Water Quality Monitoring Report
2009 Monitoring Schedule

Quality and Reliability since 1882
Madison Water Utility MWU

Monthly Report for: **Jan-10**

Analyte Group	Sample Locations	Monitoring Requirements (# of Samples)		Monitoring Activity (# of samples)		Violations & Public Notices
		Monitoring Period	2009 Annual Requirement	Current Month	Year to Date 2009	Year to Date
Daily/Routine Samples						
Coliform Bacteria	Operating Wells and Distribution Sites	150	1800	355	4660	0
Free Chlorine Residual "Grab" Samples	Operating Wells and Distribution Sites	160 [1]	1900 [1]	602	7884	0
Fluoride	Operating Wells	450 [1]	5400 [1]	373	5060	0
Quarterly Samples						
Volatile Organic Compounds (41 analytes)	Wells	5 [1]	20 [1]	0	21	0
Coliform Bacteria (Raw Water)	Wells	22 [1]	82 [1]	0	82	0
Annual Samples						
Inorganic Contaminants [2] (28 analytes)	Wells	22	22	0	22	0
Volatile Organic Compounds (41 analytes)	Wells	11	11	0	19	0
Disinfection Byproducts - Total Trihalomethanes & Haloacetic Acids	Distribution Sites	7	7	0	7	0
Specialty Samples						
Radionuclides (4 analytes)	Wells	13	13	0	17	0
Unregulated Contaminants (UCMR2 - 25 analytes)	Wells	22	22	0	23	0
	Distribution Sites	7	7	0	7	0
Iron & Manganese	Wells	na	na	15	138	na
	Residential Taps	na	na	0	386	na

(1) Sampling requirement will vary depending on the number of wells in operation during specific days or quarters
(2) Sampling is usually completed June to September in each calendar year, with results reported in the month following sampling.

Calls Logged to the Water Quality Correspondence Database - 2009
Update: 1/5/10

Year	Month	All Calls	Color	Manganese	Taste	Odor	Pressure	No Water	Inquiry	Other
2009	January	60	29	0	8	5	5	2	13	3
2009	February	50	20	2	4	7	1	1	18	4
2009	March	96	28	3	4	4	4	0	31	26
2009	April	123	53	0	8	15	15	2	16	18
2009	May	91	41	1	3	6	10	4	12	22
2009	June	78	40	1	5	5	7	1	13	11
2009	July	78	27	1	5	4	9	5	8	23
2009	August	78	38	3	6	4	6	5	14	12
2009	September	89	37	1	6	7	10	1	16	19
2009	October	77	27	0	1	1	7	11	18	15
2009	November	49	22	1	1	1	4	0	9	14
2009	December	37	5	0	3	6	0	4	12	9
2009	**TOTAL**	**906**	**367**	**13**	**54**	**65**	**78**	**36**	**180**	**176**

Year	Month	All Calls	Color	Manganese	Taste	Odor	Pressure	No Water	Other	Alder District
2009	December	1	1	0	0	0	0	0	0	01
2009	December	1	1	0	0	0	0	0	0	02
2009	December	2	1	0	0	0	0	1	0	04
2009	December	1	1	0	0	0	0	0	0	05
2009	December	3	0	0	2	1	0	0	1	06
2009	December	2	1	0	0	0	0	0	1	09
2009	December	4	0	0	0	1	0	1	2	10
2009	December	2	0	0	1	1	0	0	1	13
2009	December	1	0	0	0	0	0	0	1	15
2009	December	1	0	0	0	0	0	0	1	16
2009	December	2	0	0	0	0	0	0	2	17
2009	December	1	0	0	0	1	0	0	0	18
2009	December	4	0	0	0	0	0	1	3	19
2009	December	1	0	0	0	1	0	0	0	20
2009	December	6	0	0	0	0	0	1	5	None
2009	December	5	0	0	0	1	0	0	4	Unknown

Year	Month	All Calls	Color	Manganese	Taste	Odor	Pressure	No Water	Other	Alder District
2009	November	3	1	0	0	0	2	0	1	03
2009	November	3	3	0	0	0	0	0	0	04
2009	November	4	4	0	0	0	0	0	0	05
2009	November	5	3	0	0	0	0	0	2	06
2009	November	2	1	0	0	0	0	0	1	07
2009	November	4	1	0	0	0	0	0	3	09
2009	November	4	3	0	0	0	0	0	1	10
2009	November	1	1	0	0	0	0	0	0	12
2009	November	3	1	0	0	0	0	0	2	13
2009	November	2	0	0	0	0	0	0	2	15
2009	November	1	0	1	0	0	0	0	1	16
2009	November	3	0	0	0	0	0	0	3	17
2009	November	3	2	0	0	0	1	0	0	18
2009	November	3	1	0	1	1	0	0	1	19
2009	November	1	0	0	0	0	1	0	0	20
2009	November	4	0	0	0	0	0	0	4	None
2009	November	3	1	0	0	0	0	0	2	Unknown

Water Quality Technical Advisory Committee - DRAFT

119 E Olin Ave, Main Conference Room

January 13, 2010 - 1:00 p.m.

