



City of Madison
Meeting Minutes - Final
BOARD OF WATER
COMMISSIONERS

City of Madison
Madison, WI 53703
www.cityofmadison.com

Tuesday, November 15, 2005

4:35 PM

119 E. Olin Avenue

CALL TO ORDER

ROLL CALL

Guests included Jerry Edward and Dave Hunt of Black & Veatch, and Jerry Groth of Strand Associates.

Present: Ald. Lauren Cnare, Priscilla B. Mather, Jonathan H. Standridge and Gregory W. Harrington

Excused: Larry L. Studesville

PUBLIC COMMENT

APPROVAL OF MINUTES

1. Approval of the minutes from the meeting of October 18, 2005.
Unanimous approval of minutes.

INFORMATIONAL REPORTING

2. October 2005 Water Quality Report.
John Marchewka said everything proceeded, as it should for October, that EPA required monitoring was completed.
3. November Staffing Report.
In Gail's absence, Dave reported that interviews were conducted for Public Works Maintenance Worker 2 positions, and there are two offers pending. Bob Runkel was promoted to Engineering Aide 1; he has been a Hydrant Inspector for many years, and Mr. Runkel's promotion creates a vacancy for that position.
4. Operations Report.
Doug Grueneberg reported there were 12 lead service replacements in October because the focus has been on trying to complete black top and dirt work. The black top plants are open until Thanksgiving, and could be open longer weather permitting.

5. Engineering Report.

Al reported that we continue to update our system and have a lot of design work going on right now. He said we are starting to look at 2006 water main projects. Unit Well 30's concrete reservoir is finished and being tested. Al said the deep well pump at UW 9 has been pulled and will be rebuilt. This is typically done about every 10 years. Al stated it was decided to shut down UW 28 for the winter and run UW 16 because it has a standby generator. He said we are also looking at shutting down UW 11 for the winter now that UW 29 is fully operational.

Al said the final report is complete on Nakoma water quality and will be printed for distribution. Unidirectional flushing of the Nakoma/Allied Drive area was finished the week of November 7. Most of the pipes clean up to a turbidity of less than 5 NTU with a 15-minute flush. Dave said Abigail Cantor's sampling investigation is complete and we just received the final report yesterday. Dave said it is posted on our website and includes the lengthy detailed report and the summary report. He said we have prepared a postcard to mail to 12,000 homes in the UW 10 service area. The cards inform people that the report is available on the website, by calling or emailing us, and it will be available at the City Clerk's Office and city libraries. Dave said the postcard also talks about manganese information. He said we've sent out all of the sampling results to individuals who participated in the study.

Al said the report is 82 pages with many charts and graphs. On page 35 there is a map that plots the location and results of the manganese tests in stagnant water samples, which was found to be the worse case scenario. There were three or four samples that were above the secondary limit of 50 ppb and none above 300 ppb, which is the health advisory limit from the EPA. Al said pipeline replacement on Mandan Crescent is still on track to start next spring. During unidirectional flushing of flushing district 3, about two-thirds of the way through, we started taking samples. Manganese levels in the flushing water during initial flushing exceeded 7,000 parts per billion in a couple of cases. At the end of flushing, manganese in flushing water ranged from 550 down to less than 50. We did see a correlation between the turbidity and manganese levels, so we decided to increase our flushing to try to get the turbidity to less than one. We were able to achieve at least 90% removal of manganese with flushing. Priscilla said she is concerned with the length of the manganese report. Dave said he tried to cover it with a summary in layman terms, to be put on the website. Priscilla said she was concerned with a 16 or 18 page summary. She thinks we should put a paragraph in the Water Quality Report regarding this, with key points so people can understand it. Dave said there was something about manganese in this year's report and we will update that in next year's report. Dave also said the City Attorney's Office has been contacted and informed that there may be some legal action taken by one of the residents in the Nakoma area, that it could be an injunction to prevent us from using UW 10. He said we've had one meeting with the City Attorney staff and Health Department, and there is another meeting set up.

Al said that Judy Moron, the UW graduate student, would be at the December meeting to present her thesis to the Board.

6. Paterson Street Report.

AI reported this project has been put on hold, but we are planning to get permits and hope to begin construction in 2007. AI presented the UDC submittal package, which illustrates the building and site configuration. The project is up for approval at the UDC tomorrow, Wednesday, November 16.

