ORRICIAL BULLETIN

January - June 2009 VOLUME 95 • NUMBERS 1-6 SPRING ISSUE













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Members of the conference are indebted to those members and others who have contributed articles and other materials for this publication.



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Spring Issue

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INDEX TO ADVERTISERS

The services and products of the following represented firms are deserving of your best consideration.

FIRM	PAGE
AE2S	13, Inside Back Cover
Bartlett & West	2
Braun Pump and Controls	7
Dakota Pump and Control	30
Dakota Supply Group	
Electric Pump, Inc.	31
Engineering America	
Fargo Water Equipment, Inc	7, 27
Ford Meter Box Company, Inc.	19
Hawkins Water Treatment Group	10
Houston Engineering, Inc.	26
Hughes Lift Station Service, Inc	12
Interstate Engineering	31
Kadrmas, Lee & Jackson	
KLM Engineering, Inc.	31
Larson Data Communications	7
Moore Engineering, Inc.	Inside Front Cover, 21
MVTL	24
ND Sewage Pump Co	21
Pace Construction, Inc.	7
Sweeney Controls Company	26
Tonka Water Treatment Systems	21
Ulteig Engineers	19, Back Cover
Wold Engineering PC	12

TABLE OF CONTENTS

UBJECT	PAGE

Angle Wells, Ozone and Membranes - A Great Combination	3
North Dakota Water Environment Association	
Executive Committee Meeting Minutes	9
NDWPCC Joint Board Meeting Minutes	11
AWWA Management Institute Scheduled	.13
Governor Hoeven Proclaims Drinking Water Week	14
Proclamation Public Works Week	
49th Annual Water and Wastewater Operator Training Program	
Attendance Roster: 49th Annual Water and Wastewater	
Operator Training Sessions	.17
Operators Pass Certification Exams	20
Operator Certification Exams Scheduled	21
Fluoridation Facts	
Minutes of the Board of Trustees Meeting	
North Dakota Section of AWWA	.23
AWWA Membrane Workshop Held in April	25
ND WARN to Hold Training	
Call for Papers: 2010 Surface Water Treatment Workshop	28
Program Directories	32

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The objectives of this Conference shall be: the advancement of the knowledge of design, construction, operation and management of water and wastewater systems; the promotion and encouragement, through annual meetings or otherwise, of an exchange of information and experience among its membership; the promotion and encouragement of the protection of public health and improved environment through the construction and efficient operation of water supply and wastewater treatment facilities; and the promotion of water and wastewater system operator education and certification programs.

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Angle Wells, Ozone and Membranes - A Great Combination

Jim Lennington, Bartlett & West, Inc.

The South Central Water District's (SCWD) North Burleigh Water Treatment Facility incorporates: (1) angle wells under the east bank of the Missouri River; (2) ozone for oxidation of iron and manganese; (3) microfiltration membranes for removal of pathogens and the oxidized iron and manganese; (4) low pressure reverse osmosis for softening; and (5) ozone for disinfection. This unique combination represents several firsts for public water systems in the region.

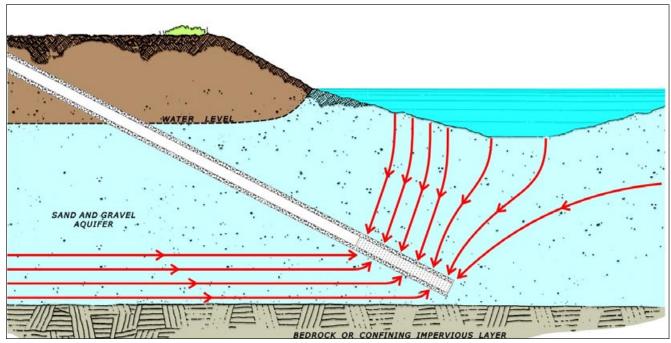
SCWD needed a reliable high quality source of supply for its new water treatment facility 9 miles north of Bismarck, and angle wells fit the bill.

Traditionally, wells have been horizontal or vertical, with each having advantages and disadvantages under particular situations. However, angle wells are increasingly becoming a preferred method of water source extraction in shallow aquifers and along water channels. Particularly promising applications include situations where groundwater is under the influence of surface water (e.g., beneath a river). Relatively new to water production, angled wells help balance four key constraints: transmissivity, drawdown, water quality and installation cost.