Attending: Janet Battista (JB), Ken Bradbury (KB), Joe DeMorett (JD), Joseph Grande (JG), Jocelyn Hemming (JH), Al Larson (AL), Sharon Long (SL),

Absent: Tom Heikkinen (TH)

The meeting opened with an overview of the agenda:

- Housekeeping – Meeting Schedule, Committee Focus (JG)
- Annual Report on Water Quality Monitoring (JG)
- Sentinel Well Update (JD)
- Water Quality Studies at Well #8 and Well #29 (JG)

1. Housekeeping Items (JG)

A. Meeting Schedule: The meeting schedule for 2010 was discussed. Currently, the committee is meeting on a quarterly basis. It was proposed that the committee meet more frequently but for a shorter time period. More frequent meetings could facilitate more timely discussion of subjects in advance of the monthly Water Board meetings. Information reports reviewed at the meeting could also be posted to the WU website.

After some discussion, it was proposed to meet eight times in 2010. The next meeting is scheduled for Thursday, March 11 at 1:00 p.m. Starting in April, meetings will occur on the 2nd Tuesday of the month from 1:00-2:30 PM. The committee will evaluate the new schedule in June 2010 to determine if it is better than the current one.

The tentative meeting schedule for 2010 is as follows:

- March 11 (Thursday)
- April 13
- May 11
- June 8
- September 14
- October 12
- November 9

B. Committee Input: The committee discussed potential ideas for topics and items they would like to review at TAC meetings. Potential topics were:

- Trend analysis for water quality data including PCE detected at wells #9, #15, and #18, and sodium/chloride at wells #14 and #23.
- Evaluating water quality in greater detail at 1 or 2 wells at each meeting including a review of the wellhead protection plan. This would facilitate increased knowledge base of each well over the next 2 years.

2. Annual Report on Water Quality Monitoring (JG)

The Annual Report is produced to provide water quality data to Water Board members and the general public. It provides background on water quality monitoring activities and includes information on the distribution system, sampling locations, and microbiological and chemical tests and their results. Feedback included:

- Microbiological Testing (Compliance) – More information about the sample location (treated vs. non treated water, location of sample within distribution system) - Table 3. How will the Groundwater Rule affect response to positive coliform result? Consider adding the word "compliance" to Table 2 along with how the positive coliform results (3 out of 4,660) compare to the federal/state regulations (<5% monthly positive).
- Fluoride - There has been increased interest in the community regarding the addition of fluoride to the water. Fluoride has been added since 1948. The 2010 goal is to increase from 91% to 95% the frequency of samples that fall within the target range of 0.9 to 1.3 mg/L range. Daily samples for each well are measured daily at the Olin Avenue facility by the Water Operator. There is inherent variability due to the instrument used and the number of operators who conduct the test. Suggested adding the words, "after the addition of fluoride" in the text along with Figure 1. Also suggested that a fluoride fact sheet is produced and posted to the website; it could be a useful reference.
- Annual Inorganic (IOC) Tests - Every well is annually tested for inorganic contaminants, usually in June. Nitrate is detected at about half of the wells. The older wells tend to have a higher level, possibly due to construction of the well (casing depth) and/or location. Three wells with high levels are: #6 (University Ave. by VA Hospital), #14 (Spring Harbor area) and #23 (former Blooming Grove well).
- Sodium/Chloride – Two wells (#14 and #23) exceeded the Drinking Water Equivalency Level for Sodium. Public Health is not concerned, reported that EPA is expected to increase the DWEL in the near future. Suggested adding note in text explaining MCL and clarify if samples were taken before or after treatment.
- Figure 5: Iron/Manganese – Monthly samples are collected at all wells that exceed a specified concentration. Suggested addition of an explanation for what the secondary standard and the lifetime health advisory level are. Also suggested a note explaining that Table 4 summarizes the one time annual sample (i.e. June 2009) versus additional sampling done within the year at select wells with higher or more variable iron/manganese.
- Figure 6: Volatile Organic Compounds (VOC) - PCE has been detected at 7 wells. UW15 has shown an increasing trend. UW 15 is being monitored and has shown slight decreases in the trend, possibly due to operational changes made at the well. Recommended range rather than maximum in Table 6.
- Disinfection By Products (DBP) – The levels of DBPs are low. The data is not in the original document but rather in a separate handout.

3. Sentinel Well Update (JD)

There are 6 ports in the sentinel well. The top 3 ports are above the Eau Claire Shale (285' – 295') and the bottom 3 ports are below the Eau Claire Shale. The sentinel well has been sampled twice (November 12 and December 8, 2009) for indicator parameters and was recently purged. Currently, the well does not appear to have returned to in situ conditions as the conductivity is still high. The heads appear to be holding. The next sample is scheduled for early next week (January 18, 2010). The only current obstacle is the hoses freezing up near the surface. Benchmarks include chloride 2.2 - 2.3 ppm, nitrates 0.5 ppm and conductivity 575-600 umhos/cm. Once the results are closer to these benchmarks, the ports will be sampled for IOCs and VOCs. Transducers are continually collecting data. Cost of the well and FLUTe is approximately $130K plus Ken and Madeline's time.

