



**Water Supply Report**  
Joseph DeMorett

Item 5.

September 23, 2008

**Status of Summer Wells**

UW #29 is no longer in service. The deep well was last run on Tuesday, September 9 with all water being discharged to the storm sewer. At that time, samples were taken to fulfill the DNR's quarterly requirements. The reservoir was subsequently drained earlier this week and the well was taken off line for the winter months.

UW #10 is also out of service. Given the saturated ground conditions this year, water from this well was never needed. This well was briefly put in service on Tuesday, September 9 in order to collect some water samples. The well was prepped, started, and intermittently run over a period of two days. Samples were collected on Wednesday the 10<sup>th</sup> after the water quality stabilized. All water generated (approximately 500,000 gallons) during this sampling event was discharged to the storm sewer. Following the sampling event, the well was shut down and taken off line. The well will remain out of service until next year.

**UW #26 Reservoir Overflow Incident**

The UW #26 reservoir, located on North High Point Road, overflowed briefly on Monday, September 15. The incident, which occurred from 12:50 PM to 2:15 PM, can be attributed to Operator error. The Operator on duty failed to notice that the reservoir had reached the overflow level (22.8 feet) and did not shut down UW #16 on Mineral Point Road. (UW #26 automatically shuts down when the reservoir level reaches 22.1 feet.)

It appears that as much as 85,000 gallons of water may have flowed from the reservoir during the incident. Water flowed north from the site to Rylant Circle, flowing between two residences and into the street, eventually reaching the storm sewer located on Lois Lowry Lane. Staff visited the site after the incident to meet with neighborhood residents and found no significant damage to the residential properties.

This is not the first time that this has happened. Possible fixes include: extending storm sewer to the reservoir, installing an altitude valve, and incorporating an alarm via the new SCADA system that would notify the Operator of an immediate problem. Staff is reviewing these three options to determine the most practical.

**SCADA Update**

The central control module for the new SCADA (Wonderware) system was installed in the operator's room by L.W. Allen, Inc. earlier this month. UW #30 and the Felland Road Reservoir sites were successfully transferred from the old system and are now running on the new system. Both sites need some fine-tuning but are running satisfactorily.

Plans are currently being made to convert sites UW #26, UW #28, and UW #29 over next. The Utility's Electronic Maintenance Technicians (EMTs) are in the process of ordering the parts necessary for the hardware stations at all three sites and will begin construction soon. L.W. Allen has been asked to provide a proposal to do the software programming. It is hoped that our EMTs will be able to do the software programming in the near future.

An updated version of the automated database management system the Operators use for trending, reporting, and recording site data has been installed by IntelliSys. The station in the Operators room is up and running but the remote stations are still in the process of being set up/converted over. This should take another couple of weeks. Training for staff will then get underway.

**Waterworks Maintenance Worker/Operator I Position**

The Waterworks Maintenance Worker/Operator I position vacated by Tom Arneson when he was promoted to Operator II has been posted. It is hoped that this Water Supply position can be filled by the end of November.

2008 Unit Well Pumpage by Month

Water Supply

Unit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep*	Oct	Nov	Dec	Totals
6	0	0	0	0	43980	28190	55230	59184	25340				211924
7	36377	30542	23390	17323	34317	22907	25812	19378	5517				215563
8	0	0	0	0	0	1426	26014	57912	24584				109936
9	49221	44902	42930	41932	45194	44897	53060	56340	28851				407327
10	0	0	0	0	0	0	0	0	474				474
11	70840	67380	72526	74140	76710	74146	75390	75950	40910				627992
12	54962	48242	49073	45467	40920	47050	57560	50092	25410				418776
13	64410	61492	69357	71340	67060	66960	72490	75720	40048				588877
14	69337	65765	71260	67760	53470	67140	71811	70434	35795				572772
15	79030	73901	79170	68490	59930	77129	79940	79730	43690				641010
16	36889	40925	58570	69510	45450	70260	54788	50271	16170				442833
17	0	0	0	842	31840	46078	63760	63535	35530				241585
18	13008	16242	15950	18180	18210	17180	16580	35440	7600				158390
19	27139	42921	41957	45420	35440	26670	34550	30220	14330				298647
20	50604	42046	48210	41060	45950	45160	57388	57679	24868				412965
23	33289	28165	29449	32346	33148	31060	32932	31649	17169				269207
24	44780	41410	42351	50020	45000	35230	37700	36300	15430				348221
25	61510	64170	69618	67380	70310	66811	72820	75430	33450				581499
26	48383	25332	29070	330	63050	6750	73177	102580	52471				401143
27	0	0	0	0	0	13750	12380	25937	11400				63467
28	39930	48690	36590	47900	30960	62960	52840	42960	14080				376910
29	0	0	0	0	0	1211	910	983	410				3514
30	69641	67860	72947	72145	65996	66340	66310	41740	35850				559029
<b>Total</b>	<b>849350</b>	<b>809985</b>	<b>852418</b>	<b>830413</b>	<b>906935</b>	<b>918094</b>	<b>1092732</b>	<b>1138481</b>	<b>548493</b>				<b>7946901</b>

