600-34-2005



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street, P.O. Box 83720, Boise, ID 83720-0098 Phone: (208) 287-4800 Fax: (208) 287-6700 Web Site: www.idwr.idaho.gov.

> DIRK KEMPTHORNE Governor KARL J. DREHER Director

July 20, 2005

BOB DUKE WATERMASTER, WATER DISTRICT NO. 34 PO BOX 53 MACKAY, ID 83251-0053

Re: Mitigation Credit For Ground Water Recharge Operations

Bob,

IDWR has reviewed the data submitted in your letter of June 9, 2005, and determined that only a portion of the total reported recharge to the ground water system qualifies as credit towards mitigation. Specifically, your letter reports the total recharge volume as 9,212 acre-feet for the period from May 9 through June 5, 2005. IDWR calculated that from May 22 through June 5, 1,243 acre-feet is the total volume that should be credited as the portion of the total recharge that will result in an offset to the depletions from ground water pumping in the Big Lost River.

IDWR derived the lower volume by multiplying the total recharge volume by the thirteen percent ground water diversion depletion rate in Rule 50.04.c. This approach is consistent with IDWR's explanation at last winter's public meetings of how recharge mitigation credit would be allowed.

IDWR understands that your volume of 9,212 acre-feet is calculated by assuming that 30 percent of all heading deliveries, and tributary flows becomes ground water recharge. IDWR attempted to verify the 30 percent value using a different approach. IDWR calculated the recharge from the canal systems below the reservoir by subtracting farm headgate deliveries from the total canal headings, and assuming the difference is all recharge to the aquifer. Using this method, IDWR calculated an average loss rate of about 40 percent for the canals below the reservoir. This rate is probably high considering that some of the water delivered to the canals likely returned to the Big Lost River. Because no farm delivery information is available for diversions above the reservoir, a seepage loss of 30 percent is used. This 30 percent value may be revised based on additional information, specifically earlier seepage studies done on the Upper Fish Hatchery Canal. A 30 percent seepage loss is also used for calculating recharge from tributary sources. A total recharge volume of about 9,561 acre-feet is calculated from all sources, and the resulting component allowed as mitigation credit is 1,243 acre-feet (9,561 x 0.13).

IDWR used procedures in the Basin 34 Recharge Plan of Operation for Permits 34-7571 and 34-7573 to determine dates when recharge was permissible. The beginning date for allowing recharge above the reservoir and for sources from tributaries is May 25, 2005. The May 25 date is acceptable because that is the date that the Mackay Reservoir filled. The recharge Plan of Operation does not allow diversion of water to recharge upstream of the Mackay Reservoir if such diversion of water would interfere with filling of storage water rights. For below the reservoir, the date for allowing recharge to start is May 22, 2005. This is the date that flows at

Mr. Bob Duke July 20, 2005 Page 2

the 2B gage exceeded irrigation deliveries by over 300 cfs, as is required in ¶3, page 3 of the Plan of Operation. In IDWR's calculations, no credit is given for flow occurring in natural channels where direct control and measurement of water is not possible. This includes the North Antelope, Antelope Back Channel, and Pass Creek.

IDWR is allowing mitigation credit from recharge for several of the diversion sites that were estimated rather than measured. Specifically, the UCC Blaine Diversion and the Antelope Diversion to the UCC Canal are reported as estimates. The recharge permits specifically require measurement of all recharge diversions. For 2005, IDWR will allow mitigation credit for these two sites by assuming a 30 percent seepage loss, and multiplying these recharge values by the thirteen percent ground water diversion depletion rate in Rule 50.04.c. IDWR will not recognize mitigation credit from recharge activities in subsequent years unless the recharge diversions are measured.

IDWR also calculated the recharge credit for mitigation through June 26 using the data submitted by the water district. The calculated cumulative volume for mitigation from recharge from May 22 through June 26 is 2,560 acre-feet. The attached spreadsheet printout shows the preliminary IDWR recharge calculations. It is anticipated that additions and revisions to these calculations will be necessary after consultation with the water district. The additional recharge data you faxed on July 13 is also being reviewed by IDWR staff and will be incorporated into the calculations.