4. Water Quality Studies at UW8 and UW29 (JG)

- UW 29 Water Quality: The filter to remove iron and manganese went on-line in April 2009. Residential tap sampling occurred prior to the start-up, during the commissioning period, and 6 months post start-up. Results show low levels of Fe and Mn after filtration. A few outlier results are possibly attributed to premise plumbing or variations in the distribution system. The UW 29 service area was flushed uni-directionally before UW 29 went back on-line. May still see a residual of Fe and Mn in the system for 1-2 years. Overall, the results show excellent Mn and Fe levels at both the well and in the distribution system. Samples taken at UW29, prior to the filter, show an increase in the iron level. Results document justification for the use of the filter. Will continue to monitor Fe and Mn at the well (pre and post filter) and in distribution. Suggested to include more detail in the narrative along with using a box and whisker plot to summarize test results.
- UW 8: Sampling was driven by volume of complaints from customers in the UW8 service area (2007-2008) that reported receiving discolored water "all the time". The longitudinal residential tap sampling program demonstrated that there is a higher concentration of Fe and Mn when UW8 is on-line; however, water quality is very good when the well is off. Some residual mineral sediment in distribution system may be cleaned out by water from other wells when the well is off line. Unidirectional flushing has helped to remove mineral sediments in distribution system. Monitoring results may be influenced by variables including property age, internal plumbing, and frequency of sample tap usage.

General discussion regarding the type and number of calls received from customers. Previously, ~50% were tied to discolored water. Currently discolored water calls are less frequent and usually tied to specific incidence of a broken main or flushing. Majority of current calls consist of inquiries/information requests (hardness, private wells). Other reasons for complaints include smells (chlorine, sewer gas) and no water/low pressure.

Private Well Abandonment Reimbursement Program: The purpose of this program is to prevent groundwater contamination of the aquifer from unsafe, unused or non-complying private domestic well. The ordinance was changed to include partial reimbursement of 50% of the abandonment cost, to a maximum of $1000. The UW14 wellhead protection area has been analyzed for potential unused private wells. Property owners in the area will be contacted this spring followed by field surveys.

Meeting adjourned at 3:05 p.m.

Quality and Reliability since 1882
Madison Water Utility mwu

Water Supply Report January 26, 2010
Joseph DeMorett

Status of Seasonal Wells
UW #6: Out of Service on September 28th.
UW #8: Out of Service on September 9th.
UW #10: Out of service
UW #17: Out of Service on September 28th.
UW #23: Out of Service on October 15th.
UW #27: Out of Service on October 5th.
UW #28: Out of Service on October 6th.
All seasonal wells are off-line for the winter months.

UW #7
The repair services on the reservoir at UW #7 are complete. Spectrum Contracting Corporation finished repairing the reservoir ceiling on January 5th. The well and reservoir were flushed, sampled and analyzed for bacteria, and brought back on-line January 15th. The well is currently supplying water to Zone 6E on an intermittent basis.

UW #29 Sentinel Well
The sentinel well was purged extensively on January 5, 2010. It was purged again on January 21st and sampled for several basic indicator parameters (conductivity, pH, chloride, and nitrogen as nitrates/nitrite.) The Utility is currently awaiting the analytical results before determining if water in the well at the deeper depths is representative of surrounding formations.

SCADA Update
The conversion of Unit Wells 6, 12, 14, 19, 20, 27 and Reservoir/BS 106 to the new SCADA system is underway. Construction of the control boxes should be complete by January 29th. Utility staff and L.W. Allen will begin installing the new components in early February. The work should be completed by late February.

The remaining sites still requiring conversion are all located on the east side (Unit Wells 7, 8, 9, 11, 13, 23, 25, Booster 213, and Spheres 113 and 225). These sites will be converted in two different phases. It is hoped that all of the Utility's sites will be completed by the end of 2010.

2009 Unit Well Pumpage by Month
(1000 gallons)

Unit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
6	0	0	0	18,860	26,310	40,070	35,630	40,170	31,760	0	0	0	**192,800**
7	8,986	7,525	6,995	21,511	32,761	42,832	30,512	18,806	22,327	700	0	0	**192,955**
8	0	0	0	0	0	0	1,635	31,523	9,786	0	0	0	**42,944**
9	50,440	46,130	52,613	51,180	50,220	46,206	46,130	45,100	45,310	37,260	34,840	38,210	**543,639**
10	0	0	0	0	0	0	0	0	0	0	0	0	**0**
11	42,432	39,504	36,980	36,740	50,030	60,010	27,340	38,190	43,280	43,280	42,190	37,300	**497,276**
12	51,870	48,970	37,120	37,100	39,900	48,870	52,210	46,745	50,350	26,760	30,460	24,380	**494,735**
13	69,170	61,180	69,159	60,790	65,480	64,230	66,290	66,360	55,560	60,970	63,160	67,430	**769,779**
14	71,410	63,570	69,846	66,950	70,210	67,660	71,070	69,590	69,740	69,130	66,690	69,930	**825,796**
15	79,420	71,770	78,650	46,770	0	34,420	96,980	38,500	42,330	43,190	42,090	57,450	**631,570**
16	22,160	21,750	12,760	11,670	26,660	18,500	37,920	51,401	51,240	38,650	22,879	35,000	**350,590**
17	0	0	0	0	0	43,590	56,190	64,910	60,230	0	0	0	**224,920**
18	0	0	0	22,580	48,560	46,660	44,820	34,450	43,560	50,560	40,510	44,740	**376,440**
19	47,880	57,300	57,700	37,140	28,490	17,830	30,020	22,500	26,840	73,320	73,580	62,778	**535,378**
20	46,100	41,390	44,870	40,910	46,630	45,620	49,190	40,100	44,310	37,835	34,400	42,760	**514,115**
23	24,491	20,392	27,625	24,159	24,861	22,534	15,620	19,890	25,054	9,007	0	0	**213,633**
24	48,850	45,320	50,310	49,370	52,650	39,700	31,410	27,710	36,350	53,450	47,610	46,100	**528,830**
25	63,440	58,430	54,690	53,860	58,700	47,090	45,370	51,900	53,980	56,790	46,000	38,460	**628,710**
26	106,310	94,920	105,270	103,010	104,820	100,800	95,780	71,500	78,000	78,850	88,700	87,100	**1,115,060**
27	46,010	56,060	64,590	59,250	49,260	21,820	24,970	33,010	33,170	9,945	0	0	**398,085**
28	0	0	0	0	1,500	27,740	33,820	37,480	28,710	3,190	0	0	**132,440**
29	0	0	0	24,190	52,000	36,577	47,250	52,400	49,840	50,772	51,061	53,430	**417,520**
30	74,990	67,330	73,450	64,280	56,770	56,260	58,970	58,540	55,130	54,900	54,840	52,420	**727,880**
Total	**853,959**	**801,541**	**842,628**	**830,320**	**885,812**	**929,019**	**999,127**	**960,775**	**956,857**	**798,559**	**739,010**	**757,488**	**10,355,095**