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\* As of 9/16/2008

# 30+ Day Pumpage Report

Water Supply

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Date	Pumpage (1000 gallons)	Year to Date	Last Year to Date	Difference	Percent Difference	Average for Year	Average Last Year	Temperature			Precipitation		
								High	Low	Avg	Day	Month	Year
8/16	34,014	6,831,166	7,344,859	-513,693	-7.0%	29,830	32,339	81	52	67	0.0	1.0	34.5
8/17	37,453	6,868,619	7,375,740	-507,121	-6.9%	29,864	32,344	86	63	75	0.0	1.0	34.5
8/18	36,077	6,904,696	7,409,162	-504,466	-6.8%	29,890	32,319	86	62	74	0.0	1.0	34.5
8/19	45,061	6,949,757	7,435,866	-486,109	-6.5%	29,956	32,299	79	60	70	0.0	1.0	34.5
8/20	37,864	6,987,621	7,463,431	-475,810	-6.4%	29,990	32,307	83	58	71	0.0	1.0	34.5
8/21	34,126	7,021,747	7,497,596	-475,849	-6.3%	30,007	32,302	81	62	72	0.0	1.0	34.5
8/22	39,678	7,061,425	7,528,747	-467,322	-6.2%	30,049	32,298	83	71	77	0.0	1.0	34.5
8/23	38,732	7,100,157	7,560,016	-459,859	-6.1%	30,085	32,306	83	69	76	0.0	1.1	34.5
8/24	38,016	7,138,173	7,594,255	-456,082	-6.0%	30,119	32,292	76	52	64	0.0	1.1	34.5
8/25	35,755	7,173,928	7,623,323	-449,395	-5.9%	30,143	32,277	77	49	63	0.0	1.1	34.5
8/26	36,236	7,210,164	7,652,044	-441,880	-5.8%	30,168	32,258	78	48	63	0.0	1.1	34.5
8/27	44,392	7,254,556	7,679,714	-425,158	-5.5%	30,227	32,258	84	48	66	0.0	1.1	34.5
8/28	34,197	7,288,753	7,712,124	-423,371	-5.5%	30,244	32,279	82	60	71	0.3	1.4	34.9
8/29	41,294	7,330,047	7,749,373	-419,326	-5.4%	30,289	32,270	80	53	67	0.0	1.4	34.9
8/30	33,456	7,363,503	7,779,365	-415,862	-5.3%	30,302	32,275	87	53	70	0.0	1.4	34.9
8/31	34,905	7,398,408	7,812,821	-414,413	-5.3%	30,321	32,266	88	57	73	0.0	1.4	34.9
9/1	37,455	7,435,863	7,842,873	-407,010	-5.2%	30,350	32,250	89	53	71	0.0	0.0	34.9
9/2	40,038	7,475,901	7,871,291	-395,390	-5.0%	30,390	32,263	92	67	80	0.0	0.0	34.9
9/3	43,937	7,519,838	7,906,724	-386,886	-4.9%	30,445	32,267	73	58	66	0.0	0.0	34.9
9/4	36,127	7,555,965	7,940,146	-384,181	-4.8%	30,468	32,266	61	54	58	0.8	0.8	35.7
9/5	29,516	7,585,481	7,971,986	-386,505	-4.8%	30,464	32,306	72	55	64	0.0	0.8	35.7
9/6	30,012	7,615,493	8,014,211	-398,718	-5.0%	30,462	32,307	69	56	63	0.0	0.8	35.7
9/7	31,138	7,646,631	8,046,735	-400,104	-5.0%	30,465	32,299	72	55	64	0.0	0.8	35.7
9/8	33,089	7,679,720	8,077,221	-397,501	-4.9%	30,475	32,308	60	54	57	0.1	0.9	35.8
9/9	31,520	7,711,240	8,111,748	-400,508	-4.9%	30,479	32,308	67	40	54	0.0	0.9	35.8
9/10	30,887	7,742,127	8,144,052	-401,925	-4.9%	30,481	32,309	70	41	56	0.0	0.9	35.8
9/11	31,131	7,773,258	8,176,623	-403,365	-4.9%	30,483	32,290	74	58	66	0.1	1.0	35.9
9/12	38,484	7,811,742	8,204,061	-392,319	-4.8%	30,515	32,289	74	64	69	0.1	1.1	36.0
9/13	26,644	7,838,386	8,236,093	-397,707	-4.8%	30,500	32,293	75	64	70	0.9	2.0	36.9
9/14	27,620	7,866,006	8,269,445	-403,439	-4.9%	30,488	32,296	69	57	63	0.1	2.1	37.0
9/15	31,423	7,897,429	8,302,579	-405,150	-4.9%	30,492	32,271	61	46	54	0.0	2.1	37.0
9/16	30,026	7,927,455	8,328,357	-400,902	-4.8%	30,490	32,276	73	43	58	0.0	2.1	37.0
9/17	33,496	7,960,951	8,361,771	-400,820	-4.8%	30,502	32,279	79	55	67	0.0	2.1	37.0