The SCWD project included the installation of angle wells directly under the riverbed of the Missouri River with about 18 to 30 feet of natural occurring sand above the well screen. At this depth, test pumping

showed that a high proportion of the water produced would be of similar quality to the Missouri River. Deeper vertical wells at the site previously used by SCWD had high levels of total dissolved solids, iron and manganese which had proven difficult to treat. SCWD's consultant for the angle wells and treatment facility, Bartlett & West, Inc., determined that using vertical wells with short well screens in a thin aquifer zone would not provide the yield needed, at least not without 30 or more multiple vertical wells. The angle wells increase the length of well screen in the targeted water zone, since the screen is installed at a shallow angle of 23 degrees or less, allowing more of the high quality groundwater to flow from the well. This resulted in fewer wells with a corresponding savings in construction and operations and maintenance costs. Five angle wells were installed from 2005 to 2007, each yielding 300 to 500 gallons per minute (gpm) to provide SCWD with enough water for the first phase of its treatment facility.

Another promising by product of angle wells is that they can take advantage of river bank filtration to gain credit for removal of potentially harmful waterborne pathogens. This has the effect of potentially reducing treatment costs and giving the water district the benefit of up to an additional 0.5 log removal credit. Microscopic particulate analyses were conducted on samples of the raw water taken from the Missouri



Typical angle well installation



Completed angle wells and pump control building

River and from water discharged from the angle wells. From these analyses, it was determined that the natural riverbank filtration has removed a significant majority of microorganisms from the river water as it flows through the naturally occurring sands into the angle wells. The following table shows some of the results from these analyses.

The groundwater from the wells has an iron content of 0.4 to 4.5 milligrams per liter (mg/L) and manganese of 0.45 to 0.73 mg/L. Hardness ranges from 12 to 23 grains. Pilot studies were conducted from April to August 2005 to determine the effectiveness of membranes in removing iron and manganese. The pilot study included using chlorine, potassium permanganate and ozone to oxidize the iron and manganese. Ozone proved to be the most effective oxidant when used in conjunction with membranes. Microfiltration (MF) proved to be the best technology for removing the oxidized minerals. Low pressure reverse osmosis (RO) and electro-dialysis reversal were both utilized during the pilot study to remove the hardness from the membrane filtrate, with low pressure RO providing the most cost-effective solution. With the treatment methodology determined from the pilot study, the project went to the design stage with membrane and ozone equipment procurement contracts being offered in the spring of 2006. Construction on the treatment plant began in late fall 2006.

South Central Water District (SWCD)						
Microscopic Particulate Analysis Results						
Sample Date		10/25-26/2005	9/19-20/2005	8/15-16/2005	8/15-16/2005	
Sample Source		Missouri River	12" AW-2	16" VW-36'	2" HDD	
Sample Location		Surface Water-Raw	Under River	Riverbank	Under River	
Units		Per 100 Gal	Per 100 Gal	Per 100 Gal	Per 100 Gal	
Algae		10,000,000	402	0	0	
Diatoms		30,000,000	5,514	0	9	
Plant Debris		-	-	-	-	
Rotifers		20,000	0	0	0	
Nematodes		-	-	-	-	
Pollen (pine)		-	-	-	-	
Ameba		6,000	0	0	0	
Ciliates		0	3,738	14	77	
Colorless Flagellates		-	-	-	-	
Crustaceans		-	-	-	-	
Other Arthropods		10,000	0	0	0	
Other		0	-	-	-	
Giardia	Detected	1	0	0	0	
	#/100 L	58	< 0.21	< 0.25	< 0.22	
Cryptosporidium	Detected	0	0	0	0	
	#/100 L	<58	< 0.21	< 0.25	< 0.22	

Water from the angle wells enters the plant and passes into the oxidation basin where ozone gas is injected. The ozone oxidizes the iron and manganese, forming particles which can be removed by the MF membranes. The water then flows to a concrete basin used as the supply for the MF membrane feed pumps. These pumps force the water through MF processing