7. Customer Service/Billing Report.

Ken Key said that last week the final transfers of delinquent bills were made to the tax rolls. Ken said he is looking at automatic meter reading to keep abreast of what is happening in this field. Ken said for us it appears that it would not be cost effective. He has agreed with Badger Meter that they do 30 meters in areas that are hard to reach. Ken said he talked with Steve Phipps of our IS Department and he doesn't feel it would be viable for Madison to use automatic meter reading for 60,000 meters, but he'd like to explore it a little further. Ken said he and Robin are going to look at putting together a customer survey regarding several issues, including frequency of billing.

FINANCE

8. Fund Balance Report.

Robin Piper said balances are as they should be. In October we borrowed an additional \$200,000 from the City to help with our cash needs.

9. Capital Project Report.

Robin said we spent \$606,000 in September, paying for construction of UW 30 and some for water main replacements. The rate case is going ahead and we are answering questions from the Public Service Commission staff, with a public hearing scheduled for Thursday, December 15.

Jon Standridge made a motion to accept the informational reports. Greg Harrington seconded; unanimously passed.

ADMINISTRATION

10. General Manager's Report.

Dave said he hasn't told staff about the seating arrangements for future board meetings. We are going to try to set up in a circular or square seating arrangement and staff will be interspersed around the table, with that idea coming from the board.

The Vondron Road property sale is progressing. Joe Stepnik of City Real Estate is hopeful that we will be able to close by Friday of this week.

Dave said Priscilla and Jon had a meeting with the City Attorney to discuss the discrepancies between the ordinances and the state statues with respect to the establishment and operation and organization of the Board of Water Commissioners. The City Attorney plans to make some changes to the ordinances to make sure they are consistent with state statutes. Priscilla said the discrepancy is giving the Board a lot of authority, but there is language in the Ordinances about approval of the City Council and Mayor. So the question is, if there are disagreements, which prevails. Michael May, City Attorney, is going to look at revising the ordinance to make it clear that the Board is part of the whole city government, and the Mayor and City Council will be involved much as they are now but it will clarify the language.

OLD BUSINESS

NEW BUSINESS ITEMS

11. Authorizing the execution of an Underground Electric Easement to Madison Gas and Electric Company across a City of Madison Water Utility property located at 1133 Moorland Road. 14th Ald. District.

Sponsors: Tim Bruer

Attachments: 8298 Exhibit.pdf

A motion was made by Harrington, seconded by Ald. Cnare, to RECOMMEND TO COUNCIL TO ADOPT - REPORT OF OFFICER. The motion passed by acclamation.

RECOMMEND TO COUNCIL TO ADOPT - REPORT OF OFFICER

CORRESPONDENCE AND SPECIAL INTEREST ITEMS

12. Mayor's letter regarding Greg Harrington's reappointment to the Board of Water Commissioners.

Dave said he wanted this letter on record, which reappoints Greg Harrington to another five-year term on the Board.

13. Thank you from The Charles Hamilton Houston Institute, Inc.

Ken Key said Larry Studesville's brother, Alfonso, lends his time and support to this, which is for minority youth. Alfonso is also a counselor at MATC. They are getting an office established and he heard that we had some surplus furniture so they picked out some things and were very appreciative of it.

14. Black and Veatch Report on Infrastructure Management Plan.

Al introduced Jerry Edwards, Project Manager, and Dave Hunt, both of Black & Veatch. Jerry Groth of Strand Associates was also present as Strand did a lot of work on the report. Jerry Edwards gave the presentation on the report.

Jerry went over the Executive Summary and ended with the status of the Master Plan, which is still in progress. He started with the Infrastructure Management Plan. The main topic included in the Executive Summary is the reinvestment plan. Inspection of the facilities was by Strand Associates to verify inventory and actually go out and see, and assess the condition of the facilities and assign them a ranking. Using the rankings, a list of projects was developed to estimate long-term annual funding.

Jerry showed a graph of the pipe in the distribution system, by material type and by year installed. In 1952, you start seeing a build up in the amount of pipe installed by the Madison Water Utility. This is a typical pattern of infrastructure in the United States, the post war boom. The condition of the pipe was evaluated and given a rating. The pipeline assessment was based on main break history. He said 31% of the pipes in the system have had at least one main break. About half of those have had more than one, and the maximum was 18 breaks in a pipe segment. This information was used to evaluate the condition of the pipe.

