	E/ST		22.4	E/ST		30.5	
72-1	E/ST		13.8	E/ST		15.7	E/ST		16.9	E/ST		21.3	
73-1	E/ST		5.5	E/ST		10.1	E/ST		12.3	E/ST		16.3	
74-1	E/ST		8.3	E/ST		12.4	E/ST		14.0	E/ST		20.8	
75-1	E/ST		6.5	E/ST		9.2	E/ST		19.0	E/ST		24.7	
76-1	E/ST		7.7	E/ST		10.9	E/ST		12.4	E/ST		16.1	
77-1	E/ST		0.0	E/ST		4.0	E/ST		3.1	E/ST		5.7	
78-1	E/ST		3.4	E/ST		9.5	E/ST		15.4	E/ST		16.0	
79-1	E/ST		5.2	E/ST		7.1	E/ST		11.5	E/ST		15.7	
80-1	E/ST		3.7	E/ST		6.5	E/ST		9.5	E/ST		16.9	
81-1	E/ST		4.9	E/ST		8.0	E/ST		10.8	E/ST		16.0	

82-1 1/01	6.0 2/01	10.1 3/01	12.7 4/01	19.3 E/ST	18.7 6/0
83-1 E/ST	6.0 2/01	15.8 3/01	22.1 E/ST	30.5 5/01	26.0 6/0
84-1 E/ST	5.0 2/01	9.6 3/01	11.7 4/01	15.2 5/01	16.6 6/0
85-1 1/01	6.8 2/01	7.4 3/01	12.1 4/01	15.5 5/01	10.3 6/0
86-1 1/01	5.5 2/01	7.3 3/01	11.0 4/01	13.7 5/01	12.5 6/0
87-1 1/01	1.1 2/01	3.9 3/01	6.4 4/01	8.8 5/01	0.0 6/0
88-1 1/01	4.8 2/01	8.3 3/01	8.9 4/01	9.6 5/01	1.8 6/0
89-1 1/01	12.5 2/01	15.7 3/01	17.8 4/01	23.7 5/01	15.5 6/0
90-1 1/01	1.1 2/01	4.6 3/01	7.3 4/01	9.4 5/01	0.0 6/0
91-1 1/01	2.8 2/01	4.1 3/01	4.8 4/01	8.7 5/01	9.9 6/0
92-1 1/01	5.6 2/01	6.0 3/01	10.8 4/01	11.3 5/01	0.0 6/0
93-1 1/01	7.4 2/01	13.1 3/01	16.0 4/01	16.4 5/01	19.3 6/0
94-1 1/01	2.4 2/01	3.8 3/01	7.7 4/01	8.0 5/01	2.1 6/0
95-1 1/01	11.7 2/01	17.9 3/01	19.0 4/01	23.9 5/01	21.4 6/0
96-1 1/01	4.0 2/01	7.6 3/01	9.5 4/01	12.9 5/01	13.4 6/0
97-1 1/01	11.2 2/01	15.0 3/01	16.9 4/01	19.9 5/01	18.1 6/0
98-1 1/01	2.5 2/01	6.6 3/01	11.1 4/01	12.9 5/01	11.6 6/0
90-2 1/15	2.9 2/15	6.3 3/15	9.3 4/15	6.7 5/15	0.0 6/1
91-2 1/15	3.5 2/15	4.2 3/15	7.5 4/15	8.5 5/15	8.6 6/1
92-2 1/15	5.9 2/15	8.1 3/15	10.9 4/15	7.4 5/15	0.0 6/1
93-2 1/15	10.6 2/15	13.3 3/15	16.0 4/15	18.8 5/15	14.3 6/1
94-2 1/15	3.6 2/15	4.5 3/15	7.8 4/15	9.0 5/15	0.0 6/1
95-2 1/15	16.3 2/15	18.6 3/15	21.8 4/15	22.9 5/15	21.7 6/1
96-2 1/15	4.4 2/15	8.0 3/15	11.0 4/15	12.1 5/15	7.3 6/1
97-2 1/15	13.1 2/15	15.9 3/15	18.7 4/15	20.2 5/15	10.0 6/1
98-2 1/15	4.6 2/15	9.7 3/15	12.1 4/15	15.1 5/15	6.2 6/1

FIRST OF MONTH MEASUREMENTS

average depth and swe :

	6.4	10.4	13.8	17.3	11.6
years	0 62	0 63	0 63	0 63	0 17
1961-1990 average :					
	6.5	10.9	13.7	18.0	11.3
years	0 30	0 30	0 30	0 30	0 9

MID-MONTH MEASUREMENTS

average depth and swe :

	7.2	9.8	12.8	13.4	7.6
years	0 9	0 9	0 9	0 9	0 9
1961-1990 average :					
	2.9	6.3	9.3	6.7	0.0
years	0 1	0 1	0 1	0 1	0 1

NOTES: O/dd - October, J/dd - November, K/dd - December, E/ST - estimate
 Card type 1 = First of Month, 2 = Mid-Month, and 3 = Special Measurement

/cdbs/id/snow16

Station : 12E03, CAMP CREEK

Unit = inches

year/ card	January			February			March			April			May			
	date	dep	swe	date	dep	swe	date	dep	swe	date	dep	swe	date	dep	swe	dat
36-1	K/30	15	2.3	1/30	27	4.8	2/27	36	10.8	3/29	29	5.8				
37-1	K/28	31	3.4	1/30	32	6.0	2/27	31	8.4	3/27	40	11.2	4/30	0	0.0	
38-1	K/31	12	3.2	1/31	20	4.8	2/26	42	11.6	3/30	55	17.1	5/02	1	0.5	
39-1	K/30	11	2.5	1/28	22	4.0	2/27	32	6.8	4/01	25	6.6				
40-1	K/31	6	1.0	2/03	15	3.0	3/03	22	5.6	4/01	16	5.0				
41-1	K/31	20	3.8	1/28	26	5.8	3/03	30	7.8	3/28	28	8.1				
42-1	K/30	23	4.8	1/30	28	6.6	2/28	35	8.8	3/28	34	9.4				
43-1	K/30	21	4.6	1/29	44	10.2	2/27	41	12.6	3/31	37	11.6				
44-1				1/31	14	2.0	2/28	25	4.8	3/30	35	9.2				
45-1	K/29	18	3.0	1/29	22	4.0	2/27	31	8.6	3/30	35	9.6				
46-1	K/31	25	5.2	2/01	30	7.2	2/27	37	9.6	3/31	40	11.4				
47-1	K/31	31	8.0	1/31	41	9.4	2/28	35	10.2	3/31	29	7.8				
48-1	K/30	14	1.8	1/30	16	3.0	2/28	22	4.2	3/29	34	8.4				
49-1	K/31	21	4.0	1/29	25	5.4	2/26	40	11.2	3/28	38	12.0				
50-1	K/29	22	5.2	2/07	42	10.2	2/25	40	13.0	3/28	48	15.0				
51-1	1/03	17	3.0	2/05	22	4.8	2/28	30	6.2	3/30	32	9.0				
52-1	1/03	33	8.6	1/27	57	16.2	3/02	62	21.0	3/30	65	24.8	5/02	25	10.8	
53-1	K/31	32	7.0	2/01	33	10.2	3/03	42	12.6	3/30	36	12.6				
54-1	1/01	16	3.0	1/31	31	6.8	2/28	35	9.4	3/28	39	10.8				
55-1	1/04	18	2.6	1/31	21	4.0	2/27	34	5.6	3/28	33	8.6				
56-1	K/30	20	5.2	1/30	34	8.6	2/29	39	9.6	3/30	35	10.2				
57-1	1/07	30	4.2	2/03	30	7.0	3/01	30	8.4	4/02	38	10.6	4/29	29	9.4	
58-1	1/08	21	4.0	2/03	26	6.0	2/28	34	7.8	3/25	46	12.6	5/09	22	7.8	
59-1	K/29	10	1.2	1/30	20	4.2	2/27	37	8.6	3/30	36	9.4				
60-1	K/28	20	2.8	1/28	23	5.0	2/29	28	6.8	3/30	27	7.4				
61-1	K/29	18	3.2	1/30	17	3.8	2/27	24	5.0	3/29	29	7.2				
62-1	K/29	24	5.7	1/29	29	7.4	2/26	37	10.4	3/28	45	13.0				
63-1	K/28	12	2.6	1/28	14	3.0	2/26	14	3.4	3/27	13	3.6				
64-1	K/30	16	3.2	1/28	28	5.5	2/26	29	6.7	3/26	37	10.4				
65-1	K/28	34	7.0	1/29	49	14.6	2/26	44	14.4	3/29	44	14.5				
66-1	K/30	21	3.9	1/28	28	6.7	2/23	32	8.6	3/31	29	9.1				
67-1	K/29	17	3.7	1/30	39	9.5	2/27	37	11.4	3/31	45	14.2				
68-1	K/28	25	5.2	1/29	40	8.5	2/27	33	9.7	3/28	36	11.5				
69-1	K/30	29	5.9	1/27	60	16.1	2/26	85	22.0	3/27	68	24.5	5/02	39	18.0	
70-1	K/31	19	3.6	1/28	28	6.9	2/25	27	7.0	3/30	40	10.4				
71-1	K/30	44	10.6	1/27	46	13.8	2/24	48	14.4	3/29	54	18.9				
72-1	K/28	37	8.8	1/28	37	10.0	2/25	36	10.8	3/29	37	13.0				
73-1	K/29	18	3.4	2/01	28	6.4	2/27	32	7.8	3/28	37	9.8				
74-1	K/28	35	5.2	1/30	29	7.9	2/28	33	8.9	3/28	39	12.7				
75-1	K/31	21	4.0	1/30	25	5.8	2/27	40	12.2	3/29	54	15.2				
76-1	K/29	21	4.8	1/30	26	6.9	2/26	32	7.9	3/29	38	9.7				
77-1	K/29	0	0.0	2/01	9	2.4	2/28	11	1.8	3/31	15	3.0				
78-1	K/29	12	2.0	1/30	25	6.0	2/28	38	9.8	3/31	28	9.6				
79-1	K/29	18	3.2	1/31	24	4.4	2/28	32	7.3	3/29	35	9.4				
80-1	K/31	14	2.2	2/01	21	4.0	2/28	27	6.0	4/01	39	10.2				
81-1	K/31	13	3.0	1/29	21	5.0	2/27	32	6.8	3/31	35	9.6				

82-1 K/31	19	3.0	1/29	28	5.0	2/25	28	8.1	3/29	51	11.5
83-1 1/03	36	9.0	2/03	36	10.2	3/01	52	14.0	3/30	55	17.8
84-1 K/27	24	4.4	1/30	24	4.8	2/29	31	6.9	3/28	39	9.2
85-1 K/28	15	2.6	1/29	26	6.0	2/28	34	8.2	3/29	46	10.8
86-1 K/26	17	4.0	1/30	25	6.2	2/25	26	5.8	3/27	24	7.2
87-1 K/24	8	1.2	1/29	17	3.2	2/27	23	5.0	3/27	18	6.2
88-1 K/29	12	2.0	1/28	20	4.0	2/26	20	5.0	3/30	18	4.7
89-1 K/27	36	8.0	1/30	36	9.6	3/01	37	10.4	3/30	29	10.2
90-1 K/28	5	1.0	1/30	13	3.0	2/28	20	5.0	3/29	15	5.0
91-1 K/31	10	1.0	2/01	14	2.7	2/28	16	4.5	4/01	20	6.5
92-1 K/30	16	3.0	1/31	19	4.0	2/27	32	7.8	3/31	22	7.6
93-1 1/04	36	6.4	1/29	36	9.8	3/01	42	11.4	4/01	29	10.6
94-1 1/03	10	1.2	1/31	13	2.0	3/01	24	6.0	4/04	22	6.0
95-1 K/30	29	7.4	1/30	42	10.2	2/23	40	11.5	3/31	40	12.5
96-1 K/29	9	1.5	1/30	29	5.0	2/27	30	6.4	3/29	36	8.3
97-1 K/30	27	6.9	1/31	30	8.5	2/27	32	8.7	3/31	31	9.8
98-1 K/30	12	2.0				2/26	39	9.5	3/31	30	9.4
52-2									4/15	55	21.8

FIRST OF MONTH MEASUREMENTS

average depth and swe :

	20	4.0		28	6.6		34	8.8		35	10.4		19	7.8
years	62	62		62	62		63	63		63	63		6	6
1961-1990 average :														
	21	4.2		28	6.9		33	8.7		36	10.7		39	18.0
years	30	30		30	30		30	30		30	30		1	1

MID-MONTH MEASUREMENTS

average depth and swe :

										55	21.8			
years	0	0		0	0		0	0		1	1		0	0
1961-1990 average :														
years	0	0		0	0		0	0		0	0		0	0

NOTES: O/dd - October, J/dd - November, K/dd - December, E/ST - estimate
 Card type 1 = First of Month, 2 = Mid-Month, and 3 = Special Measurement

Contor, Bryce
From: Contor, Bryce
Sent: Monday, April 03, 2000 8:44 AM
To: McHugh, Candice
Cc: Music, Vicky; Carlsen, Ernie
Subject: "Allotment System" in Suave Decree

The federal court decree "Suave v Abbot," 1930, is the main decree we rely upon in B31.

One of the unique features of this decree is an "allotment system" for accounting for storage in Mud Lake. It is described in section 5 of the decree.

Ernie and I believe that we need a general provision to allow for continued use of the allotment system. A problem we will have, though, is dealing with differences between historical practice and the decree:

- 1) Initial estimate of Camas Creek contributions, for May 1 calculation of allotment.

The watermaster pointed out that the provision to allocate 18,000 acre feet as an estimated contribution of Camas Creek is unworkable. Many years that is an unrealistically high estimate, and it causes some social distress if the watermaster makes an original allocation based on that estimate, then has to reduce the allocation significantly as the season progresses and actual Camas Creek contributions can be assessed.

Historical practice of the watermasters back at least to 1960 has been to make a more realistic initial allocation based upon snow pack in the basin. The watermaster couldn't give us a hard and fast rule of how he does this. However, he did provide me with annual Camas Creek volume for the last 16 years. I believe I can get corresponding snow pack data and see what kind of statistical relationship there may be. The watermaster cautioned that the unknown variable will be rainfall after the beginning of the allotment calculation season.

- 2) Ambiguous language regarding curtailment of junior rights.

The last part of the second paragraph in section 5 states:

"...thereafter at intervals during the irrigation season, not less frequent than 15 days, such official shall compute the amount of water theretofore used by each right (including the amount, if any, used prior to May 1st) and the amount of water remaining available to fill such rights, taking into consideration actual accretion to the lake from natural inflow and charge each right its proportionate part of the evaporation losses in the lake; and whenever, according to such computation, at any time there shall no longer remain in the lake any water available to fill any right after deducting from the available supply computed up to date as aforesaid, the amount necessary to supply prior rights to September 1st, such later rights shall be cut off."

The watermaster's practice has been to recalculate the allotment every fifteen days until surface sources quit contributing to the lake. At that time a "final allotment" is calculated, assigning each water right a volume of storage based on priority. This allotment is not recalculated for the rest of the season, though evaporation and other losses continue to be calculated and charged against storage.

The watermaster's practice appears to be just, and accepted by the water users, but it is unclear to me if it might be inconsistent with the underlined passage above.

3) Limitation of 35% of allotment per month.

Paragraph 4 of section 5 states "Nothing herein contained shall restrict any user from using at such times and in such quantities as he may desire, his said seasonal allotment of water, but not exceeding 35 per cent of his seasonal allotment in any one calendar month..."