30+/- Day Pumpage Report
(1000 gallons)

Water Supply

Date	Daily Pumpage	Year to Date	Average for Year	2009 Temperature High	Low	Avg	Precipitation Day	Month	Year	2008 Last Year To Date	Percent Difference	5 Year Ave Percent Difference	10 Year Ave Percent Difference
12/9	25,180	9,824,747	28,644	32	9	21	0.7	1.5	36.7	10,325,186	-4.8%	-8.5%	-10.9%
12/10	24,580	9,849,327	28,632	10	-3	4	0.0	1.5	36.7	10,354,006	-4.9%	-8.5%	-10.9%
12/11	24,630	9,873,957	28,620	17	2	10	0.0	1.5	36.7	10,380,727	-4.9%	-8.5%	-10.9%
12/12	29,238	9,903,195	28,622	33	6	20	0.0	1.5	36.7	10,408,924	-4.9%	-8.5%	-10.8%
12/13	21,160	9,924,355	28,600	33	30	32	0.0	1.5	36.7	10,440,265	-4.9%	-8.5%	-10.9%
12/14	28,120	9,952,475	28,599	33	20	27	0.1	1.6	36.7	10,465,965	-4.9%	-8.5%	-10.9%
12/15	24,400	9,976,875	28,587	20	0	10	0.0	1.6	36.7	10,493,313	-4.9%	-8.5%	-10.9%
12/16	26,060	10,002,935	28,580	14	1	8	0.0	1.6	36.7	10,518,422	-4.9%	-8.5%	-10.9%
12/17	24,820	10,027,755	28,569	28	0	14	0.0	1.6	36.7	10,545,226	-4.9%	-8.5%	-10.9%
12/18	23,950	10,051,705	28,556	30	16	23	0.0	1.6	36.7	10,575,802	-5.0%	-8.5%	-10.9%
12/19	27,200	10,078,905	28,552	30	26	28	0.0	1.6	36.7	10,604,935	-5.0%	-8.5%	-10.9%
12/20	23,080	10,101,985	28,537	27	20	24	0.0	1.6	36.7	10,627,701	-4.9%	-8.5%	-10.9%
12/21	23,760	10,125,745	28,523	26	23	25	0.0	1.6	36.7	10,651,300	-4.9%	-8.6%	-10.9%
12/22	25,530	10,151,275	28,515	29	22	26	0.2	1.8	37.0	10,678,889	-4.9%	-8.6%	-10.9%
12/23	26,000	10,177,275	28,508	32	28	30	0.3	2.1	37.3	10,708,247	-5.0%	-8.6%	-10.9%
12/24	22,540	10,199,815	28,491	35	32	34	0.5	2.6	37.7	10,733,770	-5.0%	-8.6%	-10.9%
12/25	18,380	10,218,195	28,463	40	17	29	0.5	3.1	38.2	10,754,950	-5.0%	-8.6%	-10.9%
12/26	21,140	10,239,335	28,443	23	11	17	0.0	3.1	38.2	10,778,405	-5.0%	-8.6%	-10.9%
12/27	20,450	10,259,785	28,420	24	7	16	0.0	3.1	38.2	10,802,991	-5.0%	-8.6%	-11.0%
12/28	22,270	10,282,055	28,403	29	21	25	0.0	3.1	38.2	10,826,321	-5.0%	-8.6%	-11.0%
12/29	24,500	10,306,555	28,393	19	1	10	0.0	3.1	38.2	10,853,430	-5.0%	-8.6%	-11.0%
12/30	23,420	10,329,975	28,379	29	12	21	0.1	3.2	38.4	10,879,086	-5.0%	-8.7%	-11.0%
12/31	25,120	10,355,095	28,370	30	8	19	0.0	3.2	38.4	10,907,098	-5.1%	-8.6%	-11.0%

