



# Metro Interceptor

A PUBLICATION  
OF THE MADISON  
METROPOLITAN  
SEWERAGE DISTRICT

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## DOWN THE PIPE

When I started to work for the District in 1974, I never imagined I would be here for 36 years. But when you enjoy your work and the people you work with, the years fly by. That has certainly been my experience.

There have been many changes in those 36 years, but the satisfaction of providing an essential public service, the opportunities to be involved in various areas of the District's planning and operation, to research and implement cutting edge treatment technologies, to fully participate in professional activities, and always working with people who care deeply about protecting public health and the environment have provided a consistent foundation for all of those years.

Since its inception, the District has faced and overcome many challenges, and I am sure there are more to come. I leave confident that those that remain will continue to provide our community with outstanding service, and that the District will continue to be a leader in our industry.

It has been a pleasure and an honor to work alongside my fellow employees at MMSD, the many professionals and leaders in the local governments we serve, the regulators at WDNR, and the engineering consultants that have worked for the District and the communities served by the District. I wish you all the best.



Travel safely and try to enjoy our snow-covered winter wonderland!

## OUR MISSION STATEMENT

*To protect public health and the environment by providing exceptional wastewater conveyance, treatment and related services.*

## MMSD COMMISSION SELECTS MICHAEL MUCHA AS CHIEF ENGINEER & DIRECTOR

The MMSD Commission would like to announce that Michael Mucha has been selected as the District's next Chief Engineer and Director. Mr. Mucha will be replacing Jon Schellpfeffer as he retires. Michael is expected to arrive in Madison on January 10, following his move from Washington State.

Michael is coming to the District after working eleven years as the Director of Public Works for the City of Olympia, Washington State's Capital City. Michael was born and raised in Milwaukee and worked construction early in his life until he received his civil engineering degree from UWM. He has worked as a City Engineer for two municipalities in Wisconsin before moving east to Reading, Pennsylvania, to work as a Public Works Director.

When not at work, Michael will be backpacking, cycling, skiing or "playing" the violin. As to why Michael decided to come to MMSD, he said there were forces drawing him back to the Midwest. "I wanted to come home to be closer to family and to work with people committed to an important mission. MMSD owns the leadership role in sustaining the world's most precious natural resource... water, and that resource enriches life. That is very exciting to me. I can't wait to get to work."

Mr. Mucha will join the District staff in January. We welcome Michael Mucha to his new position!



Michael Mucha

A4 • FRIDAY, OCTOBER 8, 2010

### LOCAL

## MedDrop events are successful

Middleton Police Department will install a permanent box to collect medicines.

State Journal

DANE COUNTY — Middleton's four MedDrop events have been so successful the Middleton Police Department is installing a permanent MedDrop box in the lobby of its new building.

MedDrop collects unwanted prescription and over-the-counter medicines, protecting the environment and keeping them from young people who may abuse or accidentally ingest them.

A MedDrop event on Saturday in Middleton drew more than 617 cars and collected 1,334 pounds of medicine, 113 pounds of which were controlled substances.

The permanent MedDrop box at the Middleton police station, at 7341 Donna Drive, is scheduled to be open by Nov. 1.

For more information and for upcoming MedDrop events, go to [www.meddropdane.org](http://www.meddropdane.org).

MMSD has supported local MedDrop events since inception. The article above is reprinted with the permission of *The Wisconsin State Journal*.

## POLLUTANT MINIMIZATION

### Mercury and Chloride Pollutant Minimization Programs.

*Two pollutant minimization programs (PMP) moving in different directions.*

Recent treatment plant effluent data is making it apparent that the mercury program has achieved successes that should allow the District to direct its innovation and outreach capabilities towards the chloride program. The DNR permit issued to the District has required mercury reduction measures over the last six years. The most recent permit retains the mercury PMP program and adds new chloride reduction requirements that will lead to a formal chloride PMP.

**Where have we been?** The mercury PMP relied on tried and true pollution prevention techniques to be applied to a number of mercury "sectors" to reduce usage of mercury and to increase proper management of devices and wastes. Additionally, the District used

the sewer user ordinance to require the most significant sector-source of mercury to the sewerage system (dental clinics) to install devices to "filter" amalgam from wastewater at the source. Nine Springs Wastewater Treatment Plant effluent testing in 2010 hints at the success of the mercury program. The testing demonstrates that effluent mercury levels can meet a water quality standard of 1.3 parts per trillion, the most stringent limit that can be written into the discharge permit. We believe that the innovation and outreach devoted to the mercury program over the last 15 years can now be directed towards a chloride PMP.

**Where are we going?** The District's discharge permit sets interim limits for chloride ions in effluent on a mass loading and on a concentration basis. Whereas mercury, as a trace contaminant, was targeted for grams per day reductions, the

(Continued on page 3)

# Leadership Expectations

(POLLUTANT MINIMIZATION—Continued from page 2)

chloride ion is very abundant in wastewater. The Nine Springs treatment plant receives over 130,000 pounds of chloride ion per day. This amounts to about 200,000 lb/day of table salt equivalence. The District's first report on chloride will be submitted to DNR in June, 2011. The primary task at hand is data gathering. We need to have an idea where the "low hanging fruit" might exist for significant chloride loadings that can easily and cost-effectively be reduced. Our report will use pie graphs of chloride loadings to point out where reduction activities should be directed.