This limitation was likely intended to prevent injury by a user overdrafting an initial allotment that was too high, due to a too-high estimate of Camas Creek inflows. The historical practice of using a more conservative estimate of inflow, combined with the development of wells to supplement the lake, has largely overcome the need for this provision.

Historical practice has been to allow withdrawal of allotment water without regard to the restriction. If the final allotment calculation shows that a user has overdrawn his/her allotment, the watermaster has allowed the user to purchase storage from another user or run well pumps to replace the overdraft.

Your thoughts, please, on how to proceed?

Thanks, Bryce

Contor, Bryce
From: Contor, Bryce
Sent: Monday, April 03, 2000 8:08 AM
To: McHugh, Candice
Cc: Music, Vicky; Carlsen, Ernie
Subject: Bauerly Decree 1940

One of the B31 decrees we rely upon is Owsley Canal Co. v. Ernest Bauerly, 1940. Apparently this was a "gentlemen's decree" or "private" decree, because it didn't involve all the water users in the basin. However, it appears to have included all the wells that pump into Mud Lake.

In section XII, it specifies annual diversion volumes for the parties' wells. These volumes aren't specified in acre feet, but in a pumping rate for a fixed period of time. This allows calculation of a volume, however. These volumes range from just over 4.0 acre feet per acre, to about 7.0 acre feet per acre. The IDWR standard in this area is 3.5 acre feet per acre.

The watermaster is planning to provide historical data showing transmission and storage losses. From our discussions and from some preliminary data, I think that his figures will justify most of this excess volume.

May I recommend the annual volumes in the Bauerly Decree for these groundwater rights?

To: Mud Lake Storage File
Fr: Bryce Contor
Date: 3/31/2000 

Re: Meeting w/ Greg Shenton, Garth Soderquist, Andy Dobson, Don Parker

This meeting is a follow-up to a meeting held 3/22/2000. Based on that meeting and my review of 1961 and 1964 allotment records from WD 31 microfiche, I tentatively proposed the following. Notes were added as we talked:

1. Season of Use:

Ernie Carlsen is reviewing season of use for irrigation. I propose that the season of use he recommends be used for all irrigation:

- Irrigation from natural flow of surface sources.
- Irrigation from well diversions.
- Irrigation from allotment storage.
- Irrigation from well storage.

For "irrigation storage" from surface sources I propose the season of use be Nov 1 to Oct 31, to parallel the allotment accounting. WD 31 resolutions specify that late drafts be charged against the following year's allotment.

For "irrigation storage" from wells I propose the season of use be March 1 to October 31. This is because WD 31 resolutions call for no carryover of storage.

2. Storage Volume.

Storage volume for natural flow rights calculated according to Suave decree formula:

$\text{cfs} * 2 \text{ acre feet/day/cfs} * 123 \text{ days}$

(note that precise factor is 1.983 acre feet/day/cfs but the proposed formula reflects historical practice)

Storage volume for well rights calculated by dividing the highest recorded storage in Mud Lake proportionately among the existing well rights. Tentatively use 8.0 foot gage height storage minus the - 1.0 gage height storage, but defer to watermaster's recommendation if different.

3. Diversion Rate.

Recommend as decreed in Suave.

4. Annual Diversion Volume.

Surface rights do not need a volume limitation in the recommendation.

Standard well volume is 3.5 acre feet per acre. Per 1961 and 1964 allotment records, historical losses in lake are approximately 0.80 acre feet per acre (watermaster may have better data to refine this number). For now I propose recommending $3.5 + 0.8 = 4.3$ acre feet per acre diversion volume on well rights.

If watermaster records show significant loss between the wells and the lake, those losses will have to be added to the proposed volume, too.

Greg believes Suave Decree references an acre foot value - 6 or 7 feet? If volume is specified in decree, we will need to recommend per decree.

5. Remark or General Provision

I believe we should include a remark or general provision clarifying the need to continue use of the allotment system per Suave decree. Ernie Carlsen and IDWR legal staff will have to make the call on this issue.

Greg Shenton's current practice is to use a more realistic estimate than the 18,000 acre feet referenced in Suave. Often 18000 is way too much. Can the remark allow current practice. Greg believes this had always been Don Shenton's practice, as well.

Greg estimates that 120% snowpack can produce a 20,000 acre foot contribution. Estimated inflow per allotments has been decided by the watermaster, not the water users. Watermaster and water users jointly have decided early pumping.

6. Holly Storage Right.

Evidence tends to show that the right was forfeited through non-use. However our instructions are to recommend forfeited rights if use has resumed, and let objectors challenge the recommendation if they believe it injures them.

Because beneficial use storage right will be recommended based on lake capacity, a combined use limitation will be included in remarks showing that the Holly right overlaps the beneficial use right.

The result will be that if the Holly storage right stands, 5,000 acre feet of storage will have a better priority. Either way, the recommendations will allow for adequate storage to reflect historical practice.

Per Ernie, a complicating issue is the fact that the resumed use is changed from the decreed use.

Another issue is the transfer. If the transfer acknowledges the storage right, we will likely recommend it. However, someone could still object.

7. Priority Date

Decreed rights (including Holly storage): Priority date will be recommended per decree.

Beneficial use storage rights: Recommend per documentation provided. Right now, 1961 is documented. Note that 1982 agreement asserts practice began in 1960's.

Loy Johnson told Don Parker early season pumping occurred during his tenure (1954 to 1960) which gives us at least a 1960 priority. Johnson may be able to find diaries to document earlier date?

An issue w/ the storage is that there may be an "in season" portion of the well storage authorized by Suave and/or Baurley. If so, the well storage claims may have two components, in-season and early-season, with two different priority.

8. Independent "Runoff" right.

Need to ask Greg and Don Parker what this right is.

A problematic issue is that the Suave Decree already appears to allocate all pre-season or in-season inflows that accumulate as storage in the lake.

Per Don Parker, Independent has no runoff right.

Level Canal has some late-priority decreed rights, sometimes referred to a runoff right.

This may refer to the Level Canal right, 11.09 cfs, 1952. This is a beneficial use claim for additional ground. No additional diversion capacity was developed at the time so it is like an enlargement, but since it was prior to '63 there will be no subordination language attached. (If this is well water, it must be an Independent right because Level has only creek water.)

This is part of the transfer process being handled by Harold Jones.

Actions:

- 1) Greg will look for allotment summary sheet showing high losses in dry year.
- 2) Don Parker will talk to Loy Johnson to see if he can get an affidavit to establish early season pumping priority date.
- 3) Greg will provide documentation of Independent and North Lake losses.
- 4) Ernie will continue to research season of use.
- 5) Bryce will look at decrees to see if well storage needs to have two components, a decreed component for in-season use and a beneficial use component for early-season pumping. May have different priority dates.
- 6) Don and Garth will double-check place of use on independent transfer.
- 7) Based on the results, Independent's beneficial use storage claim will be modified prior to signature. We will prepare beneficial use claims for Mud Lake Water Users and Dobsons.

- 1) How is evaporation figured?
Evap pan
- 2) How is loss divided between
Allotment storage & well storage?
loss is charged to Balance of storage - ^{loss figures a} factor
- 3) How is loss divided among well storage owners?
- 4) How much loss between wells & where inflows are measured?

Bybee - meas @ pump -

Dud - meas @ pump } at Kirden Budge
(Beginning of lake)

North Lake - loss = not recorded -

WD 31 Acreage breakdown - attachment to agreement.

Owsley	17,800
Fadett	2,821
Independent	4,803
Holley	600
	26,024

Composite yearly pumping - "flow" totals from 1961 & 1964 records

May 1-15 1961	5544
16-31 1961	7297
Jun 1-15 1961	7047
16-30 1961	6763
July 1-15 1961	6376
$\Sigma =$	33127
$\bar{x} \approx$	6600

Jun 1-15 1964	1776	} Carnan Creek flowing
15-30 1964	1506	
Aug 1-15 1964	7252	
16-31 1964	6680	
Sep 1-15 1964	6510	
16-30 1964	4372	

$$\Sigma = 24814 \text{ (Aug \& Sept)}$$

$$\bar{x} \approx 6200$$

Composite $6600 \times 2 = 13200 / \text{month} \times 3 = 39600$
(May, Jun, July)

$6200 \times 2 = 12400 / \text{month} \times 2 = 24800$
(Aug, Sept)

$$\Sigma = 64400$$

$$\frac{64400}{26000} \approx 2.46 \text{ af/acre}$$

Total Water Usage - composite

1961 Loss plus draft

1964 Loss plus draft

May 1-15	7867
16-31	9748
Jun 1-15	12710
16-30	10244
Jul 1-15	<u>6376</u>
	$\Sigma = 38945$
	$\bar{x} \approx 7800$

Jun 1-15	8198
15-30	7554
Aug 1-15	10982
16-31	4863
Sept 1-15	3387
16-30	<u>6099</u>
	$\Sigma = 41083$
	$\bar{x} \approx 6850$

Composite avg.

May	$\frac{7867 + 9748}{2} \times 2 =$	16600
Jun	$\frac{12710 + 10244 + 8198 + 7554}{4} \times 2 =$	19300
Jul	$\frac{6376}{1} \times 2 =$	12800
Aug	$\frac{10982 + 4863}{2} \times 2 =$	15800
Sept	$\frac{3387 + 6099}{2} \times 2 =$	9500
		<u>74000</u>
		$\approx 2.84\%$
		ave

Total loss Composite

1961

May 1-15	^{2 3} 1428
16-31	1893
Jun 1-15	2078
16-30	283
July 1-15	<u>3408</u>

$$\Sigma = 9090$$

$$\bar{X} = 1810 / 15 \text{ days}$$

$$\approx 3620 / \text{month}$$

1964

Jun 1-15	^{2 3 4} 2474
15-30	2079
Aug 1-15	3316
16-31	1397
Sep 1-15	605
16-	<u>799</u>

$$\Sigma = 10670$$

$$\bar{X} \approx 1780 / 15 \text{ days}$$

$$\approx 3560 / \text{month}$$

Composite

$$\text{May } 1428 + 1893 \approx \overset{2 1}{3320}$$

$$\text{Jun } \begin{array}{r} \overset{2 3}{2078} \\ 283 \\ 2474 \\ 2079 \\ \hline 6914 \end{array} \times 2 \approx 3460$$

$$\text{Jul } 3408 \times 2 \approx 6820$$

$$\text{Aug } 3316 + 1397 \approx 4720$$

$$\text{Sep } 605 + 799 \approx \underline{1410}$$

$$\Sigma = 19730$$

$$\frac{19730}{26000} \approx$$

$$0.76 / \text{acre}$$

	CAMMAS CREEK TOTAL FLOW
YEAR	FLOW

1983	77,778 A.F.
1984	54,188 A.F.
1985	20,000 A.F.
1986	27,224 A.F.
1987	2,444 A.F.
1988	1,000 A.F.
1989	10,600 A.F.
1990	0 A.F.
1991	0 A.F.
1992	0 A.F.
1993	26,184 A.F.
1994	0 A.F.
1995	50,185 A.F.
1996	20,302 A.F.
1997	40,026 A.F.
1998	43,438 A.F.
1999	47,692 A.F.
2000	

Date 3/31/00 Sig. L. Conton

 Claim Mud Lake Storage
 Doc Source Gray Shanton
Watermaster WD 31

WELL WATER
OWSLEY N.LAKE; BYBEE WELLS; JACKETT WELLS

YEAR	FLOW	LOSS	BALANCE
1990	20,401 A.F.	2,129 A.F.	18,272 A.F.
1991	26,394 A.F.	3,648 A.F.	22,746 A.F.
1992	21,718 A.F.	4,402 A.F.	17,316 A.F.
1994	24,242 A.F.	3,343 A.F.	20,899 A.F.

WELL WATER
INDEPENDENT WATER USERS

YEAR	FLOW	LOSS	BALANCE
1990	3,493 A.F.	365 A.F.	3,128 A.F.
1991	4,542 A.F.	628 A.F.	3,914 A.F.
1992	4,094 A.F.	830 A.F.	3,264 A.F.
1994	5,040 A.F.	695 A.F.	4,345 A.F.

GAUGE HEIGHTS

YEAR	MONTH	GAUGE	MONTH	GAUGE
1990	March 17 th	3.55	May 1 st	8.05
1991	March 6 th	1.55	May 1 st	8.05
1992	March 15 th	2.18	May 1 st	7.30
1994	March 10 th	1.70	May 1 st	7.70

*See following
early-pipe records;
this must refer only to
early pipe -*

Date 3/31/00 Sig. L. Conton

Claim Mud Lake Storage

Doc Source Greg Shanton
Watermaster, WD 31

INDEPENDENT WATER USERS EARLY PUMPING REPORT

YEAR	DATE PUMPING STARTED	ACRE FEET PUMPED
1989	APRIL 8 TH - 30 TH	3,020 A.F.
1990	MARCH 22	913 A.F.
	APRIL	<u>2,580 A.F.</u>
	TOTAL E/P	3,493 A.F.
1991	MARCH 6 TH	2,272 A.F.
	APRIL	<u>2,270 A.F.</u>
	TOTAL E/P	4,542 A.F.
1992	MARCH	1,928 A.F.
	APRIL	<u>2,160 A.F.</u>
	TOTAL E/P	4,094 A.F.
1993	MARCH	880 A.F.
	APRIL	<u>2,368 A.F.</u>
	TOTAL E/P	3,248 A.F.
1994	MARCH 10 TH	2,342 A.F.
	APRIL	<u>2,698 A.F.</u>
	TOTAL E/P	5,040 A.F.
1995	APRIL 17 TH - 28 TH	1,335 A.F. estimated flow
1996	MARCH	1,870 A.F.
	APRIL	<u>4,142 A.F.</u>
	TOTAL E/P	6,012 A.F.

OF THE 8 YEARS ABOVE, THE MOST EARLY PUMPED WAS IN 1996 AT 6,012 A.F.
THE LEAST EARLY PUMPPING WAS IN 1995 AT 1,335 A.F.

1990 TO 1994 FIVE YEAR AVERAGE

	FIVE YEAR TOTAL	FIVE YEAR AVERAGE
MARCH	8,335 A.F.	1,667 A.F.
APRIL	<u>12,076 A.F.</u>	<u>2,415 A.F.</u>
SEASON	20,411 A.F.	4,082 A.F.

Date 3/31/00 Sig. B. Couton

 Claim Mud Lake Storage
 Doc Source Greg Shenton
Watermaster, WD 37

OWSLEY & JACKETT EARLY PUMPING REPORT

LOCATION	MONTH	YEAR 1989	A.F. MEASURED
N.L.	APRIL		3,380 A.F.
BYBEE'S	APRIL		3,300 A.F.
J.C.C.	APRIL		<u>1,300 A.F.</u>
	TOTAL		7,980 A.F.
		1990	
N.L.	MARCH 22		2,382 A.F.
BYBEE'S	MARCH 18		3,565 A.F.
J.C.C.	MARCH		<u>0 A.F.</u>
	TOTAL		5,947 A.F.
N.L.	APRIL		5,634 A.F.
BYBEE'S	APRIL		5,730 A.F.
J.C.C.	APRIL		<u>3,090 A.F.</u>
	TOTAL		14,454 A.F.
	TOTAL OF BOTH MARCH & APRIL		20,401 A.F.
		1991	
N.L.	MARCH 11		4,580 A.F.
BYBEE'S	MARCH 10		4,902 A.F.
J.C.C.	MARCH 13		<u>1,140 A.F.</u>
	TOTAL		10,622 A.F.
N.L.	APRIL		6,612 A.F.
BYBEE'S	APRIL		6,776 A.F.
J.C.C.	APRIL		<u>2,384 A.F.</u>
	TOTAL		15,772 A.F.
	TOTAL OF BOTH MARCH & APRIL		26,394 A.F.
		1992	
N.L.	MARCH		1,540 A.F.
BYBEE'S	MARCH		2,048 A.F.
J.C.C.	MARCH		<u>142 A.F.</u>
	TOTAL		3,730 A.F.
N.L.	APRIL		6,900 A.F.
BYBEE'S	APRIL		9,120 A.F.
J.C.C.	APRIL		<u>1,968 A.F.</u>
	TOTAL		17,988 A.F.
	TOTAL OF BOTH MARCH & APRIL		21,718 A.F.