5 Year Ave: 2004 - 2008 10 Year Ave: 1999 - 2008

2010 Unit Well Pumpage by Month
(1000 gallons)

Unit	Jan *	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
6	0												0
7	864												864
8	0												0
9	21,480												21,480
10	0												0
11	35,200												35,200
12	13,840												13,840
13	39,490												39,490
14	41,080												41,080
15	28,780												28,780
16	26,020												26,020
17	0												0
18	24,340												24,340
19	33,110												33,110
20	25,980												25,980
23	0												0
24	28,210												28,210
25	20,440												20,440
26	47,870												47,870
27	0												0
28	0												0
29	29,690												29,690
30	32,760												32,760
Total	**449,154**												**449,154**

* As of January 18, 2010

30+/- Day Pumpage Report

(1000 gallons)

Water Supply

Date	Daily Pumpage	Year to Date	Average for Year	2010 Temperature High	Low	Avg	Precipitation Day	Month	Year	2009 Last Year To Date	Percent Difference	5 Year Ave Percent Difference	10 Year Ave Percent Difference
1/1	26,650	26,650	26,650	15	1	8	0.0	0.0	0.0	24,599	8.3%	-0.9%	-1.6%
1/2	21,240	47,890	23,945	7	-5	1	0.0	0.0	0.0	50,294	-4.8%	-7.7%	-8.8%
1/3	21,720	69,610	23,203	12	-8	2	0.0	0.0	0.0	77,308	-10.0%	-11.7%	-13.4%
1/4	24,380	93,990	23,498	17	1	9	0.0	0.0	0.0	102,166	-8.0%	-11.2%	-12.5%
1/5	27,880	121,870	24,374	19	7	13	0.0	0.0	0.0	125,869	-3.2%	-8.8%	-10.1%
1/6	25,490	147,360	24,560	18	1	10	0.0	0.0	0.0	152,652	-3.5%	-7.6%	-9.2%
1/7	25,520	172,880	24,697	26	17	22	0.4	0.4	0.4	180,561	-4.3%	-7.6%	-9.3%
1/8	25,220	198,100	24,763	23	-5	9	0.0	0.4	0.4	207,238	-4.4%	-7.1%	-9.0%
1/9	23,110	221,210	24,579	15	-11	2	0.0	0.4	0.4	234,482	-5.7%	-7.9%	-9.7%
1/10	28,270	249,480	24,948	17	-5	6	0.0	0.4	0.4	264,940	-5.8%	-7.3%	-9.0%
1/11	23,310	272,790	24,799	26	12	19	0.0	0.4	0.4	291,577	-6.4%	-8.1%	-9.4%
1/12	25,400	298,190	24,849	26	2	14	0.0	0.4	0.4	317,179	-6.0%	-7.9%	-9.6%
1/13	26,030	324,220	24,940	34	15	25	0.0	0.4	0.4	341,247	-5.0%	-7.4%	-9.2%
1/14	25,970	350,190	25,014	37	31	34	0.0	0.4	0.4	367,899	-4.8%	-7.2%	-9.0%
1/15	26,820	377,010	25,134	28	26	27	0.0	0.4	0.4	395,714	-4.7%	-7.0%	-8.8%
1/16	25,604	402,614	25,163	26	22	24	0.0	0.4	0.4	427,220	-5.8%	-7.2%	-9.0%
1/17	24,650	427,264	25,133	28	24	26	0.0	0.4	0.4	454,123	-5.9%	-7.2%	-9.1%
1/18	21,890	449,154	24,953	33	22	28	0.0	0.4	0.4	479,466	-6.3%	-8.2%	-9.9%