Since there is generally a lag time for the recharge water to reach the river and become available for use, IDWR is assuming that all mitigation from recharge is to be credited to the second semester period (July 23 through October 15).

If you have any questions or want to discuss this issue further, please call me directly at 208-287-4957.

Sincerely,

Steve Burrell

Water Distribution Section

Attachments /1/

pc: WD 34 2005 file

IDWR Eastern Region – Idaho Falls

Mitchell Sorenson – Arco (w/o attch)

Loy Pehrson – Mackay (w/o attch)

Big Lost River Irrigation District – PO Box 205, Mackay 83251 (w/o attch)

Richard Reynolds – 2800 N 3233 West, Arco 83213 (w/o attch)

Darrell McDonald – PO Box 102, Arco 83213-0102 (w/o attch)

OberstonName :	5/9/2000 5/10/2	2005 Britizoisi :	V12/2005 5/13/20	105 S/14/2005 S/1	5/2005 5/16/200	K 5/17/2006 E/	18/2005 5/19/2	005 5/20/2005	5/21/2005 5/22	2005 5/23/2005	5/24/2005 5/2	15/2065 5/20/20	OS 8/27/2005 (5/25/2005 5/20	(2005 5/30/20	005 5/31/2005	8/1/2005	e/2/2006 6/3/2	005 642005	1 605/2005 N	90/2005 67/2	5005 6/P/2009	6/9/2005 6/1	100008 8:110	and allowers	All Strong B	/14/2005 B/15/2	. I see a									Sun 5/25+ Sun 5/	Surn 5/22-6/5 25- 6/16-6/20	Sum 5/22- 6/5 6/16 5	uro 5/22 - Sum 5/22	Som 3/25 - Sum 5/25 - Rect 6/5 (cts) (u5 (ct) is	Rept lame
BIG LOST AT HOWELL GAGE KENT BRADSHAW	503 2 8	552 500 2 2 8 6	. 501 2 8	4 4 635 477 2 2 8 8	16 1 619 127 4 6.4 6	4 4.	4 .	16 16 540 2850 4 4 5.4 6.4	76 2440 4 6.4	9 1 1980 2196 12 12 34 14	3 B 2140 12 14	54	12 . 25. 14 14	1770 25 14.	25 1 14	9 9 750 1596 11.4 11.4 12 12	2 12	12	9 1090 95 11.4 11 12 5		56	6.6 5.6 897 829 4.2 4.2 9.2 8.2	5.6 741 4.2	5.6 678 4.2	5.6 5.6 642 526 4.2 4.2 8.2 8.2	5 615	700 1	5 1060 1 2	Đ 8	20 17	20	009 6/21/2055 5 5 7 7	12	223/2005 6-24 11,4 22	22 2	2 22	6/28 (clis): 38/26 (si 405.2 863.7 431.4 855 G		(-6/26 (6N) O	WS (eds) ONS (ad)	176.6 354,6498	78
BITON Anderson Theister Hunler Cálch Johnson/Hermaker	1.70 0:	18, 14, 1, 1, 1,78 1,76 0, 0	14 1 1.76 1 0	14 56 1 1 75 1.76 0 0	16 1 7.4 7 2.4 2 3.6 3	4 24 6 3,6	2,4 3.0	8 8 7.4 7.4 2.4 2.4 3.6 3.6	7.4 2.4 3.6	12. 12 3. 2 6. 6	12 3 6 0.0	3 6	12 0.6 3 3 6 6 0.6 0.08	9.6 3 6 6.08	3 6	5.6 6.0 1.4 1.6 5.6 5.6 2.6 2.6	1.4 5.6	5.6 1.4 5.6 2.6	5.6 to 1.4 f. 5.6 b. 2.6 2.	4, 1.4 5 5.6	2.6	4.2 4.2 2.6 2.6 3.2 3.2	2.6	4.2 2.6	4.2 4.2 2.6 2.6 3.2 3.2	0.5	Ð.	0.6 1 5.6 5 4.6 4	14 14 6 5.6 4 4.6	14 14 5.6 4.4 7.5	14 5.6	13.5 13.5 4.4 4.4 3 3 2.6 2.6 3.4 3.4	10 4 3.4	18 16 12 11	18 1 16 1 12 1 11 5	6 16 2 12 1 11	262 510 129 265.8 166.2 320.6	677 715 577			154 305,459 92 182,482 24.8 49,1608 99.2 137,2582 20,04 39,74934	