Date 3/3/00 sig. B. Corton

 Claim Mud Lake Storage
 Doc Source Watermaster
WD 31 Greg Shanton

		1993	
N.L.	MARCH		1,078 A.F.
BYBEE'S	MARCH		192 A.F.
J.C.C.	MARCH		<u>168 A.F.</u>
	TOTAL		1,438 A.F.

N.L.	APRIL		6,730 A.F.
BYBEE'S	APRIL		6,836 A.F.
J.C.C.	APRIL		<u>2,712 A.F.</u>
	TOTAL		16,278 A.F.

TOTAL OF BOTH MARCH & APRIL 17,716 A.F.

		1994	
N.L.	MARCH 10		1,516 A.F.
BYBEE'S	MARCH		3,576 A.F.
J.C.C.	MARCH		<u>1,380 A.F.</u>
	TOTAL		6,472 A.F.

N.L.	APRIL		6,674 A.F.
BYBEE'S	APRIL		8,644 A.F.
J.C.C.	APRIL		<u>2,155 A.F.</u>
	TOTAL		17,473 A.F.

TOTAL OF BOTH MARCH & APRIL 23,945 A.F.

		1995	
N.L. & BYBEE'S	APRIL 17-28		6,787 A.F.

		1996	
N.L.	MARCH		1,800 A.F.
BYBEE'S	MARCH		2,006 A.F.
J.C.C.	MARCH		<u>0 A.F.</u>
	TOTAL		3,806 A.F.

N.L.	APRIL		3,766 A.F.
BYBEE'S	APRIL		4,472 A.F.
J.C.C.	APRIL		<u>0 A.F.</u>
	TOTAL		8,238 A.F.

TOTAL OF BOTH MARCH & APRIL 12,044 A.F.

OF THE 8 YEARS ABOVE,

1. THE MOST WATER PUMPED FOR EARLY PUMPING, WAS IN 1991 WHICH WAS 26,394 A.F.
2. THE LEAST WATER PUMPED FOR EARLY PUMPING, WAS IN 1995 WHICH WAS 6,787 A.F.

1990 TO 1994 FIVE YEAR AVERAGE

	FIVE YEAR TOTAL
MARCH	28,209 A.F.
APRIL	<u>81,965 A.F.</u>
SEASON	110,174 A.F.

FIVE YEAR AVERAGE

5,642 A.F.
<u>16,393 A.F.</u>
22,035 A.F.

Date 3/31/00 Sig. B. Conlon

 Claim Mud Lake Storage
 Doc Source Greg Shanton
Watermaster WD 31

Ind Lake Allotment

Re-Allocation

1993

MAY 1 G.H. 6.60 G.H.

29,200

April Draft

~~0~~

Actual Camas Flow

26,184

55,384

Less Well Water Total

18,690

36,694

Less - 1.0 G.H. unavailable

1,790

Less West end of Lake

2,000

A.F. to be allocated.

32,904

C.F.S. to be allocated.

16,452

$$123 \div 16,452 = 133.76$$

	Right Amount	Allotment C.F.S.	Allotment A.F.
Keith Shulberg	1.70	209	418
Holly Water users	0	0	0
Jackett Canal Co	8.00	984	1,968
Owsley Canal Co	91.26	11,225	22,450
Level Canal Co.	24.00	2,952	5,904
Dobson Andy	7.80	959	1,918
Potter Joe.	1.00	123	246
Burtonshaw	0	0	0
Total	133.76	16,452	32,904

Date 3/31/00 sig: B. Conner

 Claim Mid Lake Storage
 Doc Source Greg Shenton
 Watermaster WD 31

Final Re-Allocation

Mud Lake Allotments and Disbursements
Month: AUGUST

1993

Mud Lake Decreed Rights				1 - 15					15 - 31			
	April Draft	Right Amount	Season Allot	Begin Balance	Draft	Loss	Total Use	End Balance	Draft	Loss	Total Use	End Balance
Shuldherg, K.	0	170	418	293	0	21	21	272	0	31	31	241
Holly Water Users	0	0	0	0	0	0	0	0	0	0	0	0
Jackett Canal Co.	0	8.00	1968	0	0	0	0	0	0	0	0	0
Owsley Canal Co.	0	91.26	22,450	0	0	0	0	0	0	0	0	0
Level Canal Co.	0	24.00	5,904	3028	128	217	345	2683	386	302	688	1,995
Dobson Ranch	0	7.80	1,918	332	12	24	36	296	102	33	135	161
Potter, Joe	0	1.00	246	89	0	6	6	83	0	9	9	74
Burtenshaw Bros.	0	0	0	0	0	0	0	0	0	0	0	0
Allotment Totals	0	133.76	33,904	3742	140	268	408	3334	488	375	863	2,471
Mud Lake Gauge Beginning of Period				5.25					5.63			
Mud Lake Content Beginning of Period				21,800					24,000			
Mud Lake Gauge End of Period				5.68					5.35			
Mud Lake Content End of Period				24,000					22,300			
Total Depletion in Period				(2,200)					1,700			
Camas Creek Inflow				NONE					NONE			
Total Inflow To Lake For Period				5,908					4,440			
Draft For Period				2,416					3,864			
Loss For Period				1,292					2,276			
Loss Plus Draft For Period				3,708					6,140			
Evaporation (G.H. Factor (.20) (.18)				600					540			
Unaccounted For Loss				692					1,736			
Lake Contents Less Well Storage				7,124					6,261			
Well Water		Beginning Balance	Flow	Loss	Draft	Total Use	End Balance	Flow	Loss	Draft	Total Use	End Balance
Owsley Canal Co. North Lake		4167	180	299	2176	2475	1872	0	211	1661	1872	0
Owsley Canal Co. Bybees		7760	4440	557	0	557	11,643	3976	1311	1319	2630	12,989
Burtenshaw-Holly Spillway		470	122	34	50	84	508	22	57	52	109	421
Jackett Canal Co.		1,225	1166	88	50	138	2253	442	254	262	576	2179
Dobson Ranch (Well)		0	0	0	0	0	0	0	0	0	0	0
Ind. Water Users Assoc.		-----	0	----	-----	-----	-----	-	-	0	-----	-----
Level Canal Co. .5630		0	0	0	0	0	0	0	0	0	0	0
Dobson Ranch .1931		332	0	24	0	24	308	0	35	0	35	273
Shuldberg, K. .0459		78	0	6	0	6	72	0	8	0	8	64
Potter, Joe .0290		49	0	3	0	3	46	0	5	0	5	41
Burtenshaw Bros .1690		187	0	13	0	13	174	0	20	82	102	72
Well Water Totals		14,268	5908	1,024	2276	3,300	16,876	4440	1901	3376	5269	16,039

Date 9/31/00 sig
 Claim Mud Lake Storage
 Doc Source Greg Stanton
 Watermaster WO 31

.75
 .77
 .73

Dallas, Texas
May 23, 1961

U.S. Department of the Interior
Bureau of Reclamation

Department of Reclamation

Mr. Roy Thompson
Assistant Reclamation Engineer
State of Texas
Dallas, Texas

Dear Mr. Thompson,

I have received the copies of the material I requested and also the original of the letter and minutes of the meeting with the Forest Service officials. I wish to express my appreciation for the work which was done.

I find that the figures on the allotment sheet were correct as stated. We were not deducting the -1.0 acre height of ineligible water from our figures. The following will show the proper balance procedure.

End of period: May 15, 1961

Mad Lake Allotment Balance	18,315 Acre Ft.
Well Water Balance	5,129 Acre Ft.
Unavailable lake water not included in allotments above	1,005 Acre Ft.
Total	25,235

After studying the procedure for balancing the figures, I feel it should show the figures which it calls for instead of the total. Therefore I submit this procedure. The balance will be derived in this way in the allotment sheets to follow:

Lake contents at end of period	25,315 Acre Ft.
Less well storage	5,129 Acre Ft.
Lake contents, less well storage	20,186 Acre Ft.

I hope this will clarify the problem. Please approve these allotments and the photographic copy.

Thank You.

Sincerely Yours,

Donald W. Shenton

Donald W. Shenton
Watermaster Dist. No. 66

1961
McWright

5/10/61 sig. D. Shenton

Claim Mad Lake Storage
Doc Source WD 31
McWright 1961

$\frac{5129}{15} = 342.9$
 $\frac{342}{1.7835} = 191.8$

Re: Water District No. 66

Dear Mr. Stenton:

We enjoyed your visit while in Boise.

GEO. N. CARTER
State Reclamation Engineer
By

Encl. 3
RWT speak

Claim Mud Lake Storage
Doc Source WD 31 Mirapine
1961

Mud Lake Allotments and Disbursements

Month: July

1993

Mud Lake Decreed Rights				1 - 15					15 - 31			
	April Draft	Right Amount	Season Allot	Begin Balance	Draft	Loss	Total Use	End Balance	Draft	Loss	Total Use	End Balance
Shuldberg, K.	0	1.70	418	201	92	27	119	382	56	33	89	293
Holly Water Users	0	0	0	0	0	0	0	0	0	0	0	0
Jackett Canal Co.	0	4.50	1,107	861	744	117	861	0	0	0	0	0
Owsley Canal Co.	0	73.26	18022	4785	4135	650	4785	0	0	0	0	0
Level Canal Co.	0	1.60	394	5510	794	748	1,542	3,668	318	322	640	3,028
Dobson Ranch	0	6.43	1582	1,333	718	181	899	434	64	38	102	332
Potter, Joe	0	.80	197	185	58	25	83	102	4	9	13	89
Burtenshaw Bros.	0	0	0	0	0	0	0	0	0	0	0	0
Allotment Totals	0	88.29	21,720	12,875	6,541	1,748	8,289	4,586	442	402	844	3,742
Mud Lake Gauge Beginning of Period				6.70					4.75			
Mud Lake Content Beginning of Period				29,800					19,300			
Mud Lake Gauge End of Period				4.75					5.25			
Mud Lake Content End of Period				19,300					21,800			
Total Depletion in Period				10,500					(2,500)			
Camas Creek Inflow				200					0			
Total Inflow To Lake For Period				5,056					8,956			
Draft For Period				12,198					5,096			
Loss For Period				3,558					1,360			
Loss Plus Draft For Period				15,756					6,456			
Evaporation (G.H. Factor (.30) ())				840					600			
Unaccounted For Loss				2,718					760			
Lake Contents Less Well Storage				8,376					7,532			
Well Water	Beginning Balance	Flow	Loss	Draft	Total Use	End Balance	Flow	Loss	Draft	Total Use	End Balance	
Owsley Canal Co. North Lake	5,340	1,834	725	4973	5,698	1,476	2820	129	0	129	4,167	
Owsley Canal Co. Bybees	5,002	2,646	679	0	679	6,969	4,626	611	3724	3,835	7,760	
Burtenshaw-Holly Spillway	243	234	33	130	163	314	250	28	66	94	470	
Jackett Canal Co.	1,558	342	211	364	575	1,325	1,260	116	1,244	1,360	1,225	
Dobson Ranch (Well)	0	0	0	0	0	0	0	0	0	0	0	
Ind. Water Users Assoc.	-----	0	-----	-----	-----	-----	0	0	0	0	0	
Level Canal Co. .5630	350	0	48	0	48	0	0	0	0	0	0	
Dobson Ranch .1931	421	0	57	0	57	364	0	32	0	32	332	
Shuldberg, K. .0459	100	0	14	0	14	86	0	8	0	8	78	
Potter, Joe .0290	62	0	8	0	8	54	0	5	0	5	49	
Burtenshaw Bros .1690	259	0	35	190	225	336	0	29	120	149	187	
Well Water Totals	13,335	5,056	1810	5657	7,467	10,924	8956	958	4,654	5,612	14,268	

Doc Source Gary Shulten
Information, WD 31
Claim filed with Storage

Date 7/31/00 sig. P. Carter

 Claim Mud Lake Storage
 Doc Source Greg Shuster
Information, WD 31

July 1-15-93

July 16-31-93

Lake Balance	12,785	4586
Well Balance	13,335	10924
Total (to get Factor	26,210	15,510
Depletions	10,500	(2500)
Interflow ^{Well} _{Changes} ⁵⁰⁵⁶ ₂₀₀	+ 5256	- 8956
Draft -	- 12,198	- 5096
	3,558	loss 1360

$$3,558 \div 26,210 = .135749713 \quad | \quad 1360 \div 15510 = .087685364$$

3/31/00 B. Contor

 Claim Mud Lake Storage
 Doc Source Greg Shenton
Watermaster, WD 31

RECEIVED 1961

MUD LAKE ALLOT

JUN 21 1961

OWSLEY
Department of Reclamation

		April Draft	SPRING ALLOT MENT	MAY 1-15				AL
				Loss	Draft	Total	Bal.	
7	FURNESS J.T.	1.70	415	13		13	405	1.70
13	RICKS, BOB	1.00	32	246	8	32	206	0
	HOLLEY WATER USERS	15.49	3,809	117		117	3,691	0
70-75-99	JACKETT CANAL CO.	13.90	3,419	111	533	644	2,775	7.0
89	BYBEE, LLOYD	1.72	423	13	21	34	389	1.72
97	OWSLEY CANAL CO.	110.62	27,913	901	3,712	4,613	21,300	94.0
98	LEVEL CANAL CO.	22.40	5,510	172	425	597	4,913	1.9
99	OWSLEY MERRITT M.	7.90	1,919	59	514	573	1,346	7.90
107	POTTER, JOSEPH B	1.00	246	8	14	22	224	1.00
129	YEARSLEY, Bill	2.60	640	20		20	620	0
TOTALS		178.22	75	57,542	4,472	6,217	25,083	105.09

MUD LAKE OVER BEGINNING OF PERIOD
" " " " END " "

6.32

LAKE CONTENTS BEGINNING OF PERIOD
" " " " END " "

5.87

27,557

25,234

TOTAL DEPLETION IN PERIOD

2,323

CAMAS CREEK INFLOW

TOTAL INFLOW TO LAKE FOR PERIOD

5,544

DRAFT FOR PERIOD

6,439

LOSS " "

1,428

LOSS PLUS DRAFT FOR PERIOD

7,867

EVAPORATION

15,542 "2.70"

UNACCOUNTED FOR LOSS

-114

LAKE CONTENTS LESS WELL STORAGE

20,105

WELL WATER

OWSLEY CANAL CO'S WELLS (WITH LAKE WELLS)
HOLLEY WATER USERS ASSN WELLS (RICKS)
JACKETT FRANK WELLS
JACKETT CANAL CO. WELLS
OWSLEY, MERRITT M., WELLS
BYBEE, LLOYD (2 CAS BYBEE WELLS)
RICKS, BOB (HOLLEY WATER USERS WELLS)
FURNESS J. T. WELL

Flow	Loss	USE	BAL.
110			4405
158			82-32
413			413
60			60

INDEPENDENT WATER USERS BSS'N

LEVEL CANAL CO. 3638
OWSLEY, M.M. 2456
BURGRAF N. MRS. 1569
BEZOLD, LEWIS 0723
YEARSLEY Bill 0455
FURNESS, J.T. 0386
POTTER J. 0273
Jephson Ralph 0273
LEWIS GARRET 0227

(663)			
241		346	-105
162	3		159
104	2		102
49	1		48
30		31	-1
26			26
18			18
18			18
15			15

LEWIS GARRET

SUB

OWSLEY M.M.

