MEMORANDUM

To: City of American Falls Files
Fr: Bryce Contor
Date: 8/17/01

Re: Combined Q Limitation, POD

EWMD "dead files" ID #63

The following relies on the East Water Measurement District files. Except for measurement of discharge at the 85 location, copies are not included in the AF files.

1) Transfer-imposed limitation = 13.03 cfs from all POD combined.

2) WMD shows the following:

- 8531E 13 SW 3 wells @ Spring 307.1 GPM = 0.68 cfs
- 7531E 29 SE #5 1526.7 GPM = 3.40 cfs
- 7531E 29 SE #1 239.1 GPM ≈ 0.53 cfs
- 7531E 29 NWSWSE #4 not meas. - see theoretical below

Assume PCC ≈ PCC from well #1.

Well # PCC = 508.3 Kw#/acre foot

$PCC = \frac{KW \times 5431}{GPM} \rightarrow GPM = \frac{KW \times 5431}{PCC}$

Observed Kw on WMD records for #4 = not reported.

Assume HP ratio is ≈ Q ratio.
Well #1 = 40 Hp well #4 = 125 hp

$$0.53 \text{ cfs} \times \frac{125}{40} \simeq 1.66 \text{ cfs}$$

– 7S 31E 21 NWSESW Well #6
No meas performed by WMD
assume proportional to well #1

$$0.53 \text{ cfs} \times \frac{150}{40} \simeq 1.99 \text{ cfs}$$

Note that Well #5 has 3.4 cfs discharge @ 125 hp, so #4 & #6 may be 3.4 and 4.1 cfs respectively.

Note also that City of ~~American~~ Falls letter indicates 5th source of water; WMD records only show 5. Wells #2 & #3 seem to be missing from the series.

– 7S 31E 29 NWNWSE pump #3

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Pump 3 not measured. 125 hp.
by methods above Q ranges fr.
1.66 - 3.4 cfs.

Summary

Springs		
# 5	0.68	- 0.68
# 1	3.40	- 3.40
# 4	0.53	- 0.53
# 6	1.66	- 3.40
# 3	1.99	- 4.10
Total	1.66	- 3.40
	9.92	- 15.51

3) Summation of Transfer - approved rates:

29-2460	4.68
29-2510	2.42
29-4421	2.00*
29-7821	3.12
29-7822	0.81
	13.03

* evidence does not support this rate.

4) Additional Permits per AJ Enterprise Query:
29-8171 3.21 cfs.

5) Conclusions

a) 29-4421 should be recommended @ the measured 0.68 cfs

b) At this recommendation, the AI recommendations will sum to (13.03 - 2.00) + 0.68 = 11.71 cfs

c) Adding permit 29-8171 cfs brings total to 11.71 + 3.21 = 14.92 cfs. This is very close to the optimistic high-end of actual Q.

d) Because current recommendations will be less than 13.03 cfs there is no need for the combined Q limitation. Any need for combined limits associated w/ 29-8171 can be imposed by Allocations Bureau at time of licensing.

~~Bryce C. Cutler 8/17/01~~

Combined Q p 5 8/17/01

6) POD

There are 3 wells in the old spring at the S. S. location. WMD records indicate 5 wells in the city. The transfer seems to indicate 6 wells plus the spring POD.

Likely the difference is "well #2" which is missing from the WMD list and attached maps (from WMD files, apparently supplied by City of American Falls. Note numbering discrepancy; two #5 and no #4. This map seems to correspond to what I remember from field work w/ Lewis Rounds of EWMD in 1998).

Conclusion: Recommend 3 POD @ spring, locate visually by GIS. Recommend 5 PD shown on attached maps per visual GIS. Recommend "left over" POD from xfer by GIS "Make Shape from PLS" routine.