Microfiltration process train

trains containing membrane modules. Each process train contains 30 membrane modules, each having 538 square feet of membrane surface area. Each process train has space for eight additional modules, providing a total of 20,444 square feet of membrane surface area in a space approximately 20 feet by 8 feet. The membranes themselves are manufactured in the form of hollow tubes or fibers 1.2 millimeters (mm) in diameter with a 0.7 mm inside diameter made of a plastic material with a nominal pore size of 0.1 micron or 1/10,000th mm. These membranes are very effective at removing pathogenic protozoa such as Giardia and Cryptosporidium, which have a size range of 3 to 10 microns. The membranes received. from the North Dakota Department of Health, credit for removing 99.99 percent (4 logs) of these pathogens and 68.4 percent of virus (1/2 log). The membranes undergo a daily air test to ensure that no fibers have broken or have perforations larger than 3 microns. All of the water treated at the plant passes through the MF membranes to remove pathogens, iron and manganese. The membrane process trains also have individual turbidimeters so operators can monitor their performance. Phase 2 will include the addition of two more MF process trains. When processing water, the membranes are washed in a two-step process using air injected in the bottom end of each module and filtered water sent in a reverse direction. The backwash water

produced is sent to recovery tanks where the iron and manganese sludge removed from the membranes is allowed to settle. Water off of the top of these basins is recycled to the head of the plant. Iron and manganese sludge will be periodically removed from these basins and either sent to an existing evaporation pond or hauled to a landfill. The membranes are also periodically cleaned with warm water and dilute solutions of sodium hypochlorite, caustic soda and citric acid to remove any organic material and mineral scale which may be reducing filtration capacity.

Water passing through the membranes enters a supply tank for the RO membrane feed and bypass pumps. This is also the source of supply for the MF membrane backwash. The RO feed pumps provide pressure across the RO membranes. As the water passes through from the high pressure side to the low pressure side, the metallic molecules responsible for water hardness, along with other dissolved constituents, are rejected by the membrane and concentrate on the high pressure side. Such water, with extremely low levels of dissolved minerals, can be very aggressive, leading to problems in distribution systems and households. A blend of RO permeate and water, which only passes through the MF membranes and bypasses the RO membranes, is used to assure



Reverse osmosis process train

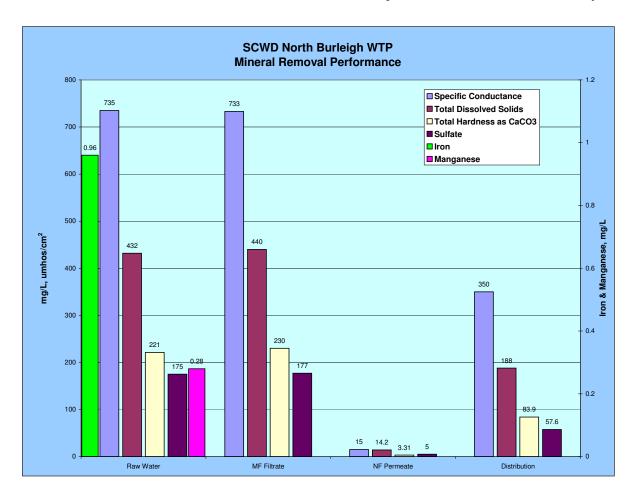
that the water going out into the distribution system has an appropriate level of dissolved minerals. For SCWD water a blend of about 60-40 permeate/bypass water achieves the water quality goal for hardness equal to or less than Bismarck municipal water. The RO membranes consist of spiral wound modules 40 inches long, each with a surface area of 400 square feet. The Phase 1 RO process train consists of 20

vessels, each containing seven modules, with a total membrane surface area of 56,000 square feet. The Phase 2 RO process train will be approximately twice the size of the Phase 1 train. The Phase 1 train is capable of producing 650 gpm of permeate. The concentrated minerals produced by the RO process are contained in a waste stream which is then discharged back to the Missouri River. The RO process has a recovery of approximately 85 percent, meaning the minerals in the feed water are concentrated by a factor of approximately 6.7 times their original concentration. Project sponsors obtained a North Dakota Pollutant Discharge Elimination System permit for this discharge. A mass balance calculation of this discharge to the river showed that it would increase the mineral content in the river by only 0.1 percent if the plant were running at peak capacity and the river had a flow/rate of only 10,000 cubic feet per second. Two diffusers were constructed in the river to provide mixing of the discharge with the natural river flow. The Cornell Mixing Zone discharge modeling computer software was used to design these facilities. The computer model indicated that full mixing, such that the discharged minerals would not be discernible from the natural flow, would occur within 20 feet

downstream of the diffuser. Similar to the MF membranes, the RO membranes are also periodically cleaned with warm water and dilute solutions of citric acid and caustic soda to maintain their performance.