N

LEVEL CANAL CO. (JACKETT CANAL CO. WELLS)

WELL WATERS

5544.6 4095129

DONALD W. SHENTON

3/28/00 J. Conlon
Claim Mud Lake Storage
Doc Source WD 31
Microfilm 1961

COMMITTEE	COMPUTER								
<table border="1"> <tr> <td>COMMITTEE</td> <td>COMPUTER</td> </tr> <tr> <td>MAY-15</td> <td>MAY 16-31</td> </tr> <tr> <td></td> <td>JUNE 1-15</td> </tr> <tr> <td></td> <td>JUNE 16-31</td> </tr> </table>	COMMITTEE	COMPUTER	MAY-15	MAY 16-31		JUNE 1-15		JUNE 16-31	
COMMITTEE	COMPUTER								
MAY-15	MAY 16-31								
	JUNE 1-15								
	JUNE 16-31								

Cammas
Total

EVAP
Unrecorded

Date 3/28/00 Sig. A. Coutee
 Claim Mud Lake Storage
 Doc Source WD 31
microfilm 1961

COMPETITION IN ACCESSORY

JULY 1-15		JUNE 16-30		JUNE 1-15		JUNE 16-30		JULY 1-15																	
NO	DRAFT PAID	LOSS	CASH	TOTAL	NO	DRAFT PAID	LOSS	CASH	TOTAL	NO	DRAFT PAID	LOSS	CASH	TOTAL	NO	DRAFT PAID	LOSS	CASH	TOTAL	NO	DRAFT PAID	LOSS	CASH	TOTAL	
23	0 345	30	111	111	23	49 53	151	3	77	01 60	14 15	28	31	0	0	0	0	0	0	0	0	0	0	0	0
0	(32) 0						0																		
0	0 0						0																		
25	533 3094	119	686	2224	25	287 284	0																		
28	21 224	23	24	24	28	62 101	210	3	150	159	51 12	21	33	18											
27	512 4929	158	13	13	27	512 4929	158	13	13	27	512 4929	158	13	13											
25	423 0						0																		
05	514 1300	104	251	125	05	357 482	463	7	269	216	247	56	191	247	0										
14	14 218	17	14	14	14	42 61	118	2	8	10	108	24	26	60	42										
0	0 0						0																		
22	105 7515	1244	75	1300	201	7147 8354	452	14	47	44	466	106	263	369	97										

	5.89	6.45	4.29	3.05
	5.75	4.24	3.05	2.86
	22.222	22.783	17.120	13.639
	22.182	17.120	13.639	10.880
	2,451	5,263	3,481	2,759
Canes				
Total	7,211	7047	6763	6376
	7,850	10,632	9961	5727
	1,873.	2,078	283	3408
	9,148.	12,710	10,244	6376
Evap	2,133	1,287	1,584	1351
Unaccount	-240	791	1301	2057
	11,096	2,742	2266	1887

[illegible]

Date 3/28/00 sig. B. Cantor
 Claim Mud Lake Storage
 Doc Source WD 31
Microfiche 1961

DONALD W. SHENTON
WATER MASTER DIST. NO. 66
DUBOIS, IDAHO

RECEIVED

JUN 12 1964

Department of Reclamation

1964 MUD LAKE ALLOTMENTS 8 DISB

OWNER	MAY 1-15				MAY 16-31			
	Right	Draft	Loss	Balance	Right	Draft	Loss	Balance
FURNESS J. T.	1.70		418	14	14	404	23	66 88 316
RICKS BOB	1.00	80	24	8	8	238	11	57 68 170
HOLLY WATER USERS	15.48		3808	121	121	3687	165	165 3522
JACKETT CANAL CO.	13.90	120	3420	111	111	3309	160	558 718 2591
BYBEE DON	1.72		423	14	14	409	22	62 84 325
OWSLEY CANAL CO.	125.01	560	30752	998	998	29754	1410	626 4388 6422 3332
LEVEL CANAL CO.	22.40	196	6810	176	176	5334	245	448 693 4641
SHELL JACK	7.80		1919	62	62	1857	85	616 701 1156
POTTER JOE B.	1.00		246	8	8	238	11	11 227
OWSLEY M. M.	2.60	30	640	21	21	619	28	28 56 563
TOTALS	192.61	986	47382	1533	1533	45849	2159	6847 9006 36843
MUD LAKE GAUGE BEGINING OF PERIOD				677				726
" " " END " "				726				651
LAKE CONTENT BEGINING " "				30 079				33 172
" " " END " "				33 172				29 738
TOTAL DEPLETION IN PERIOD				< 3 093 >				3 434
CAMAS CREEK INFLOW				2 750				4 250
TOTAL INFLOW TO LAKE FOR PERIOD				4 626				55 72
DRAFT FOR PERIOD				-				6 847
LOSS FOR PERIOD				1 533				2 159
LOSS PLUS DRAFT FOR PERIOD				1 533				9 006
EVAPORATION				725				691
UNACCOUNTED FOR LOSS				808				1 468
LAKE CONTENTS LESS WELL STORAGE				31 296				26 540
WELL WATER								
OWSLEY CANAL CO. (NORTH LAKE)	1426			1426	796			2222
BYBEES								
HOLLY WATER USERS ASS'N	180			180	214			394
JACKETT CANAL CO.								
SHELL JACK	60			60	56			116
BYBEE DON 2 C.F.S. (BYBEE WELLS)	60			60	64			124
RICKS BOB (HOLLY WATER WELLS)								
FURNESS J. T.								
INDEPENDENT WATER USERS ASS'N	(150)			(150)				
LEVELL CANAL CO. .5207	78			78	100			178
SHELL JACK .2274	34			34	44			78
BEZOLD LEWIS .0723	11			11	14			25
OWSLEY M. M. .0909	14			14	18			32
FURNESS J. T. .0387	6			6	7			13
POTTER JOE .0273	4			4	5			9
LEWIS GARNET .0227	3			3	4			7
WELL WATER	1876			1876	1322			3198

RECEIVED
JUL 13 1964

1964 MUD LAKE DECLARATION OF WATER RIGHTS

OWNER	JUNE 1-15				JUNE 15-30			
	Right	Amount	Balance	Check	Right	Amount	Balance	Check
FURNESS J.T.	1.70	418	29	29	296	29	29	267
RICKS BOB	1.00	80	24	10	85	95	0	0
HOLLY WATER USERS	15.48	3808	218	218	3382	205	205	3177
JACKETT CANAL CO.	13.90	120	3420	186	486	872	1670	150
BYBEE DON	1.72	423	27	27	307	26	46	72
OWSLEY CANAL CO.	125.01	560	30,752	1580	3248	5372	18042	1709
LEVEL CANAL CO.	22.40	196	6810	292	210	502	4056	275
SHELL JACK	7.10	19.9	29	732	811	385	36	349
POTTER JOE B.	1.00	246	15	75	90	142	9	9
OWSLEY M.M.	2.60	30	640	36	42	78	469	34
TOTALS	192.61	986	47,382	2472	5622	8094	58749	2073

MUD LAKE GAUGE BEGINNING OF PERIOD	6.51	7.20
" " " END " "	7.2	7.32
LAKE CONTENT BEGINNING " "	29,138	32,816
" " " END " "	32,816	33,568
TOTAL DEPLETION IN PERIOD	(3,078)	(752)
CAMAS CREEK INFLOW	9,500	6,800
TOTAL INFLOW TO LAKE FOR PERIOD	11,276	8,306
DRAFT FOR PERIOD	5,741	5,475
LOSS FOR PERIOD	2474	2079
LOSS PLUS DRAFT FOR PERIOD	8198	7554
EVAPORATION	1,916	1,900
UNACCOUNTED FOR LOSS	558	179
LAKE CONTENTS LESS WELL STORAGE	27,946	27,238

WELL WATER

NORTH LAKE
OWSLEY CANAL CO. BYBEE
HOLLY WATER USERS ASS'N
JACKETT CANAL CO.
SHELL JACK
BYBEE DON 2 CFS. (BYBEE WELLS)
RICKS BOB (HOLLY WATER WELLS)
FURNESS J.T.

INDEPENDENT WATER USERS ASS'N
LEVELL CANAL CO. 5207
SHELL JACK 2274
BEZOLD LEWIS 0723
OWSLEY M.M. 0909
FURNESS J.T. 0387
POTTER JOE 0273
LEWIS GARNET 0227

WELL WATER

Right	Amount	Balance	Check	Right	Amount	Balance	Check
1000		3222	750			3972	
210		664	270			934	
						40	(40)
		116				116	
128	102	26		2		24	
18		142	18			160	
360			148			168	
187		365	243			266	
82		160	106			79	
26	2	49	34	4		108	
33		65	43			46	
14		27	18			32	
10		19	13			26	
8		15	11			630	
1776	2	102	4870	1506	6	40	

Signature: B. Carter
Date: 7/13/64
Claim: Mud Lake Storage
Doc Source: W.D. 31 Microfilm
1964

1964 MUD LAKE ALLOTMENTS 8 DIS

OWNER	Right	Share	Aug. 1-15	Aug. 16-31
FURNESS J.T.	1.70	418	7	44
RICKS BOB	1.00	80	24	0
HOLLY WATER USERS	13.90	3808	217	1000
JACKETT CANAL CO.	13.90	120	3420	0
BYBEE DON	1.72	423	12	12
OWSLEY CANAL CO.	125.0	560	30,752	0
LEVEL CANAL CO.	22.40	196	6510	29
SCHELL JACK	7.10	1919	427	0
POTTER JOE B.	1.00	246	19	19
OWSLEY M.M.	2.60	30	640	22
TOTALS	192.61	986	47,382	306

MUD LAKE GAUGE BEGINING OF PERIOD	4.56	3.52
" " " END " "	3.52	3.94
LAKE CONTENT BEGINING " "	18,455	13,725
" " " END " "	13,725	15,542
TOTAL DEPLETION IN PERIOD	4,730	(1,817)
CAMAS CREEK INFLOW	-	-
TOTAL INFLOW TO LAKE FOR PERIOD	6,252	6,680
DRAFT FOR PERIOD	7,666	3,466
LOSS FOR PERIOD	3,316	1,397
LOSS PLUS DRAFT FOR PERIOD	10,982	4,863
EVAPORATION	950	560
UNACCOUNTED FOR LOSS	2366	837
LAKE CONTENTS LESS WELL STORAGE	1856	1751

WELL WATER	Well	Share	Balance	Well	Share	Balance
OWSLEY CANAL CO. NORTH LAKE	2820	446	8382	2852	270	10029
BYBEE'S	1830	2305	5713	1952	921	1966
HOLLY WATER USERS ASS'N - 7-4-7	510	80	588	80	544	30
JACKETT CANAL CO.	384	77	309	72	416	57
SCHELL JACK	60	25	74	153	64	16
BYBEE DON 2 C.F.S. (BYBEE WELLS)	1000	121	85	254	47	57
RICKS BOB (HOLLY WATER WELLS)						
FURNESS J.T.						
INDEPENDENT WATER USERS ASS'N	(648)			(852)		
LEVEL L CANAL CO. .5207	337	311	1570	444	153	304
SCHELL JACK .2274	147		292	194		177
BEZOLD LEWIS .0723	47	5	49	62	27	3104
OWSLEY M.M. .0909	54	29	302	77	39	300
FURNESS J.T. .0387	25	47	255	33	23	265
POTTER JOE .0273	18		100	33	43	120
LEWIS GARNET .0227	15	10	60	19	6	79
WELL WATER	7252	3010	7224	11869	6689	1233

Date 3/28/00 sig. B. Linton
 Claim Mud Lake Storage
 Doc Source Microfilm
 60 31 1964

1964 MUD LAKE ALLOTMENTS & DIS

OWNER	Sept 12	Sept 15	Sept 16	Sept 17	Sept 18	Sept 19	Sept 20	Sept 21	Sept 22	Sept 23	Sept 24	Sept 25	Sept 26	Sept 27	Sept 28	Sept 29	Sept 30
FURNESS J. T.	1.70	418															
RICKS BOB	1.00	80	24														
HOLLY WATER USERS	15.47	3705	37		37	999	42										
JACKETT CANAL CO.	13.90	120	3420														
BYBEE DON	1.72	423															
OWSLEY CANAL CO.	125.0	560	30752														
LEVEL CANAL CO.	22.0	196	6510														
SHELL JAC	9.10	1919															
POTTER JOE B.	1.00	246															
OWSLEY M M	2.6	30	640														
TOTALS	192.6	980	47,382	37	37	999	42										

MUD LAKE GAUGE BEGINING OF PERIOD	394	464
" " " END " "	464	425
LAKE CONTENT BEGINING " "	15,542	18,665
" " " END " "	18,665	16,938
TOTAL DEPLETION IN PERIOD	(3,123)	1,727
CAMAS CREEK INFLOW		
TOTAL INFLOW TO LAKE FOR PERIOD	6,510	4,372
DRAFT FOR PERIOD	2,782	5300
LOSS FOR PERIOD	605	799
LOSS PLUS DRAFT FOR PERIOD	3,387	6099
EVAPORATION	925	800
UNACCOUNTED FOR LOSS	(320)	(1)
LAKE CONTENT TO SET WELL STORAGE	2789	2747

WELL WATER

OWSLEY CANAL CO. BYBEE'S	2820	404	3358	11,017	1880	389	444	974
HOLLY WATER USERS ASSN	1830							
JACKETT CANAL CO	510	30		798		38	48	717
SHELL JACK	480			480	224			704
BYBEE DON (CFS. BYBEE WELLS)	60	6	30	173	60	9		232
RICKS BOB (HOLLY WATER WELLS)		18		480		20	180	200
FURNESS J. T.								
INDEPENDENT WATER USERS ASSN	810					(378)		
LEVELL CANAL CO. 5207	422	62	350	1540	197	69	86	108
SHELL JACK 2274	184	23	144	318	86	40		544
BEZOLD LEWIS 0723	59	5		158	27	47		177
OWSLEY M.M. 0909	74	14		405	34	19		536
FURNESS J. T. 0387	31	9		282	15	12		72
POTTER JOE 0273	22	4		137	10	6		14
LEWIS GARNET 0227	18	3		88	9	4		10
TOTAL WELL WATER	6510	568	2782	15,870	4372	157	53	

Date 3/28/00 sig. D. Carter

Claim Mud Lake Sprays

Doc Source 40 31

Microfilm 1964

Comparison of Loss accrued to Natural Flow storage v. loss accrued to Well Storage - 1961
(Items in blue from data, other items calculated or copied.