NESEN Bredshaw 2 GHELY LONGHURST	6 48 20	44 44 6 8 48 48 20 20	6 48 20	44 44 0 6 48 48 20 20	40 4 8.2 5 49 4 16 1	6 16	69.6 76	62 62 50 62 16 6	8	12 12 12 12 62 62 40 40		28 12 74.0 74	25 20, 12, 12,	20 12 75 35	0.06 20 12 75	20 20 12 12 75 75	0 20	20 12 75 56	20 2 12 1 75 7 36 3	0 20 2 12 5 75	50.4 5 80	50.4 50.4 5 5 80 80	50.4 5 80	50.4 5 5. 50	50.4 50.4 5 5 50 80	20 B 04.0	20 8 64,6	7.5 7, 63.2 6 8 2 76.4 7	30 66 20 20 76 76	66 20 76	66 26 76	39.2 39.2 11. 11 60 60	54 17 73	14 60 20 78	14 t 60 6 20 2 78 7	0 50 0 20 5 78	138.74 275.194 1348.4 2674.55 462 707.3 2473.8 4906.76	514 367 B23				2225
Upper Fish Matchery Canal ABV RES GRAVEL PIT OTHER DITCHES SUM	6	8 8	e	ę á	9.2 9.	.2. 9.2	9.2	9.2 3.2 13	3.2 14	9.2 p.3 14 14	0.2 14	9.2 9	9.2 10.8 14 14	10.9 14	10.8 1	10.8 10.8 14 14	108		10.6 10. 14 1		9.2 9.2 15	22] 22 9.2 9.2 15' 15	9.2 15	9.2 15	22 22 0.2 9.2 15 0	9.2 0	9.2 0	23 2 9.2 9. 15 t	28 28 .2 9.2 13 13	28 9,2 13		24: 24 9.2 9.2 13 13	9.2 13	34 9.2	34. 3 9.2 9.	4 34 2 9.2	970 1923.9 319.6 633.9 365 723.9	95 266			447 888.8245 128.4 250.7144	3534 1493 561 3530
SUM ALLOWED RECHARGE (13%-36% ALLOWED RECHARGE (13%-36% ALLOWED RECHARGE TOTA). 3		 				:	:				:		+ 1				:				÷	1.		:								. :					902 (cample)			5118,3027 186,54056 (casa	ls)
MACKAY DAM SHARP SHARP DEL	27690 21 0	7730 27850 0 3.94 3.94	27860 275 4 2	00 27930 06 2.96 4 4	27970 7801 4.64	0 28390 4 4	20180 30 4	110 32040 4 1.5 4 1.5	35390 3	8140 403±0 0 2.22		44370 4520 2.22 6.1 2 4.1	60 45370 66 16.04 08 15.8	45460 4 19.68 15.8	15670 457 19.65 19 15.8 1	720 45480 0.68 20.3 15.8 15.8	45200 26 3 15 8	45160 4 20.3 15.8	4840 4454 20.3 20. 15,8 15	0 44290 3 20 3 8 15.B	44360 44 20.3 15.8	4410 44410 14.6 14.6 14.6 14.6	44420 16,32	44300 44 16.32 16	160 43900 5.32 14,6 14,6 14,6	43690 14.6 9.7	435B0 43 10.34 10 9.7	5250 4315 0.34 10.3 9.7 9	50 43080 54 16.32 .7 9.7		43450 43 16.92 16	150 42770 592 16.92	42880 16.62	43620 4	14100 44241 16.92 16.93		94.5176 639.193	075 (gravel pil) 228	17*	210	49 577495 (gravo 230.11505	pit)