The graph below illustrates the water quality of the feed water angle well supply and the finished water produced at the plant. The data are from samples collected on a single day in August 2008. The graph shows the removal of the iron and manganese by the ozone-MF process and the removal of minerals by the RO process.

The blended RO and bypass water enters a disinfection contactor where ozone is again injected into the water to provide inactivation of viruses which were small enough to pass through the MF membranes and bypassed the RO membranes. After sufficient time in contact with the ozone disinfectant, the water flows from this basin to the plant clearwell. Along the way, chlorine is injected to provide a residual in the distribution system; caustic soda is added to raise the pH of the water to provide stabilization; and fluoride is injected to help prevent dental decay. Water is sent from the plant clearwell to the distribution system



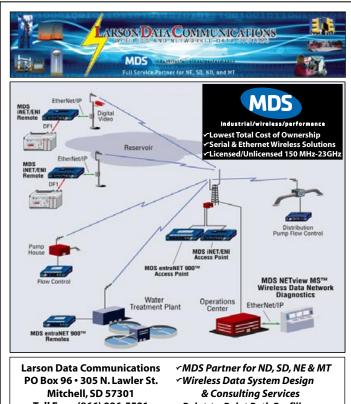
using high service pumps. The plant came on-line in May 2008 and has been providing water for the SCWD's North Burleigh Expansion Project ever since.

The plant has a Phase 1 capacity of 800 gpm or 1 million gallons per day (MGD) and an ultimate capacity of 2400 gpm (3.5 MGD). The Phase 2 expansion of the plant to its ultimate capacity is scheduled for 2010. This project was the first of its kind in North Dakota and the only one currently using angle wells that have been placed directly underneath the bed of the Missouri River. To provide a safe, high quality water supply with a low mineral content and hardness levels, the SCWD plant uses state-of-the-art treatment methods with ozone and membranes – truly a great combination.

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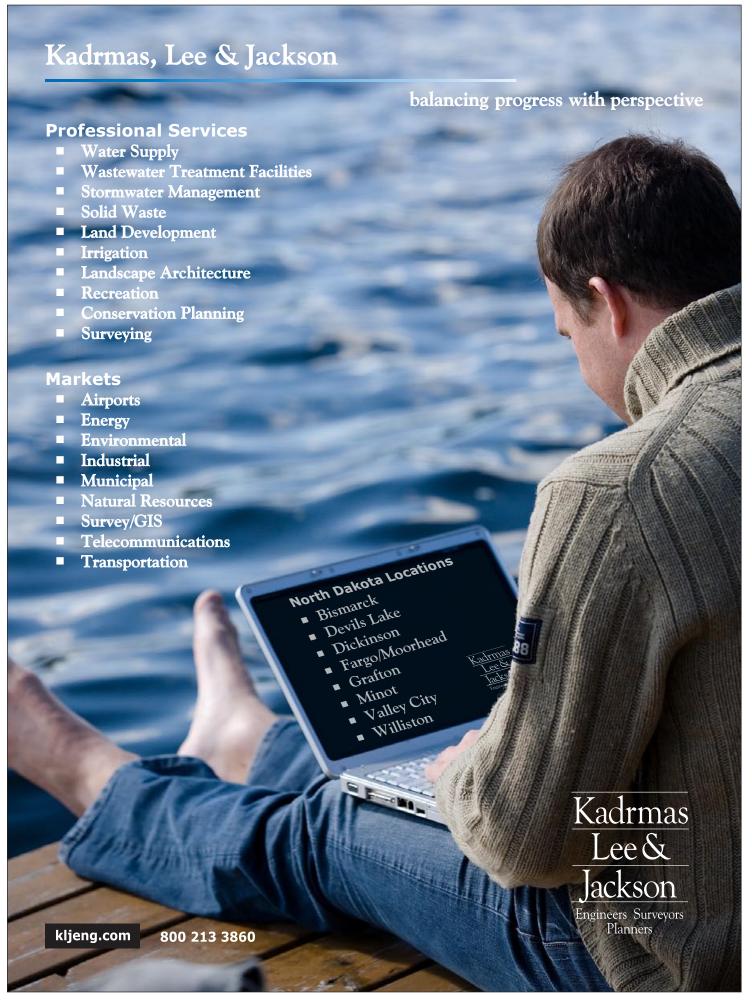
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North Dakota Water Environment Association Executive Committee Meeting Minutes

January 21, 2009

The Executive Committee for the North Dakota Water Environment Association (NDWEA) met at the Seven Seas in Mandan on January 21, 2009. Present were President Eric Dodds, President-Elect Skip Rapp, Vice President Karla Olson, Past President Seth Lynne, Professional Wastewater Operations (PWO) Representative Terry Rust, and Secretary/Treasurer Bill Gefroh. Also attending were NDWEA Operations and Safety Committee members Don Tucker and Kevin Martin and NDWEA member Gary Bracht.