Start of Period	1-May (Allocation	16-May	1-Jun	16-Jun	1-Jul
Contents Begin	27557 re-calc	25234	22783	17120	13639
Contents End	25234 on May 15)	22783	17120	13639	10880
-1.0 Contents	1790	1790	1790	1790	1790
Avail Begin	25767	23444	20993	15330	11849
Avail End	23444	20993	15330	11849	9090
Content Less Well S	20105	11096	2742	2256	1887
Allotment Begin	43842	18315	9306	952	466
Allotment End	36283	9306	952	466	97
Well Begin	0	5129	11687	14378	11383
Well End	5129	11687	14378	11383	2523
Loss	1428	1893	2078	283	3408
Natural Flow Loss	1432	1844	207	14	106
Well Loss	6	49	1871	269	3302

Math Checks:

Begin Avail	25767	23444	20993	15330	11849
Sum of Balances	43842	23444	20993	15330	11849
Estimated Inflows	18075	0	0	0	0
Loss	1428	1893	2078	283	3408
Allocated Losses	1438	1893	2078	283	3408
Difference	-10	0	0	0	0

Analysis

Beginning Avail	25767	23444	20993	15330	11849
Allotment %	170%	78%	44%	6%	4%
Well %	0%	22%	56%	94%	96%
Total allocated	170%	100%	100%	100%	100%

Ending Avail	23444	20993	15330	11849	9090
Allotment %	155%	44%	6%	4%	1%
Well %	20%	51%	84%	83%	23%
Total allocated	175%	96%	90%	87%	24%

Content less Well	20105	11096		2256	1887
Avail Portion	18315	9306		466	97
Well Storage	5129	11687		11383	2523
Allotment %	78.1%	44.3%		3.9%	3.7%
Well %	21.9%	55.7%		96.1%	96.3%

Loss	1428	1893	2078	283	3408
Allotment %	100.3%	97.4%	10.0%	4.9%	3.1%
Well %	0.4%	2.6%	90.0%	95.1%	96.9%

% of Loss/% of Stor

Allotment	0.65	2.20	1.60	1.26	2.91
Well	0.02	0.05	1.07	1.14	4.18

% of Loss/% of Cont

Allotment	1.28	2.20		1.26	0.84
Well	0.02	0.05		0.99	1.01

Comparison of Loss accrued to Natural Flow storage v. loss accrued to Well Storage - 1964
(Items in blue from data, other items calculated or copied.

Start of Period	1-Jun	16-Jun	1-Aug	16-Aug	1-Sep	16-Sep
Contents Begin	29738	32816	18455	13725	15542	18665
Contents End	32816	33568	13725	15542	18665	16938
-1.0 Contents	1790	1790	1790	1790	1790	1790
Avail Begin	27948	31026	16665	11935	13752	16875
Avail End	31026	31778	11935	13752	16875	15148
Content Less Well S	27946	27238	1856	1751	2789	2747
Allotment Begin	36843	28749	2907	1159	1054	999
Allotment End	28749	21241	1159	1054	999	957
Well Begin	3198	4870	14851	11869	13791	15876
Well End	4870	6330	11869	13791	15876	14191
Loss	2474	2079	3316	1397	605	799
Natural Flow Loss	2472	2073	306	105	37	42
Well Loss	2	6	3010	1292	568	757

Math Checks:

Begin Avail	27948	31026	16665	11935	13752	16875
Sum of Balances	40041	33619	17758	13028	14845	16875
Estimated Inflows	12093	2593	1093	1093	1093	0

Loss	2474	2079	3316	1397	605	799
Allocated Losses	2474	2079	3316	1397	605	799
Difference	0	0	0	0	0	0

Analysis

Beginning Avail	27948	31026	16665	11935	13752	16875
Allotment %	132%	93%	17%	10%	8%	6%
Well %	11%	16%	89%	99%	100%	94%
Total allocated	143%	108%	107%	109%	108%	100%

Ending Avail	31026	31778	11935	13752	16875	15148
Allotment %	93%	67%	10%	8%	6%	6%
Well %	15%	19%	86%	89%	85%	84%
Total allocated	108%	86%	96%	96%	91%	90%

Content less Well	27946	27238	1856	1751	2789	2747
Avail Portion	26156	25448	66	-39	999	957
Well Storage	4870	6330	11869	13791	15876	14191
Allotment %	84.3%	80.1%	0.6%	-0.3%	5.9%	6.3%
Well %	15.7%	19.9%	99.4%	100.3%	94.1%	93.7%

Loss	2474	2079	3316	1397	605	799
Allotment %	99.9%	99.7%	9.2%	7.5%	6.1%	5.3%
Well %	0.1%	0.3%	90.8%	92.5%	93.9%	94.7%

% of Loss/% of Stor

Allotment	1.08	1.49	0.95	0.98	1.03	0.83
Well	0.01	0.02	1.05	1.04	1.10	1.13
% of Loss/% of Cont						
Allotment	1.19	1.25	16.69	-26.50	1.03	0.83
Well	0.01	0.01	0.91	0.92	1.00	1.01

Analysis of Allotment of Natural Flow Rights

(Items in blue from data; other items calculated or copied from blue)

I. "Season Allotment" 1961

II. May 1-15 Usage

III. May 15 Allotment

Right	User	CFS Decree	April Draft	Season Allotment	Loss	Draft	Total	Balance	Allot	Loss	Draft	Bal	Calc 1.
	7 Furness JT	1.70		418	13		13	405	418	23	0	395	395
	13 Ricks, Bob	1.00	32	246	8	32	40	206	0	0	32	0	-32
	Holly Water Users	15.48		3808	117		117	3691	0	0	0	0	0
70-75-99	Jackett Canal Co	13.40		3419	111	533	644	2775	1722	95	533	1094	1094
	89 Bybee Lloyd	1.72		423	13	21	34	389	423	23	21	379	379
	97 Owsley Canal Co	110.62		27213	901	4608	5509	21714	20664	1137	4598	14929	14929
38 (88?)	Level Canal Co.	22.40	5	5510	172	425	597	4913	450	25	425	0	0
	99 Owsley Merrit M.	7.80	38	1919	59	514	575	1346	1919	105	514	1300	1300
	107 Potter Joseph B	1.00		246	8	14	22	224	246	14	14	218	218
	129 Yearsley Bill	2.60		640	20		20	620	0	0	0	0	0
	Totals	178.22	75	43842	1432	6137	7559	36287	25842	1422	6137	18315	18283

IV. "Full" Allotments

V. Calculation of Allotment Amount

VI. Percent of Full Allotments Allocated May 15

Right	User	CFS Decree	CFS * 2 * 123 days	May 1 Contents Suave Estimate -1.0 Content Available Allocated Apparent Shenton Estimate	27557 18000 1790 43767 43842 18075 25234 5129 20105 18000 1790 36315 18315 Apparent Shenton Estimate	100.0% 0.0% 0.0% 50.4% 100.0% 75.9% 8.2% 100.0% 100.0% 100.0% 0.0%
	7 Furness JT	1.70	418.2			
	13 Ricks, Bob	1.00	246			
	Holly Water Users	15.48	3808.08			
70-75-99	Jackett Canal Co	13.90	3419.4			
	89 Bybee Lloyd	1.72	423.12			
	97 Owsley Canal Co	110.62	27212.52			
38 (88?)	Level Canal Co.	22.40	5510.4			
	99 Owsley Merrit M.	7.80	1918.8			
	107 Potter Joseph B	1.00	246			
	129 Yearsley Bill	2.60	639.6			
	Totals	178.22	43842.12		0	

VI. Allocation of "Natural Flow" Loss - May 1- 15

VII. Allocation of "Natural Flow" Loss - May 16-31

Right	User	CFS Decree	May 1 Allotment	Loss May 1-15	% of Allotment	May 15 Allotment	Loss May 16-31	% of Allotment
	7 Furness JT	1.70	418	13	3.11%	418	23	5.50%
	13 Ricks, Bob	1.00	246	8	3.25%	0	0	
	Holly Water Users	15.48	3808	117	3.07%	0	0	
70-75-99	Jackett Canal Co	13.90	3419	111	3.25%	1722	95	5.52%
	89 Bybee Lloyd	1.72	423	13	3.07%	423	23	5.44%
	97 Owsley Canal Co	110.62	27213	901	3.31%	20664	1137	5.50%
38 (88?)	Level Canal Co.	22.40	5510	172	3.12%	450	25	5.56%
	99 Owsley Merrit M.	7.80	1919	59	3.07%	1919	105	5.47%
	107 Potter Joseph B	1.00	246	8	3.25%	246	14	5.69%
	129 Yearsley Bill	2.60	640	20	3.13%	0	0	
	Totals	178.22	43842	1432	3.27%	25842	1422	5.50%

Section III: Calc 1 = May 15 "Allot" - (May 15 "Loss" + May 15 "Draft")

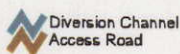
Section V: Available = Contents + Suave Estimate

Allocated = Sum of allocations from report

Apparent Shenton Estimate =

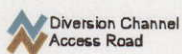
18000 - (Available - Allocated)

Lone Tree Diversion - Basin 31 Township 11N Range 38E and 39E



Prepared by Bryce A. Contor from USGS Base Maps U93 and V43 3/22/2000
Location of access road and channel enhanced per interview with
Garth Soderquist of Mud Lake Water Users

Lone Tree Diversion - Basin 31 Township 11N Range 38E and 39E



Prepared by Bryce A. Contor from USGS Base Maps U93 and V43 3/22/2000
Location of access road and channel enhanced per interview with
Garth Soderquist of Mud Lake Water Users

DRAFT

To: Mud Lake Storage File
Fr: Bryce Contor
Date: 3/22/2000

Re: Meeting w/ Garth Soderquist and Greg Shenton

5000 acre ft Holley storage right - Right was to be pumped into lake, but Holley didn't have a diversion from the lake. Therefore this right wasn't used until the merger. For Holley to get water, Camas has flow. Since the merger, Holley storage right has been used in the same manner as the early pumping plan, when needed. Any use of Holley storage right is not included in the "early pumping."

All private users on lake are also members of Independent:

Level Canal
Parker
Schmitt
Dobson
Potter (Burtenshaw purchase?)
Burtenshaw
Shuldberg
Bezold used to be, transferred to private well, sold to Holm. no longer part of Independent.

These users have private creek water rights, but the well water rights are owned by Independent. However, Dobson has a private well that can pump into the lake, it is accounted the same as the company wells. It has been used for early pumping, as well.

Per 1974 affidavit from Don Shenton, at one time Lunholms had a well that delivered and exchanged water to the lake. Per Greg Shenton, this is no longer currently practiced.

Early in the spring, watermaster and users assess lake level and snowpack. If decision is made that early pumping is needed, watermaster proposes a pumping plan which roughly requires pumping in the same percentage that water will be used from the lake. This is regulated by knowledge of pumping capacity and start times are adjusted accordingly. Some years may pump 10 days, some years 30 days, some years not at all. Have started as early as March 4. Regular season allotments begin May 1. Early water pumped is credited to whoever pumps it. Allocation is by acres.

Artesian wells are flowing in 2000. Artesian basin is lower than Camas Creek. If Camas is running full, artesian basin has to be closed or artesian basin will drain camas water to aquifer.

Artesian basin is by Bybee props. Artesian wells are in bottom of basin. When basin fills, head of water stops flow. Flow stops immediately when wells are started.

Any artesian flow is accounted to Mud Lake allotments as natural flow. Water pumped is owned by the user who pumps. All users are charged loss.

Mud Lake allotment: Every 15 days report inflows, drafts, losses.

I asked Greg Shenton about Independent "Runoff" right. Greg has not finished looking in to this right. Possibly is artesian contribution in Independent Ditch, per Garth?

Irrigation Season -

Some April drafts, not every year. Most of the time hold off till May 1. End of irrigation season Oct 31. Resolutions to charge April usage to May allotment. Greg recommends at least April 15, April 1 would be better for a windy spring. May 1 works better for canal company, to allow spring maintenance.

Ownership of carryover water reverts to allocation system as if it had been natural flow, per decree. During the season, well owners have an allotment balance and a well water balance. There is no individual carryover of either allotment water or well water.

All users have both storage allotments and pumps. In 1999, Independent had enough creek water supplied that they did not pump. No early pumping was done in 1999, but Mud Lake Water Users pumped after May 1.

Anything pumped is credited to well water balance. However, prior to May 1 there is very little use so balance accumulates. After May 1, pumped water is still credited to well water balance but users are also withdrawing, so balances accumulate very slowly if at all.

Losses are assessed per share of stored volume. Can run as high as 25% per 15 days.

Sometimes early pumping is used, not because storage is needed but because prior to peak of Camas inflow, water level in lake may not be high enough to allow diversion.

Most users have well capacity close to decreed or licensed diversion rates.

Owsley: 1991 peak year of 5 year average, Owsley stored 26,000 af for about 21,000 acres.

Independent. 1996 peak year of 5 year average, Independent stored 6,012 af for about 4600 acres.

Because of the merger, storage of well water is an issue for only three entities: Independent, Mud Lake Water Users, and Dobson. The storage claims need to be large enough to accommodate the largest likely "well storage" component of the Mud Lake

allotment accounting system. Likely the highest balance will come in the spring on a year when there was a long early-pumping season.

Generally the early pumping is credited to the individual pumpers, but one time when only ten or eleven days pumping were needed (1995) the users voted to just let the water be accounted as natural flow. Agreement was everyone would pump to full capacity for ten days.

There have been years that there has been no creek contribution to the lake; therefore the only available water has been well water. In such a year, the practice would be to pump to 7 1/2 - 8 feet (Greg will get us a better number from records) prior to May 1. Reasonably the storage component of the water rights ought to be enough to allow this practice. See attached USGS rating table. The lowest Garth remembers initial gage height is -1.0. The lowest Greg remembers is 1.5.

Greg's formula for calculating allocation volume on Mud Lake is:

$\text{cfs} * 2 * 123 \text{ days} = \text{acre feet allocation of right}$

This formula is adequate to use for calculating storage volume for natural flow rights.

Season of use for storage from surface sources should be Nov 1 to Oct 31. This is per resolutions that late irrigation is charged against following year's allotment. Note that per Suave decree, surface storage is allocated per allotment system.

There is some confusing language in the Suave decree regarding curtailment of junior rights when allocation is recomputed. Per Greg, this has not been historical practice.

Historical practice has been to make a more realistic and conservative initial estimate, to avoid over-allocation. Once creek quits running, final allocation is calculated. Following final allocation, stored rights are delivered per allocation, regardless of priority date.

(More realistic than the 18,000 estimate of Suave decree)

Because of resolutions regarding no carryover, irrigation storage for wells should be March 1 to October 31. Season of use from ^{year} storage should parallel the irrigation season.

Season of use for irrigation from ^{allotment} storage should parallel the irrigation season for diverted flow.