SHARP RCHG BIG LOST BI, W MACKAY RES SWAUGER SWAUGER DEL	140 : 0	120 103 0 3.52 3.2	0 -1 102 1 3.52 3 3.2	04 -1.04 01 98 32 3.28 3.2 3.2	96 10 3.28 31 3.2 31	0 0 0 100 2 3.12 2 3.12	0 100 1	6 0 103 109 112 3	9 239 1.4	0 0 22 369 433 1.4 9.12	0.22 503 17.52	762 10 17.52 17	58: 0.24 20 1060 52 20	3.88 5090 20	3 98 3. 1230 13	1.80 4.5 320 1240	1180 3032	4.5 1110	4.5 4. 952 80 0.32 30.3 2.68 23.8	5 4.5 0 R84	645	D: G 638: 619	1.72 602 26.66	1.72 S	5.72 0 546 520	4.9	D 64 C	0.64 0.6- 560	4 F 62	7.22	7 22 7	92 16.92 9.7 9.7 1.22 7.22	6 9.2	7.22	16.92 16.9: 9.7: 9.7 7.22 7.2: 30.32: 36.9	7: 9.7 2 7.22		274.78 114.06	224	108 33 42 8	3 4	556
SWAUGER RCHG EARLINGTON EARLINGTON DE		0 32 5.62 2	0.32 G	37 0.08 62 11.62 4 4	0.0B 11.62	4, 3.92 G G G G 4 4	<u>G</u>	0 0 0 0 0 0 0.1 7.8	0	14 8.2 0 0.92 0 0 91 4.7	17.46 0.06 0.	17 46 17 0.05 0.0 0 47 9	48 19.54 06 0.10 0 21 0 12.1	20.08 -0.08 25 12.1	25	9.3 29.3 9.06 21.88 1.22 7.42 25 44 9.0 28.6	44	4 44 36	3.68 23.8 6.44 6.4 36 3 9.34 29.3	4 544 6 36	36	25.7 26.7 25.68 19.38 5.02 7.32 36 36 30.8 30.8	7 28	26.56 26 19.36 19 7.28 7 36 30.14 30	9.38 21.68 7.28 0.26 36 26	1 06	22.88 22	5.34 25 3- 2.68 22 83 2.46 2.41 20 21	8 22.89 6 2.46 0 32	30.32 22.68 7.44	357	32 30.32 88 22.88 44 7.44 35 41	8 94 41	22.88 6.7	22.86 22.88 7.44 10.61	8. 22.88 2. 12.62 1 55		519.02 135.94 754.3	1,069 270 1,496	330 67 287 57 52 10 328 65	3	369
DARLINGTON RCHS BURNETT BURNETT DEL BURNETT RCHG SUTTER		3.62	76 7	.62 7.62	7.62	4 12	5.7 13	1.34 19.6	16.3	18.3 22.36 22: 21 0 8.8 22 12.2	18 72 21 12.2	18 72 9 - 51 10.4 20 0 31 8 53 0	46 27.46 74 84 04 23.6	96	24 OR 21		23 46	25 42 Z	5.42 25 1 127 12 56.4 56 70.6 701	2 <u>24.52</u> 7 126 4 56.4	24.52 11 126 56.4 1	13.62 13.62 100 106 58.9 58.1	14 18 107 58.1	14.85 14 GB ≤51 5	98 98 158 58.1	98	95° 57	102 10 57 59.4	1 118 8 58 B	118 55.8	519 519	.68 35.98 .18 11.28 119 119 3.6 72.8	11 28	120	39.28 33.76 11.50 23.04 138 135 74.92 75	21.68		527.38 442.6 2679 1279.78	6.314	271 53 348 68 1.341 2,66 530 1,65	e	130