5 Year Ave: 2005 - 2009 10 Year Ave: 2000 - 2009

Madison Water Utility mwu

MONTHLY OPERATIONS REPORT

	2009	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD TOTAL
1.0	**ADMINISTRATION**													
1.1	Formal Grievances	0	0	0	0	2	1	0	1	0	1	0	0	5
1.2	Employee Injuries	7	4	5	4	8	4	6	3	5	2	5	9	62
1.3	Utility Veh Accidents	0	0	0	0	2	3	3	0	1	1	0	1	11
1.4	Print Media Reports	4	5	7	3	2	2	1	4	1	1	1	4	35
2.0	**PUMPAGE**													
2.1	Tot in Million Gals(MG)	854.0	801.5	842.6	830.3	885.8	929.0	999.1	960.8	956.9	798.6	739.0	757.5	10,355.1
2.2	Average Day (MG)	27.5	28.6	27.2	27.7	28.6	31.0	32.2	31.0	31.9	25.8	24.6	24.4	28.4
2.3	Maximum Day (MG)	31.5	33.7	34.5	32.4	32.4	41.0	41.9	39.6	39.0	29.9	28.6	29.2	41.9
2.4	Date of Max Day	1/16 (F)	2/1 (Su)	3/7 (Sa)	4/15 (W)	5/20 (W)	6/26 (F)	7/7 (Tu)	8/5 (W)	9/19 (Sa)	10/8 (Th)	11/20 (F)	12/12 (Sa)	7/7 (Tu)
3.0	**INSPECTIONS**													
3.1	Cross Connections	46	45	69	102	99	102	100	70	122	102	92	108	1057
3.2	Private Wells	2	9	12	11	5	2	7	18	17	17	21	27	148
4.0	**CUSTOMER SVCS**													
4.1	Scheduled Billings	9,185	13,507	14,188	11,533	15,935	9,737	9,139	13,370	14,094	11,467	15,877	9,738	147,770
4.2	Spec Request Billings	200	228	361	392	484	815	855	1,036	523	456	458	278	6,086
4.3	Bill Related Inspections	7	30	14	11	10	8	9	11	9	6	5	5	125
4.4	Reminder/Tax Notices	2,863	1,361	1,543	2,264	2,139	1,085	2,487	1,478	1,694	10,288	0	1,084	28,286
4.5	# of Meter Readings	14,265	10,837	12,273	14,247	8,342	9,330	12,944	10,042	15,758	9,365	6,557	8,560	132,520
5.0	**HYDRANTS**													
5.1	Installed	4	1	3	3	13	15	1	16	42	4	20	3	125
5.2	Removed	4	1	3	3	9	10	1	8	34	4	5	3	85
5.3	Total in Service	8,343	8,343	8,343	8,343	8,347	8,352	8,352	8,360	8,368	8,368	8,383	8,383	8,383
5.4	Inspections	551	831	1,034	328	65	27	29	249	68	44	286	265	3,777
5.5	# Repaired	16	17	24	12	11	18	11	11	14	8	6	18	166
	Unit Cost	$2,903	$1,925	$1,755	$1,202	$1,057	$998	$1,463	$1,531	$988	$1,185	$3,100		
5.6	Routine Flushing	90	75	25	289	265	575	694	229	247	201	20	0	2,710
6.0	**VALVES**													
6.1	Installed	4	4	7	8	45	54	5	69	186	6	53	1	442
6.2	Removed	2	4	5	4	19	24	5	41	112	6	8	0	230
6.3	Total in Service	19,468	19,468	19,470	19,474	19,500	19,530	19,530	19,558	19,632	19,632	19,677	19,678	19,678
6.4	Inspections	568	1,038	1,086	867	516	722	307	389	382	352	549	179	6,955
6.5	# Repaired	10	10	16	18	11	14	10	26	22	21	16	9	183

Madison Water Utility

MONTHLY OPERATIONS REPORT

	2009	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD TOTAL
7.0	**MAINS**													
7.1	Miles Installed	0	0	0	0	1.18	0.99	0.06	1.45	3.55	0	1.64	0	8.87
7.2	Miles Abandoned	0	0	0	0	1.29	0.7	0.05	0.93	3.41	0	0.29	0	6.67
7.3	Total Miles in Svc	836.57	836.57	836.57	836.57	836.46	836.75	836.76	837.28	837.42	837.42	838.77	838.77	838.77
7.4	Number of Leaks	80	55	22	6	10	10	8	7	9	6	13	35	261
	Unit Cost	$2,465	$2,678	$3,924	$5,828	$3,766	$17,091	$19,853	$4,935	$7,967	$15,491	$3,306		
7.5	Leaks per Mile	0.10	0.07	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.31
7.6	Dwell Units Out of Svc	938	681	194	32	148	106	61	105	110	78	216	404	3073
8.0	**SERVICES**													
8.1	New Svcs to Old Lot by WU	0	0	0	0	0	0	0	0	0	0	0	0	0
8.2	New Svcs to Old Lot by PC	0	0	1	7	1	5	4	6	5	4	8	4	45
8.31	Lead Replacements by WU	0	0	0	0	1	0	0	1	0	1	0	0	3
8.32	Lead Replacements by PO	0	0	1	16	24	35	42	28	28	24	22	7	227
8.33	PO Side was Copper	0	0	0	0	0	0	0	0	0	1	0	0	1
8.34	PO Side not Replaced	0	0	0	0	0	0	0	0	0	0	0	0	0
8.41	Removals/Cut Offs Lead	0	0	0	1	1	0	0	0	0	0	0	0	2
8.42	Removals - Copper	0	0	0	0	0	1	3	0	0	0	0	0	4
8.5	New Svcs in New Plats	9	1	0	0	0	0	0	9	3	16	0	17	55
8.6	Total Svcs in Ground	61,579	61,580	61,581	61,587	61,587	61,591	61,592	61,607	61,615	61,635	61,643	61,664	61,664
8.7	New Connects to Exist Svcs	4	19	23	10	22	33	33	12	30	8	63	12	269
8.8	Number of Leaks	2	2	1	2	6	4	2	3	3	0	0	1	26
	Unit Cost	$568	$2,241	$2,898	$2,003	$1,827	$ 2,470	$ 2,466	$ 2,126	$ 4,605	$ 2,286	$218		
8.9	Frozen	32	19	2	0	0	0	0	0	0	0	0	0	53
9.0	**METERS**													
9.1	Total in Service	65,446	65,452	65,502	65,545	65,599	65,626	65,669	65,715	65,748	65,723	65,751	65,743	65,743
9.2	Total Inspections	428	446	353	299	316	234	258	311	236	358	319	207	3,765
9.3	Number Repaired	134	94	27	38	74	109	103	45	40	73	41	35	813
	Unit Cost	$56	$75	$232	$147	$91	$76	$88	$140	$156	$97	$202		
9.4	Number Changed	322	267	463	472	380	433	285	207	182	234	262	229	3,736
9.5	Number Converted	0	2	1	0	0	0	0	0	0	0	0	1	4
9.6	Installed in City (Regular)	0	0	1	1	0	2	4	0	8	2	0	1	19
9.7	Installed in City (Remote)	17	20	37	23	39	27	34	45	27	33	63	7	372
9.8	Installed Out City (Regular)	0	0	0	0	0	0	0	0	0	0	0	0	0
9.90	Installed Out City (Remote)	1	0	0	0	0	0	1	0	0	0	0	0	2
9.10	Turn Ons	2	1	18	29	24	7	7	6	7	3	4	2	110
9.11	Turn Offs	18	15	6	10	9	9	3	5	9	63	39	18	204
9.12	NET CHANGE	2	6	50	43	54	27	43	46	33	-25	28	-8	299