The data and assumptions we make will likely show us that a significant slice of the chloride loadings pie will be from water conditioning (i.e softening). Other slices of the loadings pie will include bleaches, acids, industrial chemicals (e.g. ferric chloride), and food processing. A second pie diagram will be used to give us an indication of the softening salt loadings by sectors such as domestic (household), university, medical, manufacturing, industrial laundry, institutional (e.g. large office complexes), and commercial.

Several District workgroups will support these first steps in the chloride program. The monitoring services crew

will be collecting routine and targeted "sewershed" samples for chloride testing. The lab will be performing the analyses and data management on the sample sets. The pretreatment section will be creating inventories of the sectors to identify the sector loadings and to identify any low hanging fruit. During recent mercury program inspections, we have observed innovations that are being implemented to cut water and salt usage in commercially sized softening systems

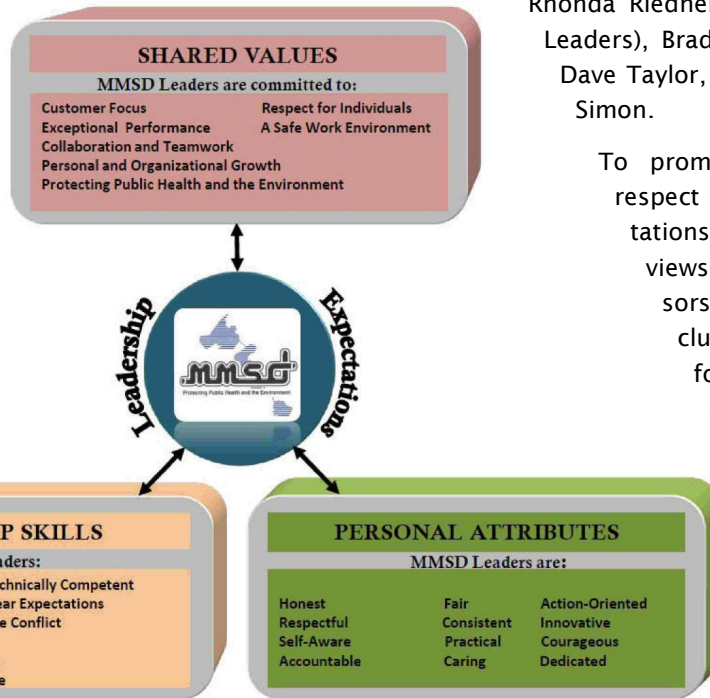
Follow the news on this topic in future issues of the *Metro Interceptor*.

*Ralph Erickson*

## LEADERSHIP EXPECTATIONS

In December 2009, Jon Schellpfeffer announced the development of the MMSD Leaders' Forum. The Leaders' Forum is designed to enhance leadership skills. A core objective of the Forum is to promote the concept of "one leadership team" at MMSD. The first meeting of the Leaders' Forum was held on January 27, 2010. To promote the concept of "one leadership team," Jon introduced the idea of creating a "Leadership Agreement." In June, eight members of the Leaders' Forum formed a team to begin to describe what effective leaders and leadership "look like" at the District.

**MMSD Leadership Expectations**



Advisor. The team was comprised of Rhonda Riedner and Jim Meyer (as Co-Leaders), Brad Walker, Dan McAdams, Dave Taylor, Jeff Brochtrup, and Mike Simon.

To promote accountability with respect to the Leadership Expectations, the performance reviews for all directors, supervisors and managers will include assessment of performance relative to the expectations. The performance reviews will be used to help identify areas of strength and opportunities for growth. In addition, the various attributes, skills and shared values identified will be used to shape fu-

ture discussions at the Leaders' Forum. This process has provided future training opportunities for our leaders.

Meeting from June through October, the team developed a model which is now referred to as "Leadership Expectations." As shown in the accompanying graphic, the model consists of a set of personal attributes, skills, and shared values that should guide leader behavior at MMSD.

A brochure explaining the MMSD Leadership Expectations can be found at the following link:

<http://www.madsewer.org/AboutUs/LeadershipExpectations/LeadershipExpectations.pdf>

*Rhonda Riedner*

Design work for the 11<sup>th</sup> Addition to the Nine Springs Wastewater Treatment Plant continues. Applied Technologies, Inc. (ATI) has recently completed the Preliminary Design Report. The report is a summary of the preliminary design activities with the design process about 30% complete. The majority of decisions driving construction costs have been made and all treatment units design criteria and sizing has been established. Space planning for all new buildings is completed. A series of detailed design memoranda have been prepared to address all the major project components.

All design memos were reviewed by District staff, followed by meetings to discuss comments and make decisions related to the design features of the new plant facilities. Design drawings at the 50% completion stage have been presented to District staff for review and comment. The design memos and drawings were also reviewed by a value engineering team from CH2M Hill. They presented a report to District staff and ATI with recommendations for possible design changes to improve the value of the project.

