

# City of Boise Geothermal

4/11/13

Bob Maynard - City, Kent Johnson - City, Tom Gunnerson  
Jeff P - IDWR, Corrick B. - IDWR - City  
Ken Neelley - IDWR, Harriet Hensley - AG,  
Charlie Honsinger - Terteling, Pat C - BWSHD  
Norm Young - Edwards

Ken Neelley - report of status, withdrawals  
remain nearly flat, monitoring wells fairly  
steady

Bob - feels City is on track, are 2-yr = 227  
seeking increase to 267 mmgal/yr mmgal/yr  
see no reasons not to proceed.

Charlie - asked about additional uses planned  
response - JUMP, Owyhee Plaza, CSHQA  
BSU - last year.

production for coming year may be  
bumping up against limits. BSU and  
city could be interrupted.

City summary of pumping/injection  
40 mmgal discrepancy

- added independent meters - ok
- no leaks identified
- exploring other avenues

Ken Healey - report could come out earlier - agreed to a draft by Jan 1

No concerns with moving forward on City's request

Norm asked if Dana would have time to comment. Agreed to wait a week to issue order.

## DOWNTOWN BOISE/HARRIS RANCH

### Withdrawals and Re-Injection

In WY12, gross and net withdrawals from the four downtown Boise district heating systems were 731.8 mgal and 287.6 mgal, respectively (Table 1 and Figure 1). The gross withdrawal was 9.3 mgal less in WY12 than in the previous water year. The net withdrawal was 22.3 mgal more in WY12 than in WY11. The gross withdrawal was 1% less in WY12 and the net withdrawal was 8% more in WY12, than their respective amounts in WY11. About 61% of the fluids were re-injected.

**Table 1.** Withdrawals<sup>1</sup> from the four district geothermal heating systems in the downtown Boise area for Water Year 2012 (October 1, 2011 through September 30, 2012).

| System                            | Gross Withdrawals <sup>1</sup> for WY12 (million gallons) and percent change from WY11 to WY12 | Net Withdrawals <sup>2</sup> for WY12 (million gallons) and percent change from WY11 to WY12 |
|-----------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Boise Warm Springs Water District | 247.3 (+1%)                                                                                    | 247.3 (+1%)                                                                                  |
| Capitol Mall                      | 72.0 (-26%)                                                                                    | 0 (NC <sup>3</sup> )                                                                         |
| City of Boise                     | 235.8 (+8%)                                                                                    | 40.3 (+96%)                                                                                  |
| Veterans Administration           | 176.8 (-2%)                                                                                    | 0 (NC <sup>3</sup> )                                                                         |
| <b>Total</b>                      | <b>731.8 (-1%)</b>                                                                             | <b>287.6 (+8%)</b>                                                                           |

<sup>1</sup>These numbers contain some degree of uncertainty which is typically associated with measurement equipment and methods. Therefore, the amounts are being reported in millions with one decimal place.

<sup>2</sup>Net Withdrawals equal Gross Withdrawals minus Injection amounts.

<sup>3</sup>NC = No change.

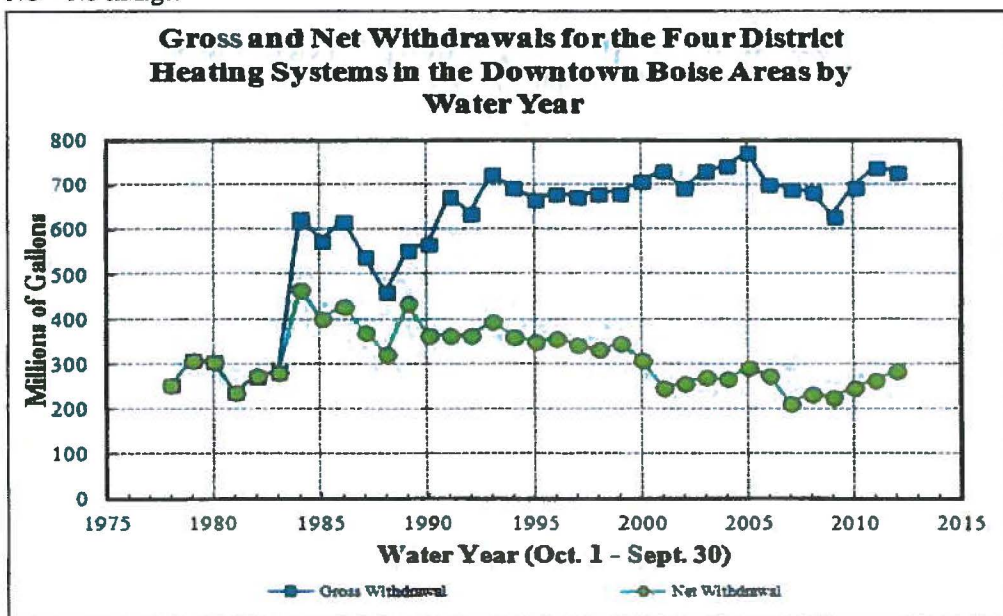


**Figure 1.** Gross and net withdrawals for the four district heating systems in the downtown Boise area for water years 1978 through 2012.