Greg will supply highest

Attachments to memo of
3/22/2000 meeting w/
Gauth Sodergren &
Greg Shenton

MUD LAKE RESERVOIR CAPACITY TABLE DATA FROM USGS AND WATERMASTER

GAGE FEET	VOLUME ACRE FEET	SOURCE
-3.0	111	WATERMASTER
-2.0	587	WATERMASTER
-1.0	1790	WATERMASTER-NORM MIN
0.0	3410	WATERMASTER
1.0	5460	WATERMASTER - USGS
1.5	6714	USGS
2.0	8150	USGS
2.5	9794	USGS
3.0	11600	USGS
3.5	13640	USGS
4.0	15810	USGS
4.5	18090	USGS
5.0	20510	USGS
5.5	23040	USGS
6.0	25740	USGS
6.5	28590	USGS
7.0	31580	USGS
7.5	34700	USGS
8.0	37930	USGS
8.5	41270	USGS
9.0	44730	USGS
9.5	48950	USGS
10.0	54033	INTERPOLATED USGS (54450)
10.5	59117	INTERPOLATED USGS (60000)
11.0	64200	USGS

Date 3/22/00 Sig. R. Coutor

Claim Mud Lake Storage

Doc Source Watermaster

WD 31

INDEPENDENT WATER USERS EARLY PUMPING REPORT

	YEAR	DATE PUMPING STARTED	ACRE FEET PUMPED
80.	1989	APRIL 8 TH - 30 TH	3,020 A.F.
51	1990	MARCH 22 APRIL TOTAL E/P	913 A.F. <u>2,580 A.F.</u> 3,493 A.F.
55	1991	MARCH 6 TH APRIL TOTAL E/P	2,272 A.F. <u>2,270 A.F.</u> 4,542 A.F.
69	1992	MARCH APRIL TOTAL E/P	1,928 A.F. <u>2,160 A.F.</u> 4,094 A.F.
33 (3/39)	1993	MARCH APRIL TOTAL E/P	880 A.F. <u>2,368 A.F.</u> 3,248 A.F.
57	1994	MARCH 10 TH APRIL TOTAL E/P	2,342 A.F. <u>2,698 A.F.</u> 5,040 A.F.
94.0 <i>Pogut</i>	1995	APRIL 17 TH - 28 TH	1,335 A.F. estimated flow
	1996	MARCH APRIL TOTAL E/P	1,870 A.F. <u>4,142 A.F.</u> 6,012 A.F.

OF THE 8 YEARS ABOVE, THE MOST EARLY PUMPED WAS IN 1996 AT 6,012 A.F.
THE LEAST EARLY PUMPING WAS IN 1995 AT 1,335 A.F.

1990 TO 1994 FIVE YEAR AVERAGE

	FIVE YEAR TOTAL	FIVE YEAR AVERAGE
MARCH	8,335 A.F.	1,667 A.F.
APRIL	<u>12,076 A.F.</u>	<u>2,415 A.F.</u>
SEASON	20,411 A.F.	4,082 A.F.

Hrlyw. 65 CFS.
74 CFS
9-1-97

Date 3/22/00 Sig. B. Cantor

Claim Mud Lake Storage
Doc Source Watermaster
WD 31

OWSLEY & JACKETT EARLY PUMPING REPORT

LOCATION	MONTH	YEAR 1989	A.F. MEASURED
N.L.	APRIL		3,380 A.F.
BYBEE'S	APRIL		3,300 A.F.
J.C.C.	APRIL		<u>1,300 A.F.</u>
TOTAL			7,980 A.F.
		1990	
N.L.	MARCH 22		2,382 A.F.
BYBEE'S	MARCH 18		3,565 A.F.
J.C.C.	MARCH		<u>0 A.F.</u>
TOTAL			5,947 A.F.
N.L.	APRIL		5,634 A.F.
BYBEE'S	APRIL		5,730 A.F.
J.C.C.	APRIL		<u>3,090 A.F.</u>
TOTAL			14,454 A.F.
TOTAL OF BOTH MARCH & APRIL			20,401 A.F.
		1991	
N.L.	MARCH 11		4,580 A.F.
BYBEE'S	MARCH 10		4,902 A.F.
J.C.C.	MARCH 13		<u>1,140 A.F.</u>
TOTAL			10,622 A.F.
N.L.	APRIL		6,612 A.F.
BYBEE'S	APRIL		6,776 A.F.
J.C.C.	APRIL		<u>2,384 A.F.</u>
TOTAL			15,772 A.F.
TOTAL OF BOTH MARCH & APRIL			26,394 A.F.
		1992	
N.L.	MARCH		1,540 A.F.
BYBEE'S	MARCH		2,048 A.F.
J.C.C.	MARCH		<u>142 A.F.</u>
TOTAL			3,730 A.F.
N.L.	APRIL		6,900 A.F.
BYBEE'S	APRIL		9,120 A.F.
J.C.C.	APRIL		<u>1,968 A.F.</u>
TOTAL			17,988 A.F.
TOTAL OF BOTH MARCH & APRIL			21,718 A.F.

Date 3/22/00 Sig. P. Contor

Claim Mud Lake Storage

Doc Source Watermaster

WD 31

		1993	
N.L.	MARCH	1,078 A.F.	
BYBEE'S	MARCH	192 A.F.	
J.C.C.	MARCH	<u>168 A.F.</u>	
	TOTAL	1,438 A.F.	
N.L.	APRIL	6,730 A.F.	
BYBEE'S	APRIL	6,836 A.F.	
J.C.C.	APRIL	<u>2,712 A.F.</u>	
	TOTAL	16,278 A.F.	
	TOTAL OF BOTH MARCH & APRIL	17,716 A.F.	

		1994	
N.L.	MARCH 10	1,516 A.F.	
BYBEE'S	MARCH	3,576 A.F.	
J.C.C.	MARCH	<u>1,380 A.F.</u>	
	TOTAL	6,472 A.F.	
N.L.	APRIL	6,674 A.F.	
BYBEE'S	APRIL	8,644 A.F.	
J.C.C.	APRIL	<u>2,155 A.F.</u>	
	TOTAL	17,473 A.F.	
	TOTAL OF BOTH MARCH & APRIL	23,945 A.F.	

		1995	
N.L. & BYBEE'S	APRIL 17-28	6,787 A.F.	

		1996	
N.L.	MARCH	1,800 A.F.	
BYBEE'S	MARCH	2,006 A.F.	
J.C.C.	MARCH	<u>0 A.F.</u>	
	TOTAL	3,806 A.F.	

N.L.	APRIL	3,766 A.F.	
BYBEE'S	APRIL	4,472 A.F.	
J.C.C.	APRIL	<u>0 A.F.</u>	
	TOTAL	8,238 A.F.	
	TOTAL OF BOTH MARCH & APRIL	12,044 A.F.	

OF THE 8 YEARS ABOVE,

1. THE MOST WATER PUMPED FOR EARLY PUMPING, WAS IN 1991 WHICH WAS 26,394 A.F.
2. THE LEAST WATER PUMPED FOR EARLY PUMPING, WAS IN 1995 WHICH WAS 6,787 A.F.

1990 TO 1994 FIVE YEAR AVERAGE

	FIVE YEAR TOTAL
MARCH	28,209 A.F.
APRIL	<u>81,965 A.F.</u>
SEASON	110,174 A.F.

Date 3/2/00 sig. B. Coulter

Claim Mud Lake Storage
 Doc Source Watermaster
W.D. 31

FIVE YEAR AVERAGE

5,642 A.F.
16,393 A.F.
 22,035 A.F.

*Indicate Jackall
 not Holly v Kulp
 Dec 1, 2000*

MUD LAKE USERS CANAL COMPANIES
Pre-season Pumping Determination Meeting
Dubois, Idaho
March 12, 1996

Those Present:

Name	Representing
Todd Simmons	Jackett
Edgar Green	Jackett
Gerald Messerli	Owsley
Keith Shuldberg	Independent
Van Burtenshaw	Independent-Holly
Garth Soderquist	Owsley
LaMoyné Barney	Independent-Holly
Don Shenton	Watermaster
Greg Shenton	Deputy Watermaster
Keith A. Bramwell	Secretary
Keith C. Wilson	IDWR
Steve Ball	IDWR

The meeting was called to order at 12:10 p.m.

Greg Shenton reviewed his report on the water available in Mud Lake and the early pumping proposal for 1996. He then reviewed three strategies to achieve the amount of water needed.

Don Shenton said that the snow/water content averages only 69%, which is quite low. With the current situation, the proposed 6.5 level may be short but the 7.5 level could be excessive if we get a lot of spring rain.

Don asked about the water disbursement with the merger between Independent and Holly, and Owsley and Jackett. It was said that the methods of water disbursement in the past will not change with the mergers.

Garth said that there is a break on the Independent about 1/2 mile from the well on the refuge. He recommended that it be filled in.

Garth asked about water currently in the Independent from subbing from the lava's. Greg said that it is true that water is coming up through the lava's in the canal. He said that the rocks will need to be sealed because when the water table drops, the water will seep out of the canal. Bentonite was suggested as a sealant. It was asked if the bentonite would be forced out in future years with subbing like this one. Don said that if the bentonite was firmly packed in the rocks that he doubted if it would be forced out.

Gerald Messerli moved that the 7 G.H. proposal be accepted. Garth Soderquist seconded the motion and the motion passed unanimously.

Putting in a pump on the Mud Lake levy was discussed. The cost of getting water into the canal would be significantly reduced. The refuge may have some concerns about it but the land and the water belong to the canal companies so no one can prevent it from being done.

Keith Shuldberg moved to adjourn the meeting. Garth Soderquist seconded the motion and the motion passed. The meeting was adjourned at 12:50 p.m.

Date 3/22/00 sig. B. Connor

Claim Mud Lake Storage

Doc Source Watermaster

WO 31

Submitted by

Keith A. Bramwell

Keith A. Bramwell

Secretary, Dist. 31, 32-C

MUD LAKE PRESEASON PUMPING AGREEMENT

March 9, 1995

At a meeting held in Mud Lake, Idaho, March 9, 1995, a preseason pumping agreement was adopted for the 1995 irrigation season.

In attendance at this meeting, representatives of all the water user groups of Mud Lake were in attendance plus private water users Burtenshaw Bros. Water user groups represented were the following: Owsley Canal Co., Jackett Canal Co., Independent Water Users, Level Canal Co., and Holley Water Users.

Purpose of the meeting was to decide what lake level would be needed to provide enough water for the first heavy drafts of water for irrigation on May 1st, and until Camas Creek and its tributaries flowed enough water into Mud Lake to sustain irrigation thereafter.

A lot of discussion was had on a desired water level and the risk of over pumping and creating a hazard but still getting enough to sustain early pumping. It was decided to start pumping at as late a date as possible and still reach a 4.5 G.H. by May 1, 1995. It was further decided to reduce this pumping level if stormy conditions existed and demand for early irrigation demand appeared to be low. A motion was made by Andy Dobson and second by Garth Soderquist for the 4.5 G.H. level.

Discussion was then had on the method of pumping needed to get the best and fairest desired lake level. Two methods discussed was by getting credit to each pumper the amount he pumped or by all pumpers pumping full capacity for the last 17 days of April and allotting the waters strictly by the decree. It was decided to use the decree method and allot lake capacity only without credit by pumping. This method of allotment was made by and motioned by Andy Dobson and second by Garth Soderquist.

Both motions were unanimous and an aye vote cast by every water user.

Garth Soderquist 3/14/95
Owsley Canal Co. President

Andy Dobson
Ind. User Assn. President

Edgar Green 3/14/95
Jackett Canal Co. President

Carl Hogg 3-14-95
Holley Water User President

Don Baker 3-14/95
Level Canal Co. President

Keith Shuldberg 3-14-95
Keith Shuldberg

David Burtenshaw 3-14-95
Burtenshaw Brothers

Andy Dobson
PRIVATE Well

Date 3/22/00 51848 Carter

Claim Mud Lake Storage
Doc Source Watermaster
W031

Early pumping Information

November 26, 1952

Jack Gerard, President
Owsley Canal Co.
Terreton, Idaho

Dear Jack,

Further answering you letter of November 22, and especially concerning the Board of Directors, Since there was no quorum at your annual stockholders' meeting, you naturally could not elect directors.

The two directors whose terms have just expired will hold over until their successors are elected and qualified. You will therefore go on just as before the meeting.

You ask about proceedings at the annual stockholders' meeting of next year. On that occasion if the terms of the office of the three other directors have expired, the stockholders should then elect an entire new board, electing two directors for two years, and the other three for three year terms so as to carry out the intent of the by-laws, that the terms of not more than two directors should expire in any one year.

Very truly yours,
Edwin Snow, Attorney

ES:bw

Dubois, Idaho, November 6, 1952

The Owsley Canal Co.
Terreton, Idaho

Gentlemen:

Requested by Mr. Fred Jemmett today was the amount of water pumped during 1952 up to November 1st.

Following you will find statements of amounts:

Normal Lake Water.....36,185 acre feet

Well Water, North Lake

and at Lloyd Bybees.....14,827 acre feet

TOTAL:51,012 acre feet

~~This does not include the small amount pumped since November 1.~~
but this will be included in the allotment sheet which will be
made up as soon as the irrigation shut down takes place.

Very truly,
Elvin W. Henninger
Watermaster, Water District #66

Date 3/22/00 sig. D. Coulter

Claim Mud Lake Storage

Doc Source Garni Soderquist

Mud Lake Water Users

Implies separate
well balance is
allotment sheet?
Implies carry-over
credit?

OVERVIEW OF 1987 MINUTES

OFFICERS: Jack Gerard, President
Vargal Johnson, Vice-President
Betty Jemmett Secretary

DIRECTORS: Bill Simmons
Bert Bent
Roy Shuldberg

MANAGER: Bill Jemmett

JANUARY:

7th: a well for Co. and surrounding buildings with five interested parties: Merrill Jemmett, Barkedale, Farm Bureau, Oweley Canal, and Hart and Holm; Bank unable to do loan immediately -- some concern over interest; W.F. Jackett suggests using Bybee Wells to build up lake level; generator for pumps from Rossiter; another notice to those owing money before turning over to Small Claims Court.

11: a letter from Wegener and Daly Investment Corporation

16th: H.R. Harn, Insurance Agent there to explain loan; also bids on pick up.

24th: purpose of this meeting was to establish maximum amount needed for loan.

FEBRUARY:

4th: well and pump surrounding houses; some discussion on loan

5th: Fluice Cope recommended some changes in wells at North Lake

7th: continuation of meeting of 2-5-57: Purpose of meeting to discuss which pumps to buy

20th: continuation of meeting of 2-7-57: discussed invitation to bid on pumps; specs also discussed.

SPECIAL RESOLUTION CONCERNING LOAN....

MARCH:

2nd: pump bids

4th: Rogers Brothers bid accepted; nine new pumps to be installed; Doris L. Gerard new assistant secretary; assessments to be raised to \$4 per share.

APRIL:

1st: report from H.R. Harn; Osborne headgate; protest from R. Brady on raise in assessment; water level .93' lower than April of 1956.

Date 3/22/00 sig. R. Coutor

Claim Mud Lake Storage

Doc Source Garth Soderquist

Mud Lake Water Users

REGULAR MEETING OF THE BOARD OF DIRECTORS
JANUARY 7, 1957

January 1957

Those present were: Jack Gerard, Vargal Johnson, Bill Simmons, Roy Shuldberg, and Bert Sant, Absentees.

Minutes were read by the secretary. Roy Shuldberg motioned that they be accepted as read. Vargal Johnson seconded the motion. Motion carried.

A well for the Owsley Canal Co. and the surrounding buildings was discussed. The five interested parties are: Merrill Jemmett, Varksdale, Farm Bureau, Owsley Canal, and Hart and Holme. Vargal Johnson motioned that a contract be made up and the above ask to sign before drilling started and if signed by five parties for the Owsley Canal Co. to arrange for Fluce cope to begin drilling. Roy Shuldberg seconded the motion -- carried.

Loan was discussed. The Bank couldn't loan immediately. Other means of borrowing were discussed.

Vargal Johnson motioned that the money be borrowed from the Bank, and then if another loan at cheaper rates can be arranged to get it and pay off the Bank loan. Board favored this motion.