Jerry reported on facility reinvestment needs, saying that each facility was looked at and given a rating of one to five. If it's a one, it's at the beginning of its useful life and a five indicates it is at the end of its life. You can take the rankings and figure out when the components would fail. We looked at the cost of each component as a percentage of the total facility. This allowed us to estimate a reinvestment need in the future. Jerry said that from 2015 to 2045, there is a reinvestment need of \$1.6 million per year for facilities. That need is over \$2 million a year in the period of 2045 to 2055. He said right now, what is being invested is around \$200,000 per year. He said the pipelines were looked at for average life expectancy, deterioration, and the average loss in value each year with each pipeline. As the pipes deteriorate, you have a loss of value, and if you are not reinvesting a similar amount in the system, it is deteriorating. The reinvestment need is based on maintaining the existing system at its current level. Jerry said currently there is about \$2.8 million a year being reinvested into pipeline replacement in the distribution system. The estimated reinvestment need goes from \$6.3 today to over \$8 million by 2045. Cumulatively, over the next 50 years that would add up to \$250 million shortfall-the system would deteriorate by an amount equal that.

Jerry said they looked at some proposed reinvestment schemes limited by bonding capacity and water rate issues. The Utility needs to regularly increase reinvestment spending to catch up with the needs.

On the Water Master Plan status, Jerry said one of the first things they did was to take the existing water distribution system model and recalibrated it. We input new information from SCADA that wasn't previously available and corrected some pipe link errors. He said they re-did the operational controls and modified some pump curves, as they had much better SCADA data to really look at how the pumps were operating and modified the curves accordingly.

Jerry said the Madison Area Metropolitan Planning Organization provided population estimate data for the projection of water demand. In 2000, population

was 210,000 and is projected to go to 235,000 by 2015, and 255,000 by 2025. Water demands will increase accordingly.

Jerry said they are doing hydraulic analysis for growth through the years 2015 and 2025, and through that we will identify existing and future deficiencies. From that, we will develop a capital improvement plan. The Master Plan will be a separate report from the Infrastructure Plan. It will take the reinvestment recommendations and the prioritized plans from that report, and combine it with the information coming out of this report, to come up with an integrated capital improvement plan.

Jon Standridge asked how Madison compares to other cities of similar size. Jerry said most utilities are in the exact same situation. Madison Water Utility has taken a very progressive approach to this. He said there are a lot of larger utilities taking a hard look at this, knowing that this is going to sneak up on them if they don't start doing something about it. Most utilities are not reinvesting in their systems or putting back into the facilities or pipelines. The amount of money required to maintain their systems at current levels. He said this is very common in this industry. Jon asked if we are replacing our pumps and wells and repairing them, and replacing water mains at the rate we should be, and doing it right now, how much higher would our rates be. Jerry said he hasn't calculated the rate impact. Al said it's roughly \$11 million a year, or an additional \$8.0 million per year. This would have significant impact on rates. Dave asked if other utilities facing the same situation are looking at other ways of financing this need other than having to double their bond debt. Jerry said he has a discussion about that today, and most utilities are at the same place as Madison, trying to figure out how they are going to pay for it. He said what he has been seeing is that water utilities have unrealistically low rates at the expense of deterioration of the system.

Priscilla asked about the volume of water used per capita, that the amount of water being sold seems to be going down per capita use. Jerry said this is typical because of education and low use water fixtures, and a switch from manual watering to sprinkler system that can use less water.

Al said this report will be finalized and formally accepted at the December meeting, and Jerry said they will be coming back after the first of the year to make a presentation on the water master plan.

Next Meeting Date: December 20, 2005

Priscilla said she would like to discuss changes to the Board operating procedures at the next board meeting. She said according to Roberts Rules, the president or presiding person should not be a participating person, so we can make changes to that. Priscilla said she would also like to discuss some key points about the open meeting requirements.

ADJOURNMENT

At 6:02 p.m. Jon Standridge made a motion to adjourn the meeting. Greg Harrington seconded, unanimously passed.