SUTTER DEL SUTTER ROHG SUTTER ROHG BKG LOST AT LESLE										14						85 65 3 3 55 5.5	B 5 3 5.5	55 3 55	70.6 761 0.5 6.1 55 51	6 69.6 5 8 3 1 5 5	5.9 3 2.0	41.1 47.0 5.9 5.9 3 3 2.9 2.9	48.9 5.9 3 2.9	39.9 1 5.9 3 2.9	19 9 39 9 5 9 5 9 3 3 2 9 2 9	38 5,9 3,2 2,7	36 5.9 3.2	45 47.55 5.9 8.6 3.2 3.2 2.7 3.1	2 59 2 9 59 2 3.2	59.2 5.9 3.2	60.2 4	5.2 46.2 5.9 5.9 3.2 3.2	46 98	19.06 5.0	33 08 60 5.9 5.5 3.2 3.2	57.42		1390.22 132.9 86.E	2,776	811 1,60 59 11 21 4	7	1468
BECK BECK DEL BECK RCHG HARRIS VALIGHT		:				a	285	29 29		277 299	595 6 0	563 75 6.64 22 0 10 6.64 11	55 616 5 22.5 19 7.6 6 14.0	940 22.5 13 9.5	1096 51 17,14 14 53 26 414 -11	175 1175 4.5 19.7 6.1 14.6 1.6 5.1	13.9 18.9 -5	19.7 19.2 4.5	912 784 19.7 19.1 18.9 18.6 0.8 0.6	6 700 7 19.7 9 18.9 1 0.6	620 10.7 17.58 2.12 29.0	595 505 17 17 16.2 16.9 98. 61	570 18:34 16:0	548 5 16.34 16 16.9 1	522 498 134 19.7 16.9 16.9	498 19.7 14,5	522 19.7 1 14.5 1	498 52: 19.7 19.1 14.5 14.5	2 673 7 19.7 5 14.5	756 21.09 14.5	756 22.5 2 15 1	725 728 2.5 21.08 2.3 12.3	673 19,7 12.3	673 12 12 7.36	912: 912 12.12: 12.6 7.36: 7.36			96.1 419.4 300.84		224 44 176 34	5	
HARRIS VAUGHT DEL HARRIS VAUGHT RONG LOW BURNETT			:		•	• • •	÷			3, 1,6 1,2	15.52 15 0.52	15 52 12 15 12 0 52	2 27.0 .2 16.8 .0 11.1	27.9 16.9 11.1	27.9 27 16.8 15.1 21	7.0 27.9 6 6 1.0 21.9	27.9 7 20.9	29.9 7 22.0	29.9 29.5 7 1 22.9 22.5	20 0 7 7 1 22 9	20.0 7 22.0	9.3: 9.3 7. 7 2.3 2.3	9.3 .7 2.3	9.3 7 2.3	D.3 7 2.3	3.2		82 53 434 434	2 5.2 4 4.34 4 4.34 0 0	12.2 B 4.2	75 1 122 1 8 42	0.2 8.78 2.2 12.2 8 8 4.2 4.2	7.4 12.2 . 6 . 4.2	176 12.2 8 4.2	4 76 5 24 12.2 12.2 8 8 4 2 4 2	1.76 12.2 B		116.66 451.72 222.08 229.64	235 896 440 455	4B 9 333 66 141 28 192 38	6 1 D	224
SIN1 SIN1 DES SIN1 ROHG B&J			•		: :		6 e. e	8 8 0 0 B 8	8. C. B.	B 16.3 D C S 16.3		16.3 16 2 14.3 16	3 16.3 0 0 3 16.3	16.3 6 10.3	16.3 16 0 10.3 10	6.3 16.3 6 5.82 0.3 7.48	16.3 10.82 5.48	16.3 11.52 1 4.78	10.3 10.3 1.52 4 1.22 6.3	10.3 1 0 1 10.3	. 0	3.12 13.12 0 0 3.12 13.12	13.12 0 13.12	3 13 12 13 0 6 13 12 0	3 3 1.12 13.12 28 6.25 84 6.84	3 5 6.28 1.28	3 5 1.5 4.5	3 3 B 14 1.5 3 5 6 5 10 5	3) 3, 4 14 5 6.5, 5 7.5	3 14 6.6 7.5	3 14 = 6.5 7.5 1	6.4 6.4 4.3 14.3 2 0 2.3 14.3	6 4 14.3 0 14.3	6.4 14.3 0	64 64 14.3 14.3 2 2 52.3 17.9	6.4 14.3 4		374.3 101.68 272.62	742	218 43 69 13	3	