In the 11<sup>th</sup> Addition, several new processes will be implemented including the following:

- Waste Activated Sludge (WAS) Pretreatment for Phosphorus release
- WAS Thickening via Gravity Belt Thickening
- Acid Digestion
- Direct Steam Injection for Digester Heating
- Heat Reduction of Thermophilic Sludge
- Struvite Harvesting

Two process alternatives will be implemented to attain Class A biosolids. The long term operation of the plant will use a three-stage continuous flow process (multi-stage acid-phase anaerobic digestion). Class A status will be obtained with either pathogen reduction demonstrated through testing or a demonstration that a Process to Further Reduce Pathogens (PFRP) equivalent process has been implemented. While the pathogen testing and/or PFRP equivalency demonstration is occurring, an interim three-stage treatment process with thermal treatment in the third stage will be implemented to obtain Class A status. Thermal treatment will be implemented in the west digester complex to treat 25% of the digested solids flow. This will allow the District to produce Class A biosolids for its Metromix program at the completion of the 11<sup>th</sup> Addition by meeting the time and temperature relationship.

The new facilities will be located along the south side of the plant (see the graphic on the next page), adjacent to the

existing solids handling facilities. Digester No.8 and Sludge Control Building No.3 (SCB3) will be constructed north of existing Digester No.7, and will be connected to the existing SCB2 by a new solids tunnel. The new WAS thickening complex will be constructed immediately south of the existing GBT Building, and will be connected to the existing Solids Tunnel No.2 by a new WAS gallery. The WAS thickening complex will house the new WAS thickeners, WAS pretreatment tanks, and sludge thickening filtrate wells. The WAS thickening complex will also be connected with the new Acid Digester Facility. The new Struvite Harvesting Facility will be constructed west of the WAS thickening complex across the south entrance road from the flow splitter.

A construction cost estimate was prepared based on the preliminary design documents, and is summarized below. Total construction costs are estimated to be about \$35.6 million.

FACILITY	ESTIMATED CONSTRUCTION COST
Sitework .....	\$783,000
Digester No.8.....	\$3,864,000
Sludge Control Building No.3.....	\$1,511,000
Tunnel No.3 .....	\$613,000
East Digester Complex .....	\$2,614,000
West Digester Complex .....	\$3,287,000
GBT Building .....	\$558,000
Struvite Harvesting Facility.....	\$7,336,000
WAS Gallery .....	\$694,000
WAS Thickening Bldg, Filtrate & Blend Tanks .....	\$9,284,000
Acid Digesters Nos. 1 & 2 .....	\$4,563,000
Miscellaneous Rehabilitation Projects .....	\$459,000
<b>TOTAL CONSTRUCTION COST</b>	<b>\$35,566,000</b>

The anticipated implementation schedule for the 11<sup>th</sup> Addition Project:

MMSD 75% Design Review.....	March 2011
Submit Plans and Specifications to the DNR .....	May 2011
MMSD 90% Design Review.....	May 2011
Bid opening .....	July 2011
Award of Contract .....	August 2011
DNR Approval of Plans and Specifications .....	August 2011
Closing on Clean Water Fund Loan.....	August 2011
Begin Construction .....	August 2011
Complete Construction/Startup (1 <sup>st</sup> Phase).....	August 2012
Complete Construction/Startup (2 <sup>nd</sup> Phase) .....	October 2013

*Jeff Klawes*

# Operations Bldg HVAC

## OPERATIONS BUILDING HVAC REHABILITATION

For years, summer cooling of the Operations Building has been problematic. This issue and many others are being addressed with the Nine Springs Operations Building HVAC Rehabilitation project. In spring 2010, Affiliated Engineers, Inc. (AEI) began evaluating the District's Operations Building HVAC system. This evaluation, completed in fall 2010, included many recommended improvements. As a result of these findings, an engineering design and construction project was necessary.

The Operations building was built in 1982 during the plant's 6<sup>th</sup> Addition. Much of the mechanical HVAC equipment installed at that time is still in operation. During the plant's 8<sup>th</sup> Addition, in 1992, office and laboratory space was added to the Operations Building. Additional mechanical HVAC equipment was installed to service this new space. A smaller office space addition was completed during 2007. Much of the building's electrical and mechanical HVAC equipment is nearing 20 to 30 years in age. As a result, many increasingly problematic operational issues occur.