Bryce A. Contor 8/17/01

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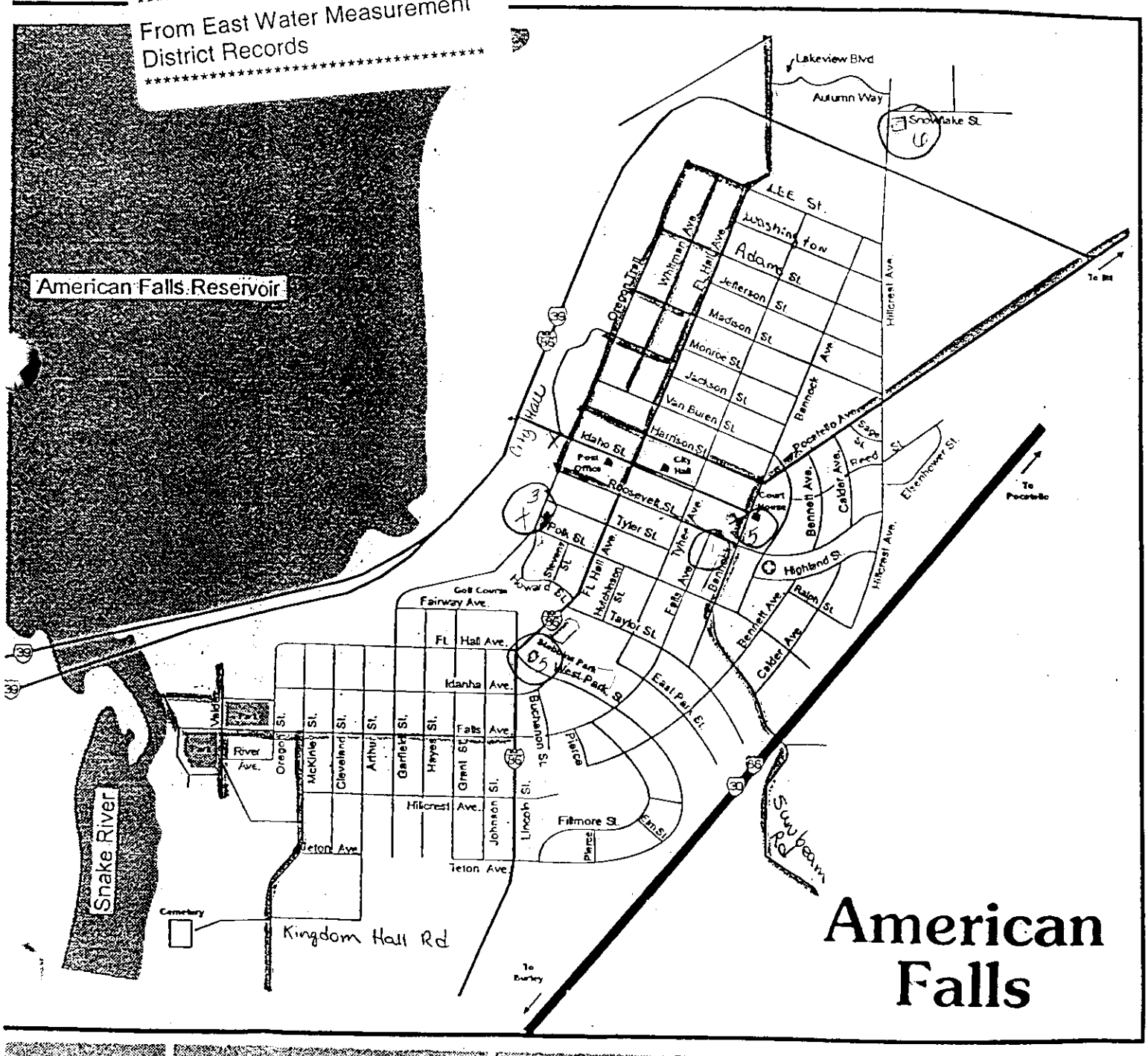
From East Water Measurement District Records



American Falls

Contor, Bryce

From: Contor, Bryce

Sent: Friday, August 17, 2001 10:58 AM

To: McHugh, Candice; Carlsen, Ernie

Cc: Music, Vicky

Subject: Diversion volumes, City of American

City of American Falls has two GW licenses originally issued w/o a diversion volume and subsequently w/o a diversion volume. Both the license and the transfer were issued after 1987. The licenses are 29-7821 and 29-7822, transfer is 68831.

My guess is, given the post-87 administrative action, I recommend w/o volume as well. Correct me if wrong.