BAJ DEL BAJ ROHG MOORE MOORE DEL	· · · · · · · · · · · · · · · · · · ·	40 35 3.78	27 3.98	23 26 2 2 36	28 32 236 G	Z . Z6 .	33	32 0	0	0, 0	9.7 9.7 48	5.7 5.7 56 7	0 0. 0 0.	0 0	0 0 141 17	0 0.6 0 9.8 77 179	7.3	9.3 177	19 15 4.5 5.5 14.5 19.5 177 177	10.5	19.7 0 19.7 1	18 17 2.5 0.5 15.5 16.5 166 165	0.5 16.5	3.5 5.5 151 1	10 10 1.5 1.5 6.5 8.5	1.5 6.5	e ↓ ↓ 143 !	12 to 4 5 8 5	10 5 2 5 9	10 2 8	10, 2 8	8 6.66 2 6 9 0.66	18.3		18.6 9.58 5.5 5.5 10.1 4.08	80.0		223.92 62.5 181.42	320	101 25 22 1 79 15	3	
MOORE RCHG EASTSIDE EASTSIDE DEL		20.22	23.02 12	2 230 71 23 04 12 3	25 64 32 0 22	26 26	33:	32 0 13 0	0	0 0 0 0	14,08 31,92 0	24.3 34.0 31.7 41.9 0 2	02 48.44 08 65.56 00 22 0 0.14	80.56 B	5.74 84.5 5.26 (12.4 61 5 17.44 38.6	46 93.6 58 73	853	73 94	DE B 107,3 58.2 69.7 104 103	93.1 71.9 100 85.16	54 56 51 97	4.96 110.56 1.04 54.94 110 110 67.2 65.8	53 B4	100 46 95 50 54 47 512 1 56.8 60	22 52 42	102 14 34 86 112 33 6	55.14 93. 54.65 44.	08 500 08 02 45 02 118 135 49 52	8 64 12 5 52	90 82 77.5	85.4 98 88.6 65 124 1	92 69.94	122	67.22 7 122	164 160 1.76 96.28 2.22 63.72 122 120	91.48 59.52 124		3598 1916.82 1681.18 2038.5	3,235 4,043	903 1,79 903 1,79 993 1,76 758 1,50	1	2325
EASTSIDE RCHG EASTSIDE OUT ARCO ARCO DEL		: :			···	: : :						. !	7.71	18.4 10.8	26 15.4 26 11.8 1	6 0 13 29 58 26.6 13 15	0 52 31.74 27 20.76	0 40.84 30 34.1 18.8	G 0 1.74 33.3 94.6 37.6 12.1 23.1	333	29.6. 2	17 17 4 25.8 26.8	14.4 25.8	2176 30	58 23 P6 23 41.44 3.4 30.7 5.3 21.6	40.26	27 96 30, 41.44 38 32.6 30	36 30 64 53 0.2 37.6	0 0: 3 44.2 5 48.1	54 0 30.74 53.8 19.8	15 2 1	62 73.6 14 476 3.6 43.64 53 53.8 72 22	71.6 2 t 48.3 59.3	5.7 47.3	5.74 58.58 6.22 19.04 0.04 38.4 59.3 61.6	17.4 38.4		1226.96 110.34	237	536 \$,060	-	077
ARCO RCHG MUNSEY MUNSEY DEL MUNSEY RCHG BIG LOST BLW ARCO CNL	N N		1	: :			:		1 1				4 34 16.04 2 54 04	7 6 17,22 1	7.22 26 9	36 11.6 5.7 42.18 9 19.8	6.24 41,32 18.92	15.3 34.1 23 21	2.5 14.5 06 28.5 21 18	14.5	13.5 12 27.06 2 18.2 2	29.9 36.1 6.96 19.30 2.94 16.74 28.5 33.34 20.8 24	13 4 30 20.8	31.06 28 19.6 17	E E D.1 5.5 36.06 7.8 25	24.12 8.0E 37.26 25	16.48 13	8.4 16.4 3.8 21.2 58 45.60 72 27.7 86 17.86	28.3	33.B	20.2 31.4 42.16 38. 30.1 Zi 12.06 10	22 22 11 310	22	22 36.2	22. 22 37.3 39.6 7.72 50.82 36.5 37.5	37.3 55.38		392.06 473.78 847.14 509.02	1,680	269 53 162 32 107 21 264 564 149 205	-,,,,	269