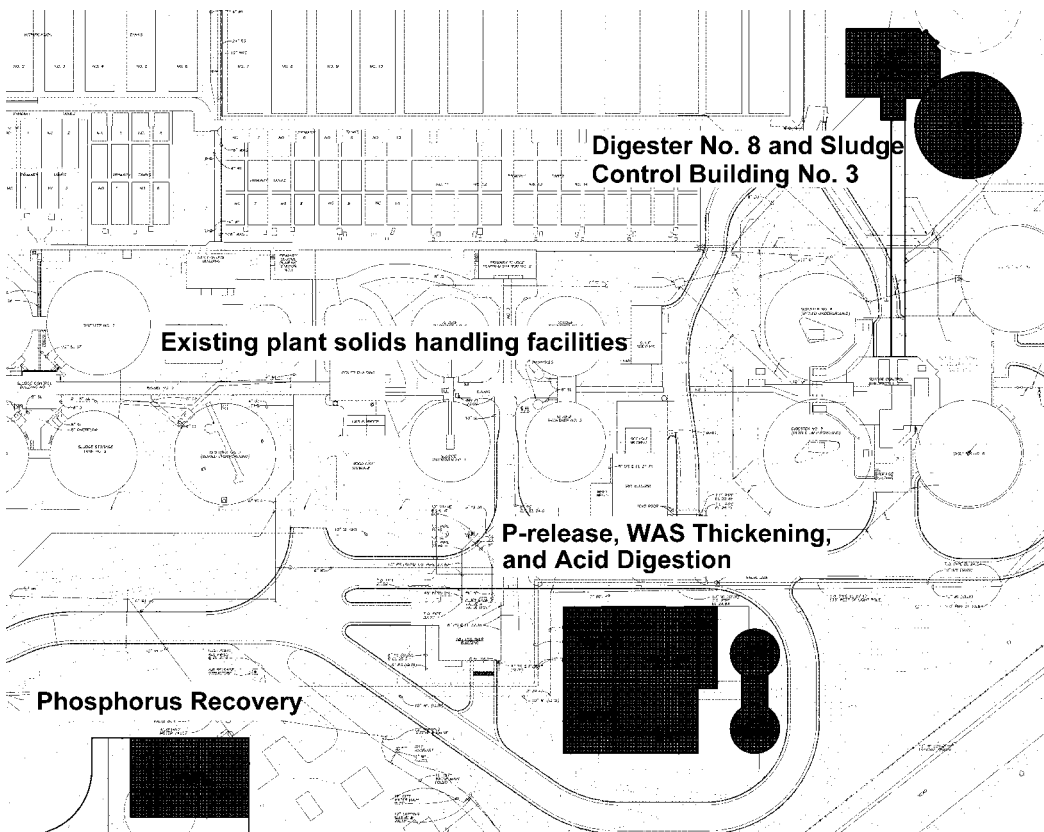


The HVAC equipment installed during 2007 will not be replaced; however, all other equipment in the building was reviewed for replacement or rehabilitation. The HVAC rehabilitation project is expected to include the replacement of two large air handling units, replacement of two absorption chillers, replacement of corroded pipe and pipe insulation, replacement of old leaking fiberboard ducts with new galvanized ducts, valve replacement in hot and chilled water lines, and modifications to baseboard heating in older office space. In addition, electrical and control improvements are anticipated to include replacement of the existing control system with a system more compatible with the plant process control system. AEI will perform the initial control programming - future modifications to the programming would be made by MMSD or an outside consultant. Other electrical and control improvements include a second power feed to the building, new fan and pump flow indicating switches, and new electrical panels.

During construction, it is expected that disruptions to the District's laboratory operations will be minimal. Disruption to other areas however, especially the administrative offices, will be much more extensive. In addition to the AHU replacement, there will be a lot of work done on the ducts above the ceiling and on the baseboard heating system. The offices will be unusable while this work is going on and other accommodations will be required for up to a month or more during this project.

AEI is preparing a preliminary design report with four major design options. The District will review the options and select a suitable option by January. AEI will then produce a detailed design report to be followed by construction plans and specifications to be put out for bid in spring 2011. Construction should begin next fall. Project costs are expected to be approximately \$2 million.

*Eric Hjellen*



11<sup>th</sup> Addition site plant layout for major new facilities at 50% design completion.

## PHOSPHORUS RELEASE STUDIES AT MMSD

In the May 2010 *Metro Interceptor*, we discussed plans to add struvite harvesting facilities to the Nine Springs Wastewater Treatment Plant. The struvite harvesting facilities are now being designed as a part of the District's 11<sup>th</sup> Addition. Three suppliers for this process submitted proposals for the project. At their May 10<sup>th</sup> meeting, the MMSD Commission approved Ostara Nutrient Recovery Technologies, Inc. as the system supplier. Specific terms of the agreement were negotiated and a final agreement was approved and signed by the Commission on September 13<sup>th</sup>. Struvite harvesting is an attractive option for the District. It will: 1) recover a valuable mineral resource from wastewater (phosphorus), 2) reduce phosphorus content of the biosolids produced, and 3) reduce the risk of uncontrolled struvite formation in our anaerobic digesters and plant piping. All of these reasons represent significant value (economic and non-economic) to both the District and our environment.

Finalizing the scope and terms of the agreement with Ostara is only one step in defining this system. Determining how to maximize the benefit of the planned process has been a long standing question the District has been working to answer. Typically, struvite is harvested after anaerobic digestion where the key ingredients and conditions occur naturally. However, the District felt that if the phosphorus could be reduced prior to anaerobic digestion, the overall benefit would be greater. This is largely because struvite formation in the digesters and piping systems is a significant problem that harvesting after digestion does not adequately address. In partnership with the University of Wisconsin-Madison, the District has been researching phosphorus release from waste activated sludge (WAS) for over ten years. While this research provided a reliable method to release phosphorus from the WAS, the method essentially required combining all of the WAS and primary clarifier sludges, holding it for a period to allow phosphorus to be

released, and then co-thickening it prior to digestion. The additional sludge volume involved in this method would require increased thickening capacity and higher capital expense. Following the decision to utilize acid-phase digestion in the 11<sup>th</sup> Addition, we explored an alternate solution using acid sludge to trigger phosphorus release from WAS.