Madison Water Utility

MONTHLY OPERATIONS REPORT

2009 Water Board Data	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD TOTAL
Pumpage in MG	854.0	801.5	842.6	830.3	885.8	929.0	999.1	960.8	956.9	798.6	739.0	757.5	**10355.1**
Scheduled Billings	9185	13507	14188	11533	15935	9737	9139	13370	14094	11467	15877	9738	**147770**
# of Meter Reads	14265	10837	12273	14247	8342	9330	12944	10042	15758	9365	6557	8560	**132520**
Hydrant Inspections	551	831	1034	328	65	27	29	249	68	44	286	265	**3777**
# Rep'd/Replaced	16	17	24	12	11	18	11	11	14	8	6	18	**166**
Hyd Painted	0	0	0	0	256	588	561	497	0	0	0	0	**1902**
Valve Inspections	568	1038	1086	867	516	722	307	389	382	352	549	179	**6955**
# Rep'd/Replaced	10	10	16	18	11	14	10	26	22	21	16	9	**183**
Main Leaks	80	55	22	6	10	10	8	7	9	6	13	35	**261**
Lead Replace by W.U.	0	0	0	0	1	0	0	1	0	1	0	0	**3**
Removals/Cut Offs Lead	0	0	0	1	1	0	0	0	0	0	0	0	**2**
Lead Replace by P.O.	0	0	1	16	24	35	42	28	28	24	22	7	**227**
New Svcs Installed	9	1	1	7	1	5	4	15	8	20	8	21	**100**
Service Leaks	2	2	1	2	6	4	2	3	3	0	0	1	**26**
Meters Repaired	134	94	27	38	74	109	103	45	40	73	41	35	**813**
Meters Changed	322	267	463	472	380	433	285	207	182	234	262	229	**3736**

LEGISTAR NO. _____

Madison Water Utility
STAFFING REPORT

January 15, 2010

WORK AREA	POSITION	HELD BY	COMMENTS
Management			
Finance			
Water Quality			
Water Supply			
Engineering			
Customer Service	Water Meter Mechanic 2 (16-11)	Vacant	Vacancy due to Mr. Ertel's promotion to position of Water Services Inspector. Position will be held open.
Operations	Administrative Clerk	Vacant	Vacancy due to retirement of Deb Meinert
Maintenance	Maintenance Worker (16-11)	Vacant	This position is currently vacant.

SUMMARY OF PERMANENT POSITIONS

Budgeted positions for 2010 (1/1/2010):	127
Positions Vacant as of January 15, 2010:	03
Positions in various stages of recruitment:	00
Positions being filled by employees in Acting status	00
Employees on Extended Absences	01
Employee hired, not yet working	00
Employees Absent Without Pay Status	03
Net Effective Employees	120

SUMMARY OF HOURLY/SEASONAL POSITIONS

Work Area	**Full Time Employees**	**Part Time Employees**
Customer Service		
Engineering		
Operations Section		
Finance/Accounting		

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January 20, 2010

Customer Service Report

I was on vacation from December 30 to January 19.

All RFP's for professional service regarding the AMI project have been returned (10) and are in the process of being evaluated by myself, Tom, Robin, and the Purchasing Department.

Ken Key
Customer Service Manager

Engineering Report to the Water Board

January 26, 2010

Alan L. Larson – Principal Engineer

119 E. Olin Avenue
Madison, Wisconsin 53713
Telephone: 608 266-4653
email: allarson@cityofmadison.com

Engineering Systems and Mapping

1. GIS & Mapping: Continue to enter 2009 water main projects and main leaks into the Utility's GIS.
2. ACCELA asset management software; continue to work through issues with the implementation and startup of the work order system; Asset management portion is scheduled to go live on February 8, 2010.
3. Lead Services: Continue to coordinate replacement and compliance.
4. Hydraulic Model: Providing assistance with system analysis as requested

Water Main Design Projects

Projects under active design: Pleasant View Road - Mineral Point to Valley View; University Avenue - Shorewood to Segoe; STH 113; University Ave – Breese to railroad tracks; Lien Road; University Ave – Park St intersection; Old Middleton Rd main replacement; Helena/Division/Schurz/Lakeland main replacement; N & S Broom St main replacement; Sanitary w/resurfacing main replacement; Edgewood Ave main replacement