BIG LOST BLW ARCO CNL HEADING SUMS DELIVERY SUMS SEFPACE LOSS SINS	:										:		3.01	7.24	B 22 17 21	7 22.56 19 210	22.4	13 t 6 22Z	176 130	15 f	9.86 49	7.7 934 22 6	9.2	11.26 10	07 11.06 0 0	12.26	12 34 7. D	0 0	47.3	18,5 1 0	72.06 1D 0 6	96 4.76 i.6 0.81	0.07		1,22 13 32 0: 0.14	17 48		336.12	26,775 14,757	136 276		233
LOWED RECHARGE (13%: SEEPAGE) DAILY DELIVERY BLW RES	0	0 12.92	18.1B 13	2 13.56	73.56 11.12	11.12	16.1 16.3	22 12.3	12	10.5 25.5	67.44	81,86 107.1	8 158.72	218.86 23	0.56 291.1	16 320.82	357.92	383.9 406	.64 391.62	380.7B	365.34 37	74.6 370.4	357.19 14	156.28 340	0.1 329.58	300.92	267.36 293.1	88 319.68	306,3	317.66 31	15,78 369.	14 397.02	394 44	385.54 36	7.86 391.74			•	14,757 11,073 1,439 41%	6,812 5,740 746 46%	İ	_
STREETER ANGELO Pass Creek (na.)								10	10	10 10. 6 B	10	10 21	0 10. 6 8	10- B	10 1	10: 70°	10:	10	10 10	10	10	10 10	10.	10	10. 10:	0	E01.30 2943	0 0	900.3	10	10	19 397.02	394,44	385.54 28 5.	7.86 391.74 s: 5	369.86	295 56	15 276	545	150 298		
No Astelope Creek (na) Antelope Creek (na) Antelope to UCC Canal (e)	. 80	80 85	B5 8	o 80	75 75	50	RD. F	90 60	en.	60 60	80	40 St	n E0	20											8 8	0	0	0 0	. 0		8	8. 8	В	***			232 46	0 216	420	120 238		7
Spring Creek (Included in Eastside)			,,		www.ia . 73	LIU	· ************************************			, ou	30	.rv 51	<u> </u>	20	U	y. 0	20	40	au 30	20	20	20 15	15	15	10 10	0	0	0 0	0	0	0	0 0	9	•			1,585 3,14	4 605	1,200	500 992		-
UCC Blaine Diversion (e) 3 in 1 Antelope Burnett End (incl Burnett) ALDER CR SPILL (RCHG)	10	10 10	10 1	0 10	10 10	10	10 1 19.3 2	10 10	10	10 10 10 28 27.4	10 10 27.4:	10 10 10 10 22.8: 27.6	9 15 1 10 8 22.8	15 10 22.8	15 SI 10 14	55 30 10 10 .2: 25.2	60 10 29 ft	50 10	40 40 10 10	40 10	40 10	40 40 10 10	40 10	4D 4	40 40 10 10	10	10 1	0 0 10 10	0 10	10	0 10 1	0 0	10				690 1,38 450 89	9 690 3 320	1,369 635	370 734 150 298		1
SLIMS ALLOWED RECHARGE (19%) ALLOWED RECHARGE (0.30*13%) TOTAL ALLOWED RECHARGE							-						*****				64-9		18.8	8.9	10.0: 1t	u.o. 18.8	18.8	19.3 16	1.3: 4.26	4,26	4.26 4.6	62 4.62	10.7	13.9	17- 1	7: 17	17:	22.22	22.2 22.2	23.4	787 1.56	0 665.42 —	1,320 2,343 381		(mensured flows)	+
TOTAL CREDIT																							٠																481	267		v/26 2.560
(na) = Not acceptable, natural channel (e) = estimated flow																																							TOTAL, CR		RU 6/5 PERIOD OF WO 34 LETT	
																																				'						

76 ·