In February 2010, we determined that adding a low dose of acid sludge (around 5% by volume) to the WAS followed by a contact time of about 6 hours releases about 35% to 45% of total phosphorus from WAS. With the gracious support of the MMSD laboratory staff, many experimental runs were conducted under a variety of conditions to determine the impact of factors such as volatile fatty acid (VFA) content, solids level, temperature, pH, and acid sludge age on release characteristics. A major concern is verifying consistency and repeatability of this process since it is not known to be used elsewhere. Also, we found that the amount of VFA - a key ingredient in triggering phosphorus release - necessary to achieve P release was well below values reported in available research literature. Over the course of our testing, we have found the method of adding acid sludge to WAS to trigger phosphorus release to be a consistent and stable process. This is obviously good news, especially when considering the operation and control of the process.

Design is proceeding around wasting sludge to specially designed phosphorus release tanks and adding acid sludge to trigger phosphorus release from the WAS. Research continues in-house to discover ways to potentially further enhance phosphorus release. While acid sludge addition is not a method available to every facility, it is hoped that this research spanning the last decade will assist MMSD as well as other facilities in efficiently recovering this valuable mineral from wastewater and improving the environment we all share.

*Alan Grooms*

## 2010 METROGRO OPERATIONS

Metrogro operations ceased for the year on November 24<sup>th</sup>. As a result of some very favorable weather, the crew had emptied the storage tanks by November 1<sup>st</sup>. From that point through the end of the season, daily production was hauled. By November 24<sup>th</sup>, storage capacity for winter and spring production looked great.

For the year, over 38 million gallons of Metrogro were applied to about 4700 acres of agricultural land. Whereas in years past, we've had up to 30% increases in solids production during the cold weather months, the total volume is down this year as a result of productive operation into December of 2009 and plant biosolids production remaining constant. We could yet see higher biosolids production over the winter months.

The 2010 owner/operator contractors have been the same for three years. These contractors are: Bradley Farms, Doerfer Bros, Klondike Farms, Marshall Bros, List Trucking, Lien Acres,

T.J. Trucking, and the Uphoff Company. These contractors operated hauling vehicles pulling District owned tankers, and they supplied applicator operators.

During this season, we used 15 transport trailers for the first time. This allowed us to keep all four applicator vehicles in productive operation. Spring weather gave us a four-week early window, and with the extra equipment, we were able to finish the spring application by May 10<sup>th</sup>. This kept our spring yield guarantee payout to land owners about 35% below budget.

The fall hauling started on August 4<sup>th</sup>, and there was very little interruption. The weather and land availability kept us going nonstop for the better part of the fall - we actually kept our operation to a 9 to 10 hour day and didn't need any weekend hauling. This was probably a first in the 30 plus years of the Metrogro program.

*Mike Northouse*

## 2011 DISTRICT BUDGET AND RATES

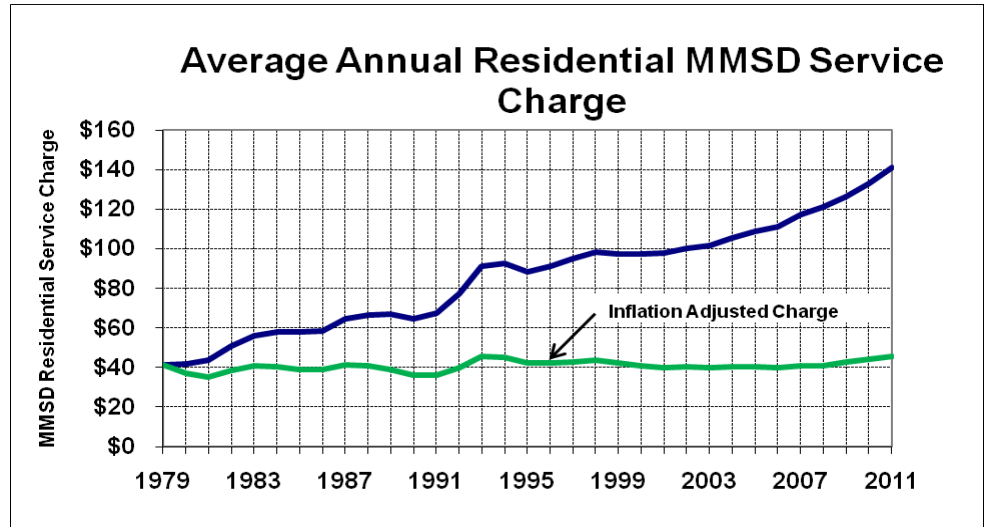
The Commissioners approved the 2011 budget and service charge rates at their meeting on October 27, 2010. The General Fund budget as approved anticipates costs of \$24,134,642, a 3.7% increase over the 2010 budget of \$23,268,333. The largest budget increases in 2011 are for capital outlay items and debt service.

We estimate the average residential MMSD service charge in 2011 will be approximately \$141. This is a 6.1% increase compared to 2010. The actual charge that a typical residential customer pays will also include the costs of the local collection system which is maintained by the local community and not by MMSD. For our largest customer, the City of Madison, the typical residential customer is expected to pay \$262 for sewer service in 2011.