~~Frank Jackett asked about starting the Bybee Wells to build up the lake level and all of the lake users on the creek pump their wells. Vargal Johnson asked that the matter go on for a month before deciding and find out if we can legally begin this early to pump there and at North Lake.~~

Rossiter has a generator to put on the pumps to insure use if an exciter goes out. Bill Jemmett was asked to find out price by next meeting.

Vargal Johnson motioned that one more notice be sent to those owing money to the Canal Co. and state on the notices that they are going to be put into Small Claims Court. Bill Simmons seconded the motion -- motion carried.

Vargal Johnson motioned that Bill Jemmett order the pump parts needed. Roy Shuldberg seconded the motion -- motion carried.

Roy Shuldberg motioned the bills to be paid as read by the secretary as soon as money is available. Bert Sant seconded the motion -- motion carried.

Roy Shuldberg motioned meeting be adjourned. Vargal Johnson seconded the motion -- motion carried.

Betty Jemmett, Secretary

could be interpreted that practice was established only goes from January onwards -

CHC 3/2/60
Claim Mud Lake Storage
Doc Source ~~Water~~ / Gary
S. Bergquist and Lake Water Users

Supp 55/plate 6-6-60 -moss
Bentonite-widening 12-5-60
Rocky Knob Filed 12-14-60

4

REGULAR MEETING OF THE BOARD OF DIRECTORS
MARCH 7, 1962

Those present were: Jack Gerard, Vurgal Johnson, Barney Staten, Ivan Staten, and Bill Simmons, Directors. Vern Pincock and Henry Martin, stockholders.

Kay Pincock ask about using water that returns down the Camstock ditch to the second owlesey to irrigate his ground on his NorthWest corner of ground. He would lift this water out of this waste ditch. The Board suggested that Kay dam off the culvert and take the water out on the West side of the road for this year and if satisfactory another year possible fix a gate on the east side of the road to hold up this water for pumping. Barney motioned that Kay be allowed to put in this lift pump for this year and further arrangements to be made after this trial period. Jack Gerard seconded the motion. Motion carried.

Minutes of the last meeting were read by the secretary.

Vurgal Johnson read the letter from Wayne Allen in regard to North Lake survey and the letter stated that they possibly wouldn't be able to do any survey work this year herefor the Canal Co. due to limited funds and time.

Jack Gerard and Barney Staten reported on the experiments they had done with SS-13 and the effects of freezing upon same. Jack stated that after freezing it seems to loose its effectiveness Mr. Cook thought. Barney stated that after his experiment thawed out that it held good again.

Mr. Henry Martin stated that he things pumps should be put on the levee walls to pump more water into Camas Creek. He suggested even using the Hutton system to get this water down here. The others on Camas Creek use the water we pump he stated without running their pumps. He also stated that we have the right to remove beaver dams anywhere within our canal or Camas Creek. He said we have the right to clean Camas Creek right to the head of the creek and even into the forest if necessary. He recommended Pat Perry, Twin Falls, or Bill Holden, Idaho falls as a lawyer on water rights and associated matters. He stressed our protecting our water rights by lawsuits if necessary even. He said to go ahead and do the work and let somebody sue us. Mr. Martin ask if he would be allowed to move water from Merritt Owsley's ground to his ground on the south side if he purchased it from Merritt. Jack Gerard motioned that Henry be allowed to do this provided he didn't expect the Owsley Canal Co. to foot any expense for delivery of this additional water. Bill Simmons second the motion. Motion carried.

June 3/22/00 sig. D. Carter

Claim Mud Lake Storage
Doc Source Center Soderquist
Mud Lake Water Users

Bentonite 1-2-61
Abandoned wells North Lake mar 61

5

OVERVIEW OF THE 1961 MINUTES

OFFICERS: JACK GERARD, PRESIDENT
BILL SIMMONS, VICE PRESIDENT
BETTY JEMMETT, SECRETARY

DIRECTORS: CARLEY STATEN
IVAN STATEN
GUY DISKIN

MANAGER: BILL JEMMETT

JANUARY:

2ND: meeting on bentonite reported -- decided clay would be a better sealer for North Lake; our claim on bentonite is named "Rocky Knob", filed 12-14-60; Workman's Compensation for Directors; church's damaged hay.

FEBRUARY:

7TH: O.E. Peterson's sub pump bill; Mike Hathaway requests use of dragline; Staten gate.

APRIL:

3RD: transport and Chastains; Mitchell's work on the canal; power failure, Bloem to talk to P.U.C.; report on pumps.

MAY:

1ST: Louis Anderson transfer of seventeen shares; Kay Pincock request 150 inches of steady water for irrigating machine; Karl Shuldberg to check on Vern Pincock's actual use of forty shares.

JUNE:

5TH: ~~Barter of the Dept. of Reclamation told Don Shenton and Jack Gerard that the water master should give Owsley Canal Co. credit for water pumped from wells not mentioned in the decree before May 1, until someone proves different.~~

JUNE:

30TH: \$1,200 insurance on dragline; Miller from David Place asks for permission to pump sub out of the borrow pit; pump and well on old rock ditch; single-phase protective devices for North Lake wells; motion to get news sub pump; request for buying lumber ahead of time for gates so that it can be treaded; assessment on bentonite claim.

AUGUST:

7TH: single-phase devices not to be used; Bill Yearsley's lease; loss at North Lake and sealing; report on Camas Creek; Cecil Allen checkgate on Henry Martin's place -- refers back to agreement; proposal by D.F. Edwards; pump efficiency.

date 3/22/00 sig B. Linton

Claim Mud Lake Storage
Doc Source Gerth Swierquist
Mud Lake Water Claims

REGULAR MEETING OF THE BOARD OF DIRECTORS

June 1961

Those present were: Jay Furness, Bill Emerson, Barney Staten, and Bill Simmons.

Ivan Staten motioned that the minutes of the last meeting be approved as read, the secretary, Ivan Staten, seconded the motion -- motion carried.

Jack Gerard reported on his and Don Shanton's trip to Boise to see the Department of Reclamation. They secured copies of letters and pictures which had been sent to the Dept. of Reclamation regarding the Camas Creek work. There was a discussion about the water coming down Camas Creek and the pumping being conducted at Rays Lake which keeps water from reaching Mud Lake. ~~Mr. Carter of the Department of Reclamation in Boise stated that the watermaster should give us credit for water pumped from any wells not mentioned in the decree before May into the lake until someone proves otherwise.~~

The water charts as prepared by the watermaster were discussed and read.

The secretary was instructed to call Blaine McKinlay and Jay Furness and ask them if they want us to moss now on their canal.

Ditchrider problems were discussed.

The drain from the Comstock into the second Owsley was discussed. When the lake is high the water won't drain. It was agreed that Peterson could put on a new flapper gate to control this water from running west through this drain pipe if he wished. Guy Miskin motioned that the Canal Co. put a flapper gate here that seals completely. Ivan Staten seconded the motion. Motion carried.

The bills were read by the secretary. Barney Staten motioned that they be paid as read. Bill Simmons seconded the motion -- carried.

Bill Simmons motioned that the meeting adjourn. Barney Staten seconded the motion -- carried.

Betty Jemmett, Secretary

Date 3/22/00 sig. B. Coulton

Claim Mud Lake Storage
Doc Source Garth Soderquist
Mud Lake Water Users

OWSLEY CANAL CO. FAX COVER SHEET

PHONE(208)663-4359

FAX(208)663-4369

PAGES INCLUDING
COVER SHEET (4)

FAX#
208-525-7177

ATT: Mr. Harold Jones

COMPANY Mud Lake Water Users, Inc

From: Keith Soderquist

COMMENTS:

The following information may be of further interest
in pre-season pumping during years 1963 - 1986

Sincerely,
Keith

Claim Mud Lake Storage
Doc Source supplied by
claimant A31-11339
Date 3/22/00 Sig. B. Conlon

Page 3

Wednesday, March 20, 1963

79th Day—286 days to follow

☒	CLEAR
☐	CLOUDY
☐	RAIN
☐	SNOW

~~58522~~

58520

102

Pick up.

Mud Lake
to start Pumps

L.H. 5.38

Pre season pumping 1963
J.S.

Claim Mud Lake StorageDoc Source Claimant supplieddocument in A31-11339Date 3/22/00 Sig. B. Coulter

The Season - (MAR-April)
Early Pumping Flows to MUD LAKE

1973-1977 No early Season Pumping Required.

1978 12,400 A.F. April

1979 17,800 A.F. MARCH

1980 21,800 A.F. MARCH + April (5,000 m)
(12,100 A)

1981 9,500 A.F. March.

1982 8,100 A.F. March > (10,800 total)

1982 2,700 A.F. May > (early 70)

1983-1986 No Early Pumping Required.

Claim Mud Lake Storage

Doc Source Supplied by claimant -

File A31-11339

Date 3/22/00 Sig B. Condon

page H

FEB-18-15 10:55 AM OMSLEY CANAL

		5
North Lake pumps started March 20	1963	Main Plant pumps
Water level on March 14 - 4' 2"		Started May 6
		Stopped Nov. 15
Stopped pumps April		
Water level on this date - 12' 6"		Bybes Well pumps
		Started May 27
North Lake pumps started May 24		Stopped June 15
Water level - 6' 10"		Started July 2
Stopped pumps June 11		Stopped Sept. 19
Water level - 15' 2"		
	1964	Main Plant pumps
North Lake pumps started July 2		Started May 14
Water level - 9' 3"		Stopped
Stopped pumps Sept. 17		
Water level - 25' 6"		North Lake Pumps
		Started May 24 Water level 4' 4"
October 11 water level - 16' 6"		Stopped June 19
		Started July 6 Water level 3' 1"
North Lake pumps started Oct. 28		Stopped Sep. 25 Water level 25' 4"
Stopped pumps Oct. 31		
		Bybes Pumps

 Claim Mud Lake Storage
 Doc Source Supplied by
Chairman - AGI-11339
 Date 3/22/00 Sig. B. Conlan

6634369

P. 04

MUD LAKE WATER USERS, INC.
FAX COVER SHEET

PHONE(208)663-4359

FAX(208)663-4369

PAGES INCLUDING _____
COVER SHEET ()

FAX#
(208) 525- 7177

ATT: HAROLD JONES

COMPANY IDWR

From: GARTH SODERQUIST

COMMENTS:

Regular Meeting of the Board of directors June 5, 1961
indicate that pre-season pumping was done before June 5, 1961.
I became a director in 1972 and know that pre-season pumping
had been done for some time before that

Sincerely,
Garth Soderquist

3/22/00 S. Conter

Claim Mud Lake Storage
Doc Source Supplied by
claimant - A31-11337

Page 3

SPECIAL MEETING OF THE BOARD OF DIRECTORS

APRIL 9, 1979

Owsley Canal Company

Those present were: Nile Wilding, Tom Hodgson, Walt Speelman, Merlin Byrne, and Gerald Messerli. Also present were Karl Shuldberg, Manager and Robert Saunders, Secretary.

Also present were many individuals from the surrounding Canal Companies. Myron Evans from Utah Power and Light Co. was there to explain the new program from Utah Power and Light Co. We would need to shut off one fifth of the pumps each day to reduce the load during the day. He expressed concern of the effect of this program on the flood irrigators. The sprinkler people could benefit from such a program. If we do not want to comply with the voluntary shut off this year we need to apply for a waiver. There would be no increase in the power rate for noncompliance.

Mr. Evans and the other irrigators left at this point.

Dobson Stewart wants permission to move three power foles from the sub ditch to the side of the road. Walt Speelman moved and Gerald Messerli seconded to let them do it if Nile or someone checked the site to make sure that it did not hurt the Canal Company.

Don Shenton said the lake is about a foot below the level last year and the water shed is less than normal. He recommends that we begin pumping about the middle of April. Merlin Byrne moved with a second from Walt Speelman to turn the North Lake pumps on April 16, 1979 -- carried.

Gerald Messerli moved and Walt Speelman seconded to sign the waiver from the Power Co. Tom Hodgson abstained from voting.

With no other business, Walt Speelman moved that the meeting be adjourned.

Robert Saunders
Secretary

Date 3/22/00 Sig. B. Contor

Claim Mud Lake Storage

Doc Source supplied by claimant

A31-11339

Page 4

A SPECIAL MEETING OF THE BOARD OF DIRECTORS

APRIL 21, 1978 *Owsley Canal Company*

Those present were: Don Shenton, Dennis Green, Rulon Yearsley, Art Dobson, Nile Wilding, Tom Hodgson, Merlin Byrne

Don presented the lake gauge figures and indicated that we would be 8,752 acre ft. short of a full lake if we did not begin pumping.

Art Dobson moved that we begin pumping April 24, 1978, this was seconded by Rulon Yearsley -- motion carried.

Merlin Byrne will get witnesses to sign a statement that our desert right was used in the summer of 1977. He will also supply a copy to Don.

Don will make the bills out for pro-rating the cost of the gates on the Bybec check. Owsley will authorize Don to send a cashier's check to California to pay for the gates and the other water users will pay Owsley.

Ron Summers will be moving down to the house April 23, 1978.

Merlin Byrne moved that Bryon Jemmett clean the trailer or if we hired someone to clean it, the cost would be deducted from his salary, also that the furniture be accounted for. This was seconded by Tom -- carried.

Meeting was adjourned.

Tom Hodgson took the minutes of this meeting.

Date 3/22/00 Sig. B. Contor

Claim Mud Lake Storage
Doc Source Supplied by
Claimant - A31-11339

REGULAR MEETING OF THE BOARD OF DIRECTORS
JUNE 5, 1961

Those present were: Jack Gerard, Ivan Staten, Bill Simmons, Barney Staten, and Guy Mickin.

Ivan Staten motioned that the minutes of the last meeting be approved as ready by the secretary. Ivan Staten seconded the motion - motion carried.

Jack Gerard reported on his and Don Shenton's trip to Boise to see the Department of Reclamation. They secured copies of letters and pictures which had been sent to the Dept. of Reclamation regarding the Camas Creek work. There was a discussion about the water coming down Camas Creek and the pumping being done out of Rays Lake which keeps water from reaching Mud Lake. Mr. Carter of the Department of Reclamation in Boise stated that the watermaster should give us credit for water pumped from any wells not mentioned in the decree before May into the lake until someone proves different.

The water charts as prepared by the watermaster were discussed and read.

The secretary was instructed to call Blaine McKinlay and Jay Purness and ask them if they want us to moss now on their canal.

Birthright problems were discussed.

The drain from the Coe stock into the second Owsley was discussed. When the lake is high the water won't drain. It was agreed that he should put on a new flapper gate to control this water from running west through this drain pipe if he wished. Guy Mickin motioned that the Canal Co. put a flapper gate here that seals completely. Ivan Staten seconded the motion. Motion carried.

The bills were read by the secretary. Barney Staten motioned that they be paid as read. Bill Simmons seconded the motion - carried.

Bill Simmons motioned that the meeting adjourn. Barney Staten seconded the motion - carried.

