

**Written Public Comments**  
March 25, 2013 Public Hearing  
Well 7 Iron and Manganese Mitigation Project

**From:** Michael D. Barrett  
**Sent:** Monday, March 25, 2013 12:15 AM  
**To:** Water  
**Subject:** Public Hearing Water Utility Well 7: UNNECESSARY

[Please enter this in the public record for the public hearing on Monday March 25, 2013]

TO THE WATER UTILITY BOARD:

*We oppose the expansion of Well 7.*

First & foremost, we know, thanks to Colonel Christopher Gellasch's research for his Geology Ph.D., that the mere fact of pumping vast quantities of groundwater in sudden, powerful bursts and then storing it in massive reservoirs on the surface is:

- Warping the bedrock below
- Fracturing an already fractured shale layer that currently at least \*slows\* transmission of pathogens and toxins to the deep aquifer. (His research on Well 7 was the first to positively demonstrate that the Eau Claire shale is indeed permeable, much of it human caused through overpumping and then over storing masses of water on the surface. Conventional hydrogeology to that point had held that the shale layer was perfectly impermeable, protecting the deep aquifer. The reality: Warp it, crack it, pump hard, it stops protecting.).
- Pulling denser, dangerously high concentrations of naturally occurring elements which in trace amounts are otherwise harmless (or nearly so)

This was the finding of his research, under UW-Madison Professor Kenneth Bradbury, at Well 7: That we are *currently* overpumping an already strained hydrogeologic system at Well 7.

And now we, as a city, want to:

- *Triple* the size of the surface reservoir?
- Pump even more?
- Faster?
- More vigorously?
- Further exacerbating the fracturing? (Yes, *the rapid pumping actually creates measurable seismic events under the well!*)
- Creating yet *more* pathways for toxins and disease right into our deep aquifer drinking water?
- *Actively pulling* surface toxins and pathogens downward into the deep aquifer?
- Increasing the concentrations of naturally occurring, neurologically damaging elements?
- An expansion in capacity in an area that is essentially built-out and landlocked, not growing and not predicted to grow?
- When there are so many more opportunities for conservation?

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Indeed, before looking to expand capacity with these megalomaniacal tributes to manly engineering, we need to take a serious look at the consumption patterns across the city. We note that our 2-flat (that's 2 separate families, one meter, 4 adults total) *consumes 20% less* than the average single family home (average occupancy: <2.3). Clearly, there is a vast chasm between need and waste in the current consumption patterns in this oh-so-enviro city. (Oh, and no one in our house stinks, there are no hairshirts in our respective wardrobes; during the summer we often take 2 showers/day given our high level of physical activity; the tenants have no financial incentive to conserve since they don't pay the water utility bill, we water our trees, and this low level of water use held even when tenants had a baby, etc.). And we're working on yet more absolutely invisible water conservation measures that will likely save us *yet another 10-20 percentage points or more below the city average*.

The fruit...it is so low-hanging that it is nearly dragging the ground!

And yet, everywhere we go—homes, city buildings, private businesses, non-profits—we see sink aerators that pour forth 2.2 gallons/minute (ours is 1.5; the glorious Overture Center's faucets probably gush 4--FOUR!--gpm given that they have no aeration whatsoever!), showerheads that lavish >3.5 gpm (ours is 1.25, but feels lavish nonetheless), streets getting watered (how many sprinklers we see sending water right down city drains, never touching grass! how many thousands of gallons getting wasted in flushing operations!), new dishwashers that require handwashing before loading (yes, it is routine in the many households with dishwashers I have observed!), ....What's the point of an EnergyStar/WaterSense dishwasher if you have to handwash the dishes first?

And the insanity continues.....

At Citizens Advisor Panel (CAP) meetings at least a couple of individuals tried to make the point that there is so much more room for conservation, but they were out-maneuvered and out-voted. Indeed, there was but one lonely 'no' vote in a committee vote cast by the most intensely knowledgeable citizens on water issues. They were cowed by staff's barrages of undigested data on water consumption. They should have held their ground.

And so it goes. Madison water utility leadership, much like Madison's leadership in general swaddles itself in the attitude of consumption-at-all-costs-is-ok-because-we're-a-liberal/progressive city.

We, the undersigned, refuse to go along with that groupthink. We choose to listen to the science. Thus, we oppose the expansion of Well 7. The extra water you seek is freely available in very simple, very cheap water management measures in households and institutions and industry.

We implore the Water Utility Board to smash the science-denial that permeates the staff reports on the issue and simply say no to an expanded system at Well 7.

We note that only three Water Utility Board members showed up to the Technical Advisory Committee meeting at which Col. Gellasch laid out the hydrogeologic science of Well 7. One of those members has since been thrown off the commission for having raised precisely the questions that came out of

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that study. Pathetic political leadership made that happen. We implore you to rise above the politics of denial, even if it risks your tenure on the Water Utility Board. It would be worth it. You could achieve with this one action what others could never achieve even in 10 years of service.

On the science: for context, to get a private sector study of the scope and quality of the Gellasch Ph.D. would probably have cost \$400,000 or more. It was groundbreaking, thorough, and, most importantly, highly specific to Well 7. And frankly, it was priceless because the funding was independent of the utility, thus untainted by staff's pre-conceived notions.

To ignore the essential science—laid at your feet—amounts to willful ignorance.

You not only ignore the science at your peril. You, the board members of the Water Utility, ignore it at the peril of us all.