The chart shows that MMSD's average residential service charge has held nearly

constant when adjusted for inflation since 1979, when it was \$41. The 2010 average residential charge would be equivalent to \$46 in 1979 assuming an inflation rate of 3% for 2010. The "inflation adjusted" line shows that MMSD charges are trending above the rate of inflation over the last three years and have reached a level last seen in the early 1990s.

*Jeff Brochtrup*



## GERRY SACHS REJOINS DISTRICT STAFF FOR PART-TIME, TEMPORARY WORK

As you may recall, Mr. Gerry Sachs retired from the District in June of 2010. Gerry had worked at the District for 40 years, primarily involved with annexations to the District and connections to the MMSD interceptor system. As you can imagine, Gerry had accumulated an extensive knowledge of the regional wastewater conveyance system during his tenure at the District. Gerry attempted to transfer as much knowledge as possible to his successors before he retired, but transferring 40 years of knowledge in a short period of time is never easy.

After some well-deserved time-off during the summer and fall, Gerry has graciously agreed to return to the District on a part-time basis. Gerry will assist with year-end interceptor connection duties and will continue previous efforts in converting areas that have paid interceptor connection charges from paper to electronic format. Gerry returned to work on November 9th and will work approximately 20 hours a week. Activity in the lunch room is expected to increase once again with Gerry's return!

*Bruce Borelli*



Chad Liddicoat and Bob Hart perform end of season maintenance for Metrogro equipment in the Vehicle Loading Building.

# Phosphorus Update

Following implementation of biological phosphorus removal in the late 1990's, the District reduced phosphorus effluent concentrations and loading by about 90 percent. Further reductions will be required as the result of recent administrative rule revisions and completion of the Rock River Total Maximum Daily Load (TMDL). The Rock River TMDL establishes allowable loadings for both point sources (e.g. a wastewater treatment facility) and nonpoint sources (e.g. agricultural runoff) that if met, will result in water quality standards being met in all streams in the Rock River Basin. The District will likely need to achieve a 40% to 60% reduction from current effluent phosphorus loads to comply with the administrative rule revisions and the allowable loadings specified in the Rock River TMDL.

These additional Phosphorus reductions could be accomplished through advanced treatment processes at the Nine Springs Plant; through water quality trading; or a combination of the two approaches. Achieving the limits with an advanced treatment addition to the Nine Springs Plant would likely involve adding filtration, and possibly adding chemical feed and flocculation tanks ahead of the filters. The target effluent concentration for the advanced treatment process would be lower than the actual effluent limitation specified in the District's discharge permit to provide reasonable assurance of permit compliance. Very low target concentrations are near the reliable limits of available filtration technology, even with chemical polishing.

Water quality trading is a tool that could potentially be used by the District to meet part of or all of its required phosphorus reductions. Trading is based on the premise that sources in a watershed can face very different costs to control the same pollutant. Trading programs allow facilities facing higher pollution control costs to meet their regulatory obligations by purchasing environmentally equivalent (or superior) pollution reductions. In the District's case, trading would most likely involve working with the agricultural sector to purchase reductions by funding best management practices, although working with other sectors (e.g. municipalities responsible for stormwater management) is also possible.

If the District's phosphorus reduction requirement is greater than what could be accomplished by using advanced treatment or trading alone, a combination of the two approaches

would be needed. Even if the phosphorus reduction requirement could be met by either approach alone, it is possible that utilizing a combination of the two approaches could represent the lowest cost alternative. For example, there are a number of different filtration options available (e.g. sand, cloth, membrane), with different cost and phosphorus removal efficiencies. Coupling a lower cost and lower efficiency filtration option with trading may be less expensive than achieving phosphorus reductions using a highly efficient filtration system or trading alone.

While existing state statutory language allows the DNR to authorize trading programs, there are a number of complex issues and uncertainties regarding water quality trading that need to be addressed. For example U.S. EPA's 2003 Trading Policy states that water quality trading should occur either "within a watershed" or within a defined area for which a TMDL has been approved. How this language is interpreted from a regulatory standpoint will have a significant impact on the viability of trading for the District. Specifically, it will impact the pounds of phosphorus that are potentially available for trading. If the definition of "within a watershed" in EPA's 2003 Trading Policy is narrowly interpreted as requiring that trades be limited to just the Badfish Creek Watershed, the District could not meet its full phosphorus reduction requirement through trading with the agricultural sector. If the definition of "within a watershed" is more broadly interpreted as the entire Yahara River Watershed or the Lower Rock River Basin, sufficient pounds of phosphorus would theoretically be available for trading.



The Wisconsin Department of Natural Resources has formed a stakeholder group to provide assistance in developing a more robust trading framework, which could include development of administrative rules and/or guidance to facilitate watershed based trading. District staff is participating in this effort. In addition, the District and Dane County have formed a workgroup to explore trading options at the local level. The District/Dane County Workgroup held its kickoff meeting in September, and a second meeting will be held in January.