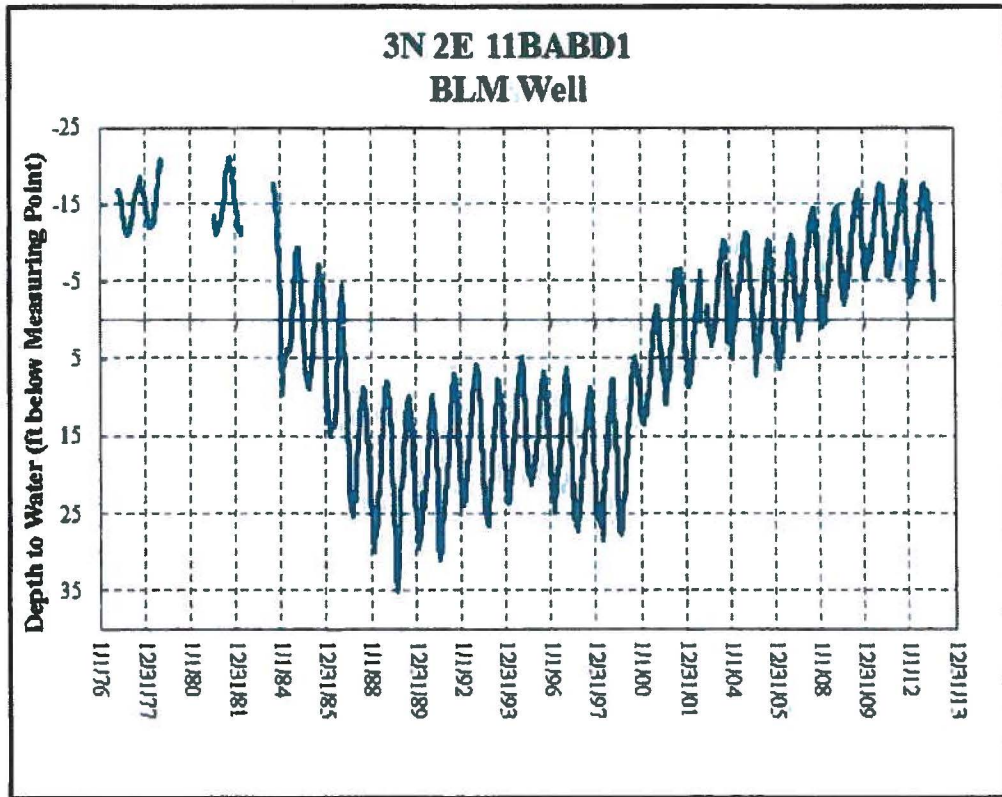


**Figure 2.** Water level hydrograph for the BLM well.

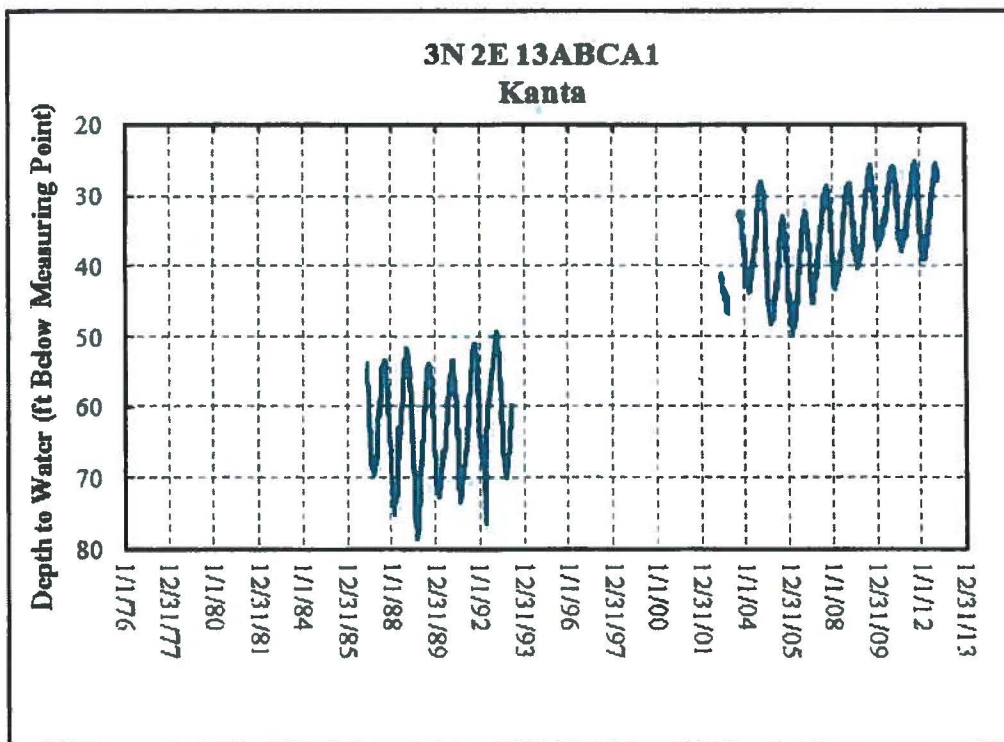


**Figure 3.** Water level hydrograph for the Kanta well.