Betty Jemott, Secretary

Date 3/22/00 Sig. B. Carter

Claim Mud Lake Storage

Doc Source Supplied by

Claimant - A31-11339

PRE-IRRIGATION SEASON
PUMPING AGREEMENT

THIS AGREEMENT, made and entered into by and between the undersigned parties, each of whom is entitled by virtue of valid appropriated rights of record to divert and use certain of the waters of Mud Lake, all within the boundaries of Water District #31, in Jefferson County, State of Idaho, for irrigation purposes,

WITNESSETH:

WHEREAS, the undersigned water users and water user entities constitute all of the persons and parties who are entitled by law to divert water from Mud Lake and apply the same to beneficial use upon their lands or to distribute the same for the beneficial use upon the lands of their stockholders; and

WHEREAS, such rights to the use of the waters of Mud Lake have previously been described and awarded by courts of competent jurisdiction in the following decrees:

1. A decree entered in the District Court of the United States for the District of Idaho, Eastern Division, in the case of Ernest Sauve, plaintiff, v. W. H. Abbott, et al, Equity No. 635, by the Honorable Charles C. Cavanah, United States District Judge, on November 1, 1930.
2. A decree entered in the case of the Owsley Canal Company, plaintiff, v. Ernest Bauerle, et al, defendants, Civil No. 1739, in the Ninth Judicial District of the State of Idaho, in and for the County of Jefferson, by the Honorable C. J. Taylor, District Judge of said Court on the 14th day of October, 1940; and

WHEREAS, during many years, commencing about 1960, shortages in the supply of water available from Mud Lake have occurred as a result of insufficient natural flow from its various tributaries, including both natural surface streams and sources described and set forth in the above-referenced Sauve v.

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Abbott decree, and natural artesian flows from various wells as described and set forth in the above-referenced Owsley v. Bauerle decree; and

WHEREAS, during the years of such shortages, the water users and the watermaster of said Water District have developed the practice of causing the wells described in the Owsley v. Bauerle decree to be pumped prior to May 1, so as to augment the flows into Mud Lake in order to fill the lake and supply all of the rights to use of water therefrom; and

WHEREAS, such practice is the most practical method of insuring the filling of Mud Lake in the manner necessary to permit distribution of water in accordance with the maximum rights of the parties hereto; and

WHEREAS, the undersigned parties now desire to define in a formal manner, the details and terms of this Agreement as practice,

NOW, THEREFORE, for and in consideration of the mutual promises and conditions hereinafter set forth, the parties hereto agree as follows:

1. This Agreement shall become binding upon the execution hereof by all parties and shall extend through the end of the 1987 irrigation season, which is agreed to be November 1, 1987. This Agreement shall automatically renew on the same terms and conditions for successive five-year periods from November 1, 1987, and each five-year period thereafter, unless a party signatory to this Agreement or their successor in interest shall give written notice of election not to continue this Agreement to the watermaster of Water District #31 by October 1 of the year in which the five-year extension shall be scheduled for automatic renewal. All rights of parties under this Agreement shall thereupon terminate at the expiration of such five-year period.

2 - PRE-IRRIGATION SEASON
PUMPING AGREEMENT

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2. The duly elected watermaster of Water District #31 of the State of Idaho, shall administer this Agreement, but shall have no obligation other than to exercise his best judgment in the determinations, decisions and actions he is required to perform hereunder.

AFTER consultation with the Presidents of the ~~the~~ Canal Co's and IAD Water USER ASSOC.

3. At such time as said watermaster shall, prior to May 1 of any year, notify the parties hereto in writing, each agrees to commence pumping his or its respective wells at his or its own proper cost and expense, at such rates as said watermaster may from time to time request, and allow the water pumped therefrom to flow by the usual means into Mud Lake to the end that said lake may be filled, prior to May 1 of each year, to such maximum height on the United States geological survey gauge located on Mud Lake at the mouth of Camas Creek, as said watermaster may determine is warranted by existing conditions.

4. The watermaster shall keep accurate records of all amounts of water pumped from the wells of the parties hereto prior to May 1, pursuant to this Agreement, and shall record the same as a separate item on the record kept by him known as the "Mud Lake Allotment Sheet," under the heading "Well Water Balances." All such amounts pumped prior to May 1, after deducting therefrom the amount agreed upon herein as the proper amount for transmission and storage losses, shall be credited to the account of the individual or entity doing such pumping, and such individual or entity shall be entitled, during the irrigation season, in addition to all amounts which may naturally accrue and which he or it might be entitled under the existing decrees to divert and use, all or any portion of the amount shown on said "Mud Lake Allotment Sheet" as a credit. It is agreed that because of the difficulty in making measurements of actual transmission and storage losses prior to May 1, the watermaster

3 - PRE-IRRIGATION SEASON
PUMPING AGREEMENT

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shall deduct amounts determined by the watermaster to be necessary to compensate for transmission and storage losses. No credits for such amounts pumped shall be carried past November 1 of such year, whether or not all of the amount credited to any individual or entity was used during the irrigation season.

5. It is understood that said pre-irrigation season pumping shall be in lieu of any natural or artesian flows which may have occurred during the same period, and the parties hereto agree that each has a valid and existing right to engage in and continue the practice of pre-irrigation season pumping, as described herein, by virtue of the above-referenced court decrees, and having done so over a period of many years. No party claims any right other than or in addition to the rights set forth in said decrees and as further described herein, by virtue of this Agreement or other written or oral agreements made for the same or similar purposes in the past, or the actual practices in previous years. Each party hereto hereby releases each and every other party and the watermaster of and from any and all claims of every name, nature, and description, which may arise out of, or in the course of, the administration of or in compliance with this Agreement.

6. The provisions and stipulations hereof, shall inure to the benefit of, and shall be binding upon the heirs, executors, administrators, assigns or successors in interest of the parties hereto.

IN WITNESS WHEREOF, the parties have hereunto set their hands this 5 day of ^{MARCH} ~~February~~, 1982.

OWSLEY CANAL COMPANY

By: M. J. Wilding
Its President

4 - PRE-IRRIGATION SEASON
PUMPING AGREEMENT

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JACKETT CANAL COMPANY

By: Henry B. Zepf
Its Pres

LEVEL CANAL COMPANY

By: Werner Schmitt
Its Pres

HOLLEY WATER USERS, INC.

By: Carl R. Haggan pres
Its _____

DOBSEN-STEWART RANCHES, INC.

By: Arthur Lee
Its Manager

Jay T. Furness
JAY T. FURNESS

Joe B. Potter
JOE B. POTTER

LEVERE PARKS ESTATE

By: Blaine Park
Personal Representative

INDEPENDENT WATER USERS OF MUD LAKE, Inc.

By: Frank Siddoway Vice Pres

5 - PRE-IRRIGATION SEASON
PUMPING AGREEMENT

Date 3/22/00 sig. B. Contor

Claim Mud Lake Storage

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Supplied by Claimant

(14)

Water District #31

Box 33
Dubois, Idaho 83423
(208) 374-5230

Donald W. Shenton
Watermaster

ATTACHMENT TO, AND PART OF, PRE IRRIGATION SEASON PUMPING AGREEMENT

We the undersigned do hereby agree to pay our appropriate per cent cost of charges assessed by the actual billings of the following:

1. Power bill charges made to the sub pump owners of waters pumped and returned into Mud Lake due to high lake levels caused by pre season pumping.
2. Maintenance bills of above pumps for service, and parts to maintain said pumps.
3. The pumpers eligible for payment shall be Art Dobson, Jay Furness, and Blaine Park and Joe Marty.
4. All waters pumped, that are paid for by this agreement shall be credited to Mud Lake losses and evaporation and not for any individual or corporation credit.
5. Method of collection Pump owners shall pay said bills as charged. At the end of sub-pump season a copy of said bills with a copy of receipt of payment shall be presented to the Watermaster of Water Dist. #31, which in turn will be pro-rated and assessed by per cent as follows. The Watermaster would then return checks of proper amounts to pump owners.

Percent Break-down

	Acres	
Owsley Canal Co.	17,800	.6840
Jackett Canal Co.	2,821	.1084
Ind. Water Users	4,803	.1846
Holley Water Users	600	.0230
	26,024	1.0000

Owsley Canal Co.

By Mike Wilkins
Its Pres
Ind. Water Users

By Warren Schmitt
Its Pres

Jackett Canal Co.

By Shawn B. Zepher
Its Pres

Holly Water Users

By Carl R. Hoggan
Its Pres

Signed this 5 day of March 1982.

Date 3/22/00 Sig. B. Contor

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Motion picture camera film was used to observe the motion of the object during its fall.

Loan was discussed. The Bank couldn't loan immediately. Other means of borrowing were discussed.

Frank Jackett asked about starting the Bybee Wells to build up the lake level and all of the lake users on the creek pump their wells too. Vurgal Johnson asked that the matter go for a month before deciding and find out if we can legally begin this early to pump there and at North Lake.

Rossiter has a generator to put on the pumps to insure use if an exciter goes out. Bill Jammett was asked to find out price by next meeting.

Vurgal Johnson motioned that one more notice be sent to those owing money to the Canal Co. and state on the notices that they are going to be put into Small Claims Court. Bill Simmons seconded the motion -- motion carried.

Vurgal Johnson motioned that Bill Jemmett order the pump parts needed. Roy Shuldberg seconded the motion -- motion carried.

Roy Shuldberg motioned the bills to be paid as read by the secretary as soon as money is available. Bert Sant seconded the motion -- motion carried.

Roy Shuldberg motioned meeting be adjourned. Vurgal Johnson seconded the motion -- motion carried.

Betty Jennett, Secretary

OVERVIEW OF 1957 MINUTES

OFFICERS: Jack Gerard, President
 Vurgal Johnson, Vice-President
 Betty Jemmett Secretary

DIRECTORS: Bill Simmons
 Bert Sant
 Roy Shuldborg

MANAGER: Bill Jemmett

JANUARY:

7th: a well for Co. and surrounding buildings with five interested parties: Merrill Jemmett, Barksdale, Farm Bureau, Owsley Canal, and Hart and Holm; Bank unable to do loan immediately -- some concern over interest; W.F. Jackett suggests using Bybee Wells to build up lake level; generator for pumps from Rossiter; another notice to those owing money before turning over to Small Claims Court.

11: a letter from Wegener and Daly Investment Corporation

16th: H.R. Harn, Insurance Agent there to explain loan; also bids on pick up.

24th: purpose of this meeting was to establish maximum amount needed for loan.

FEBRUARY:

4th: well and pump surrounding houses; some discussion on loan

5th: Fluce Cope recommended some changes in wells at North Lake

7th: continuation of meeting of 2-5-57: Purpose of meeting to discuss which pumps to buy

20th: continuation of meeting of 2-7-57: discussed invitation to bid on pumps; specs also discussed.

SPECIAL RESOLUTION CONCERNING LOAN....

MARCH:

2nd: pump bids

4th: Rogers Brothers bid accepted; nine new pumps to be installed; Doris L. Gerard new assistant secretary; assessments to be raised to \$4 per share.

APRIL:

1st: report from H.R. Harn; Osborne headgate; protest from R. Brady on raise in assessment; water level .93' lower than April of 1956.

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A31-00159	A31-00162	A31-00163	A31-00166	A31-00168
A31-00169	A31-00184	A31-00185	A31-00185Z5	A31-00186
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A31-00237	A31-00263	A31-00327	A31-00328	A31-00329
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A31-02276	A31-02289	A31-02290	A31-02297	A31-02310
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31-4009

TO WHOM IT MAY CONCERN:

I, Donald W. Shenton, Watermaster of Water Dist. #31 (formerly Water Dist. #61) hereby testify to the following statements.

I am acquainted with Carl Lundholm, I know of his farming operations. I am very familiar with his irrigation works and lands irrigated.

I testify that he has used water for many years on the lands mentioned in his claim to a water right.

I testify that I as watermaster measured his well on numerous occasions and found his flow from this well to be mostly in excess of 6.0 c.f.s. The well I refer to is the well mentioned in application to a claim to a water right.

I testify that Carl Lundholm has exchanged water into and out of Mud Lake and Camas Creek, using Mud Lake for a storage reservoir for this well water for a number of years now, as is recorded in Water Masters Annual Report and allotment reports. This custom has been permitted as a right like most other Mud Lake users, using the same practice.

I feel Mr. Carl Lundholm is entitled to this claim to a water right as stated in his application of a claim to a water right.

Dated this 22 day of May, 1974.

Donald W. Shenton

Donald W. Shenton
Watermaster, Dist. #31

Claim Mud Lake Storage
Doc Source Claim file 31-4009

Date 3/22/00 Sig. B. Coulter

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RESOLUTIONS PERTAINING TO THE TIME AND MANNER OF COLLECTING
THE BUDGET AS ADOPTED AT THE ANNUAL MEETING OF THE WATER
USERS OF
WATER DISTRICT NO. 31

RESOLUTIONS

HIGH WATER AT MUD LAKE

Moved: Don Parker, seconded by: Jim Hagenbarth, passed

That the watermaster be authorized to divert of any high water and that such water be considered stored in the aquifer, with rights to the water being retained by the District. Diversion of said waters would be by diverting at the Lone Tree diversion site, and pumping through the diversion ditch at the end of Owsley Canal.

Be it further resolved that the advisory board seek legal advise on filing a use right or amending an existing claim to ensure the recording of the historical use of the diversion of Camas Creek surface flow into the aquifer at the Lone Tree Diversion. This diversion practice has occurred for years an is well documented in the Swave Decree and other District #31 records.

COLLECTION OF WATER ASSESSMENTS

Moved: Keith Shuldberg, seconded by: Gerald Messerli, passed

That no ditch, canal company, or other water user shall have the right to demand and receive water, and the watermaster shall not deliver such water, until full payment is made. Said payment becomes due April 1, and becomes delinquent April 15, and if not paid by April 15, shall bear interest from the date of April 1, until paid at the rate of 8% per annum. That government agencies be exempt from the above provisions to the extent necessary for them to comply with payments according to the provisions of Federal law, and that the Watermaster of District #31, be authorized to enter into contract with said agencies of the United States for payment of assessment as provided in the budget.

MUD LAKE WATER USERS

Moved: Don Packer, seconded by: Willy Schmitt, passed

That any water user that completes the water year with a negative balance on the Mud Lake balance sheet shall have

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Department of Water Resources
Eastern Region

Claim *Mud Lake Storage*
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that negative balance carried forward to the April draft column on the balance sheet the following year, and said negative balance shall be charged to the Mud Lake allotment of said following year, as set forth in part 5, paragraph 4 of the Mud Lake Decree.

DISTRICT BILLINGS AND COLLECTIONS

Moved: Dave Hagenbarth, seconded by: Keith Shuldberg, passed

Be it resolved that the Clark County Auditor make up a roll of all Water District #31 users to include all Jefferson County users. Be it further resolved that the Clark County Treasurer mail out said billings to make collections of all Water District #31 water users to include all Jefferson County Water Users in said Water District #31 boundaries. Be it further resolved that the Clark County Treasurer also make all payments and disbursements owed by Water District #31, which are presented through the proper claims procedures which are common to other Clark County practices.

WELL WATER MEASUREMENTS

Moved: Don Parker, seconded by: Pete McGarry

Be it also resolved that the following canal companies be allowed to contract with Water District #31 to measure and record and report the well water flow of the Montevue Canal Company, the Jefferson Irrigation Company, and the Producers Irrigation.

Be it also resolved that the Watermaster and his Deputies accomplish the required measurements and recording and reporting of the above named companies.

Be it also resolved that monies paid for these services be paid from a separate account deposited in a bank account under a subterranean heading. The above canal companies be charged a fee of \$26.00 per second foot (c.f.s.) for the above services. The monies paid out for these services shall be drawn only if the check is signed by the chairman and the secretary of Water District #31. We order that the water district is out no costs from any source of the regular water district funds and that recording and reporting be separate from the regular water district water reports and budgets.

Claim Mud Lake Storage

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3/10/1998
Date 3/23/00 Sig. B. Conter

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