Moving forward, the District will need to carefully evaluate options for meeting its phosphorus reduction requirements. Selection of a preferred approach will be based on cost and risk management considerations. Ancillary benefits associated with each phosphorus control option will need to be identified and considered in the decision-making process.

*Dave Taylor*

# Holiday Party! Retirement

## HOLIDAY PARTY

The afternoon of Friday, December 10th, the MMSD crew, a few retirees, a commissioner, the District's attorney, and other friends and family donned their most colorful beach gear and headed for the Lussier Family Heritage Center in Madison, for our annual Holiday Celebration.

The Holiday Committee of: Janelle Werner, Kristine Farrar, Jim Post, Jeff Woerpel, John Podebradsky, Debi Iglesias, Don Martinson, Dan Purdy, and Kris Huehne had developed a great plan for feeding and entertaining the crowd. The entertainment included a visit by a special representative from the north bearing gifts for children. Everyone played a game of dodge the beach ball—several beach balls gave their lives for the greater good. Touching the beach ball, at the right time, could result in the requirement to perform an embarrassing act of a trivial nature or a pretzel-like gymnastic feat. Those that got “caught” did a great job entertaining the spectators.

The event allowed many of us to catch up with each other and share a few stories with the retirees that attended. We never get enough time for that.

We all thank the Holiday Committee for their work putting the event together, and we'd like to wish everyone the best Holiday Season ever!

*Matt Allen*



## DICK KLAAS TO RETIRE

Dick Klaas, a District project engineer, will retire from MMSD on December 27<sup>th</sup>.

Dick attended Iowa-Grant high school graduating in 1966. Following high school, Dick attended UW Platteville for civil engineering for 3 1/2 years. During this time he met his future wife, Ardys. So that she could better take care of him, he moved to Madison for his final 1 1/2 years of engineering school. About one year prior to his graduation from UW-Madison, Dick and Ardys were married. Dick graduated from the UW in 1971. Shortly after his graduation, he joined the Army reserves serving in an engineering unit in Dodgeville. Dick served in the Army reserves for six years.



Following his graduation from the UW and his initial enlistment service, Dick began working to construct flood control facilities near Dubuque, Iowa. After one year, he was laid off from this work and returned to Madison. Dick then worked for Madison Gas & Electric for 3 1/2 years building powerline towers.

Dick started working at MMSD as a Project Engineer, in June 1977. Initially, he worked on the 6<sup>th</sup> and 7<sup>th</sup> Addition to the treatment plant. Following this, all of Dick's future projects involved collection system construction.

In keeping with the theme he began years ago, Dick plans to let Ardi take care of him for a few more years while she works and he retires. Dick plans to do more volunteering for an assisted living facility and his church. He also would like to catch up on projects at home in the short term. Ardi and Dick hope to do some traveling to the west next year.

Dick and Ardys have three children, two sons and a daughter.

We thank Dick for his many years of service to MMSD. We will miss his generous humor and flexible schedule!

# Accounting, Info Systems

**Joyce Williams** started with MMSD as the Accounting Clerk on December 1, 2010. Joyce graduated with a Bachelor's degree in general studies from Eastern Illinois University and an Associate's degree in Accounting from Parkland College. She has held a variety of accounting positions, including positions at Parkland College in Champaign, Illinois and the City of Urbana. Most recently, Joyce worked as an Account Receivable Coordinator at LDS Test and Measurement, which had been a part of Nicolet Instruments. She moved to the Madison area in 2003 and lives in Fitchburg. She likes to read and she is proudly owned by her cat.

Initially, Joyce will be handling accounts payable duties in the accounting area. She will eventually be involved in Accounts Receivable, bank reconciliations and payroll.

We welcome Joyce to MMSD.

*Stephanie Calkins*

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On September 13, 2010 **Laurie Dunn** assumed a new position as Information System (IS) Manager. This change was part of transition planning at the District. In a related move, **Curt Witte**, the long-time head of the information system work-group, assumed the position of Information Technology (IT) Manager. With the position changes, Laurie assumed most of the management responsibilities for the work group and Curt transitioned to a more technical role focusing on our network and computer infrastructure.

Laurie joined the District as a programmer/analyst in 1998. Some of Laurie's major work efforts have included development of the Metrogro, budget, and GIS related databases. Prior to joining the District, Laurie worked for eleven years for RMT in Madison. At RMT, Laurie worked collecting water samples, worked on landfill projects, lead a small laboratory work-group staff, and worked in the research and development laboratory. Laurie began her computer career at RMT working with analytical data in an Oracle database.

Computers weren't Laurie's first love. She first studied music, earning a Bachelor of Arts degree in applied music, and a Masters of Music degree in trombone. Later on, Laurie received a Bachelor of Arts degree in computer science. Outside of the business world, Laurie has been an active hockey player, but her primary outside interests are now bicycling, curling (the winter sport, not hairstyling), and otters. Laurie has only recently taken up curling but she is already training with Olympians at the Madison Curling Club.

We wish Laurie well in her new role at the District.

*Jeff Brochtrup*



Joyce Williams, MMSD's New Accounting Clerk



Laurie Dunn, MMSD's Information Systems Manager

# Retirement

## JON SCHELLPFEFFER RETIRES

Jon Schellpfeffer, the District's Chief Engineer and Director, will retire with 36 years of service at the end of 2010. Jon began working at MMSD during November 1974 as the Operations Engineer. Prior to joining MMSD, Jon worked in Lansing, Michigan with Capitol Consultants engaged in wastewater treatment plant design.