Because the science is clear: Build a mega-well at Well 7 and you:

- Harm our aquifer
- Harm our health
- Deny science

We further maintain that an expanded Well 7 and similar efforts elsewhere in the city will:

- Harm ratepayers
- Harm the city's future economic sustainability

WE OPPOSE SCIENCE DENIAL.

Thus,

WE OPPOSE AN EXPANSION OF WELL 7.

Sincerely,

Michael D. Barrett and Pamela S. Barrett  
2137 Sommers Ave.  
Madison, WI 53704  
(608)245-1059

P.s. We give permission to forward this on to whomever, wherever.

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**From:** Katherine Rasmussen  
**Sent:** Monday, March 25, 2013 6:50 AM  
**To:** Water  
**Subject:** Re: Public Hearing Water Utility Well 7: UNNECESSARY

I would add my name to the growing list of very concerned user of well 7 and opposed to it's expansion. As I hear more information, the concern grows. I have 2 properties on this well and we know what a degraded water source means for any community - our health and economic viability relies on this basic need that we have all taken for granted too long. As I will not be able to attend, please register my opposition.

**From:** V Straughn  
**Sent:** Monday, March 25, 2013 12:36 PM  
**To:** Water  
**Subject:** Public Hearing Water Utility Well 7: UNNECESSARY

Dear Members of the Water Utility Board:

We are writing to add our names to the petition found below regarding the expansion of Well 7.

As life-long residents of Madison's east side, we want to see the City implement policies that reward saving water rather than having policies that reward overuse or waste of it.

Sincerely,  
Victoria Straughn  
Dean Morse  
2421 Sommers Avenue

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Sent: Monday, March 25, 2013 12:15 AM  
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**From:** Christopher Gellasch  
**Sent:** Monday, March 25, 2013 8:50 AM  
**To:** Ken Bradbury; Demorett, Joe  
**Cc:** Jean Bahr  
**Subject:** FW: Madison Water

Hi Ken and Joe,

An Army friend who has an environmental activist brother-in-law in Madison forwarded me the message below. You probably are not surprised, but it sounds like they are going to try and use my research as justification to stop the expansion of UW-7. I guess having people mischaracterize my work is just par for the course given the topic.

It sounds like this will come up at a public meeting tonight. I know you are able to rebut the claims listed below but for the record, I support the expansion of UW-7 (especially if the pumping rates/cycles are more uniform). Of course the results of the larger virus project will tell us a lot more about what is happening at UW-7 and other sites.

Please let me know if there is anything else I can do to help. My goal is to collect more water level data from the other virus sampling locations to expand that part of my research.

Chris

Christopher A. Gellasch, Ph.D.  
LTC, MS, U.S. Army  
Assistant Professor

Dept. of Preventive Medicine and Biometrics  
Uniformed Services University of the Health Sciences  
4301 Jones Bridge Rd  
Bethesda, MD 20814

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**COMMENTS ON WELL 7 PROJECT FOR WUB MEETING  
MARCH 25, 2013**

- **I am Dolores Kester. Our family has owned a home about four blocks from well 7 for over thirty years. In that time our city water has been sweet and clean but it started turning our toilet fixtures black about five years ago.**
- **I have participated in all but one of the Northside well 7 CAP meetings since last April a year ago, and have attended many of the Technical Advisory Committee meetings; and have asked as many questions as I could about the huge cost and overall efficacy of this proposed rebuilt of well 7 including water safety and design of the proposed new structure. These are my thoughts as a citizen of Madison whose family is directly affected by this project.**
- **Water safety: reassurances have been provided by Joe Grande and the Technical Advisory Committee as well as Strand that if the planned new variable speed pump for well 7 were set to run for longer periods of time at speeds in the middle range and without repeatedly cycling on and off, the pumping would not have the convulsive pumping effect that Gellasch concluded was pulling in contaminants through the shale at well 7. I'm not a hydrogeologist and have no idea whether this reassurance can be relied upon. Ken Bradbury apparently directed the Gellasch thesis and is certainly aware of his research and conclusions, and Bradbury has drawn the concentric circles diagram that has been discussed at length at several Technical Committee meetings that I have attended. I am persuaded that these authorities are sincere in believing that the changes to well 7 will keep the water sweet and clean. Time will tell.**
- **Design of new well 7 and reservoir: I understand that the function of this facility to a large degree influences its**

**design in that big walls are needed to enclose the new structure. Frankly, I did not like the first design concept proposed for well 7 which was a prairie-style, Frank-Lloyd-Wrightish design that was inconsistent with most of the buildings in the immediate neighborhood, and also boring. Fast forward to this past week when the final pre-designs were made available—many adjustments have been made and in my opinion, the latest designs are greatly improved from every angle. I love the different colors and shadings and variations in height and texture variations on the different segments of the building. I really like how this breaks up the stark walls and gives interest to the roof line without making it too tall. Thanks to Danielle Theriault of Strand and to Al Larson for these improvements, and also for giving priority to saving the corner tree and planning other landscaping to make the structure attractive as well as inconspicuous.**

- **Opportunities for public input: I am giving MWU and its project engineer, Al Larson, high marks for giving the public notice of this project and of the opportunities to provide input through various means: post cards, emails, newspaper articles, even a big sign on N. Sherman Avenue in front of well 7.**
- **Need for increased capacity: I understand that questions have been raised about whether the planned increased capacity at well 7 is necessary. These questions have not been addressed in the past year's various Northside well 7 meetings—we have simply been presented with the conclusion that since the well rebuild is necessary, they may as well increase the size. Does the MWU and the WUB have studies justifying a need for this increase?**

**Thank you for your time and attention.**