Private contract design additions: Cardinal Glenn Phase 2B

Projects out for bid: McCormick/Commercial main replacement

Projects bid waiting for construction: W Gilman St main replacement

Construction Projects – 2010 construction has not started yet

Completed Projects in 2009: Starkweather / Clyde Gallagher: East Campus Utilities: East Washington Av. – Ph. 4: University Av. Ph. 1 – Gorham to Broom: Marston Av.: Spaight / Few: S. Mills St.: Fox / Keyes / Prospect: Arbor / Knickerbocker / Pickford: University Av. Ph.2 – Park to Breese: W. Gilman: N. Few St.: Novation Campus: Kingston / Beltline Project: Union South: NE Interceptor: Chamberlain / Ash / Chestnut / Joss St.: Maple / Ludington: Oak / Hoard: Marquette St.: Eastlawn Plat: Littlemore: Nakoma: Lawrence St.: Commercial Av. / N. Thompson Rd.: Camden Rd.: Truax Water & Sewer Relocation: Sherman Terrace: Femrite Dr.: Northeast Interceptor Sewer (aka: Regas Rd.): Hawks Creek Ph. 1: Tradesman Business Park; Cannonball Run: Approx. 60% of the water main installed remainder in the spring;

Miscellaneous Projects

1. Bids were opened for the spring 2010 painting of the Prairie Road elevated tank (Reservoir 120)
2. Work continues on installing the generator at Pump Station 215 on High Crossing Boulevard
3. Repair of the reservoir roof for Well 7 has been completed and the unit is back in service.

Unidirectional Flushing Operations and Sampling

Planning has started for 2010.

East Side Zone 6 to Zone 3 Conversion

1. Bids were received January 15, 2010 for new pumps, motor controls and installation.
2. The new pumps and equipment will be installed and operational in June 2010.

Zone 4 Water Supply Augmentation

1. Developing an RFP to hire a consultant to assist with the well site search.

Wellhead Protection Planning

1. Peggy Wischhoff finished the 1st draft of the wellhead protection plans for Wells 17 and 25.
2. We have budgeted to hire a consultant to complete an additional 6 plans during 2010.

Arbor Hills Fire Flow Supply

1. Construction of phase 1 of the 16-inch transmission main for the Cannonball pipeline has shut down for the winter.
2. An RFP to hire a consultant to assist in finding a suitable site and to design of the pump station was issued.

Zones 7 and 8 Supply Augmentation

1. A public hearing to establish the project will be held at the January Water Utility Board meeting.

East Side Water Supply Project

1. The USEPA grant application was submitted. Expect approval in May 2010.
2. City Purchasing sent out the consultant RFP and the first submittal is due January 28, 2010.

Utility Emergency Response Plan

1. Looking at training requirements and keeping the Response Plan Updated.

Graduate Research Project

1. Brian continues processing data looking for a correlation with operations and sediment loading to optimize flushing.
2. Brian will be completing his Master's Thesis this spring.

Training and Conferences

1. Ongoing ACCELA asset management software testing and training as the project goes live for work orders.

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TOILET REBATE PROGRAM – FINANCIAL REPORT

January 21, 2010

	Monthly Numbers	Monthly Amount	Total Number	Total Amount	Monthly Admin Costs	Total Admin Costs	Total Revenue
January	73	$7,257.04	73	$7.257.04	$905.74	$905.74	$ 0.00
February	161	$15,998.70	234	$23,255.74	$20,982.24	$21,887.98	$5,000.00
March	149	$14,825.01	383	$38,080.75	$3,337.76	$25,225.74	$10,000.00
April	143	$14,269.13	526	$52,349.88	$1,293.84	$26,519.58	$18,333.33
May	128	$12,792.84	654	$65,142.72	$896.00	$27,415.58	$30,000.00
June	229	$22,900.00	883	$88,042.72	$1,603.00	$29,018.58	$45,000.00
July	158	$15,800.00	1,041	$103,842.72	$1,106.00	$30,124.58	$63,333.33
August	125	$12,500.00	1,166	$116,342.72	$875.00	$30,999.58	$85,000.00
September	168	$16,800.00	1,334	$133,142.72	$1,176.00	$32,175.58	$110,000.00
October	198	$19,787.15	1,532	$152,929.87	$1,386.00	$33,561.58	$135,000.00
November	85	$8,500.00	1,617	$161,429.87	$595.00	$34,156.58	$160,000.00
December	107	$10,700.00	1,724	$172,129.87	$749.00	$34,905.58	$185,000.00

WUCommon/ToiletRebateFinancial.doc

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FUND BALANCE REPORT

January 21, 2010

	Balance December 31	Balance November 30
Reserves required by Bond Ordinance		
Operation and Maintenance Fund		
Reserve Account (Maximum $150,000)	$ 150,000.00	$ 150,000.00
Special Redemption Fund		
Interest and Principal Account	$ 4,866,544.98	$ 4,866,544.98
Reserve Account (Maximum $6,308,090.01)	$ 6,308,090.01	$ 6,308,090.01
Depreciation Fund([1]) ($750,000 required by Bond Ordinance)	$ 750,000.00	$ 750,000.00
Construction Fund	$ 5,215,526.00	$ 0.00
Assessment Revolving Fund	$ 0.00	$ 0.00
Unrestricted Funds		
PILOT Fund	$ -	$ -
Cash Flow Fund	$ 500.00	$ 500.00
Unrestricted Reserve Fund	$ 11,195.25	$ 11,195.25
Debt to City of Madison		
Short Term Construction Fund Loan	$ .00	$ 4,728,873.00
Short Term Loan from City	$ 4,550,000.00	$ 4,550,000.00

([1])Transfer of funds to Construction Fund approved as needed.

Reporting special fund balances as specified in 1978 Waterworks Bond Ordinance.

Refer any questions to Robin Piper, Water Utility Finance/Accounting Manager, at (608) 266-4656.