Jon attended high school in Belmont, Wisconsin. He and his wife, Vickie, are life-long acquaintances and were married while Jon attended UW-Madison in 1971. Between 1967 and 1972, Jon completed Bachelor and Master's studies at the UW College of Engineering.

Over the years, Jon has served as the Operations Engineer, Director of Engineering, Assistant Chief Engineer and Director of Planning, and since 2002 as the District's Chief Engineer and Director.

During the 1970's and early 1980's Jon developed the District's User Charge program and billing system. His work in this area resulted in his recognition as an expert in the field of service rate development. During this time, Jon also developed the District's Sewer Use Ordinance and worked with all of the District's municipal customers to help them to develop similar ordinances to protect their systems as well as the District's collection system and treatment plant.

Since the 5th Addition to the Nine Springs Wastewater Treatment Plant in the mid-1970's, Jon has worked closely with the Department of Natural Resources grants and loan programs to obtain the financing to construct the multi-million dollar additions to the treatment plant and collection system. Since the District is currently in the design efforts for the 11th Addition to the plant, Jon has been involved in six additions to the plant. The combined value of the assets for these additions is in excess of 100 million dollars.

Jon has also worked closely with the Dane County Regional Planning Commission on long range studies for interceptor expansions. As Director of

Planning, Jon has prepared annual budgets for capital improvements. This long-term planning effort allowed the District to prepare for future expenses and set user rates accordingly. This has resulted in the District's strong financial position for many years.

With the implementation of a computerized maintenance management system in the mid-1990's, Jon completely restructured the District's chart of accounts to allow for more accurate and transparent accounting of expenses. He also assumed management of the Administrative Services section, the Information Technology section, and the Training area at that time.

Jon shared his financial expertise with others in the profession. He served for over 30 years with the National Association of Clean Water Agencies (NACWA), formerly the Association of Metropolitan Sewerage Agencies. Jon was the primary author of the 1990 and 1993 national Financial Survey for this organization. He also gathered data and produced the NACWA Financial Index on an annual basis from 1992 through

2002. In addition to being a member of the organization's Board of Directors, Jon received the organization's President's Award in 1994 and the Special Recognition Award in 2000.

Since becoming the District's Chief Engineer and Director, Jon has overseen several treatment plant expansions, numerous collection system upgrades, the District's 50 year Master Planning effort, the District's responses to increasingly stringent phosphorus limits, and most recently the development of Leadership Expectations for District staff. Jon's leadership and calm personality will be missed by all.

Jon and Vicki have three married children, Marc, Amy, and Nic, and five grandchildren. In February, Jon and Vicki will travel on a cruise through the Panama Canal. They are planning a July trip to Italy -- this will put them in Rome on their 40th anniversary. Jon expects to spend much time with his family as well as gardening, golfing, and reading.

We wish Jon and Vicki, and their family all the best during retirement. Thank you for your years of service and support.



Jon and Vicki Schellpfeffer



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# Metro Interceptor

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SEWERAGE DISTRICT

## The District Fencepost

SEPTEMBER 2010

### CARL WRIGHT RETIRES

Carl Wright retired from the District on November 5<sup>th</sup> with the intent of applying for a disability pension from the Wisconsin Retirement System. Carl began employment with the District as a part time worker in March of 1981. He became a full time employee in September 1981, when he became an Operator Helper. At that time, three operators staffed the plant 24 hours per day. In 1985, Carl advanced to a Field Operator position. Carl's career took a turn when he moved to the Labor Crew and became a Utility II Worker in 1988. However, he returned to the operations staff when he became a Field Operator again in 1995. In 2003, Carl returned to the Building and Grounds Crew. He was promoted to an Apprentice Electrician position in November of 2006. At the time of his retirement, Carl was an Apprentice Electrician II. Thanks for your service. We wish Carl all the best in his retirement.

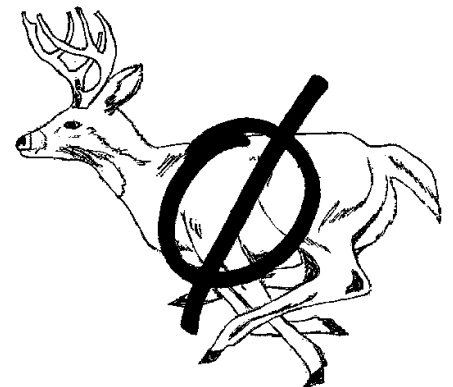
### MMSD ANNUAL BUCK POOL

This year there is NO winner of the MMSD "Big Buck" hunting award. This annual "prize" is given to any district employee or family member that enters the competition and harvests a buck during the state-wide 9-day deer firearm season.

This year, there were fourteen participants in the competition pool. Each hunter reported seeing fewer deer this year as compared to other recent years. (This may be a result of deteriorating vision of the aging hunting club.)

Thanks to all of those that participated in this friendly competition this year and we look forward to your better luck in future years.

*Tom Werner*



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