President Dodds called the meeting to order at 12:20 p.m. President Dodds entertained a motion to dispense with the reading of the minutes from the May 21, 2008 Executive Committee meeting and approve as published in the *Official Bulletin*. Skip Rapp so moved. Terry Rust seconded the motion, and the motion carried.

Bill Gefroh presented the Treasurer's Report, which reviewed in detail the receipts and expenses from January 1-December 31, 2008. The NDWEA net worth, as recorded in the report, was \$8,084.55 as compared to \$8,223.01 last year at this time. President Dodds requested a motion to approve the report as presented. Seth Lynne so moved. Karla Olson seconded the motion. Bill Gefroh reported that the current NDWEA membership is at 146, compared to 142 this time last year.

Old Business: President Dodds updated the viewing of the video *Liquid Assets* on Public Broadcasting Service that aired October 30, 2008. NDWEA provided sponsor support for the airing of the telecast. *Liquid Assets* tells the story of essential infrastructure systems: drinking water, wastewater and storm water. These complex and aging systems – some in the ground for more than 100 years – are critical for public health, public safety and economic prosperity. The documentary highlights communities from across the United States, providing an understanding of hidden water infrastructure assets, demonstrating watershed protection approaches and illustrating twenty-first century solutions.

New Business: Potential topics and speakers were discussed for the 2009 North Dakota Water and Pollution Control Conference (NDWPCC). Topics suggested were:

- 1. Water Infrastructure in China Wei Lin
- Wastewater Panel Discussion Terry Rust, Skip Rapp, Gary Bracht, Steve Himmelspach and Bill Gefroh
- Industrial Pretreatment Trends in North Dakota
 Terry Rust, Jeff Roerich, Steve Lagro, Steve
 Himmelspach and Bill Gefroh

Committee members will further investigate these and other presentation topics and report their findings at the next scheduled NDWEA meeting on May 20, 2009.

The NDWEA will continue its support for the North Dakota Science Fair by providing awards and judges. A plaque and a \$75 cash prize will be presented to the best water quality project for both the junior and senior divisions. NDWEA may also provide travel expenses (up to \$1,000) for a worthy project for one student and his or her teacher to compete nationally at the Stockholm Junior Water Prize competition at the University of Alaska in Anchorage, June 25-27, 2009. NDWEA members that volunteered to be judges at the 2009 Science Fair are Karla Olson, Seth Lynne and Wei Lin. These names will be forwarded to Frank Fish, the North Dakota Science Fair Awards Coordinator.

NDWEA Committee Members discussed educational support for 2009. Terry Rust made a motion that NDWEA provide:

- \$500 to the Gateway to Science in Bismarck
- \$500 to the River Keepers in Fargo
- \$100 to the Water Environment Research Foundation
- About \$150 for plaques and \$150 in cash for science fair prizes.
- Up to \$1,000 to be used for transportation for a science fair student and teacher to compete for the national Stockholm Junior Water Prize
- \$500 to the NDSU Student Chapter activity fund to be used for expenses incurred by students attending the 2009 Water Environment Federation Technical Exposition Conference in Chicago, Illinois, to participate in the student design competition
- \$2,000 student chapter design competition award money from the Water Environment Federation (WEF) to be transferred to the student chapter activity fund.

Seth Lynne seconded the motion, and the motion carried.

Karla Olson made a motion to increase some of the NDWEA dues:

	NDWEA	WEF	New Amount	Current Dues
Active	\$10	\$82	\$92	\$87
PWO	\$10	\$44	\$54	\$49
Student	\$0	\$20*	\$20*	\$20*
Corporate	\$15	\$250	\$265	\$260
Retired	\$10	\$25	\$35	\$35
Dual	\$10	NA	\$10	\$5
Young Professional	\$10	\$41	\$51	\$41

*NDWEA pays \$10.

No increase in the NDWEA dues was proposed for the student and retired membership categories. Skip Rapp seconded the motion, and the motion carried.

In 2009, NDWEA would like to present the Bedell Award and the Norman Peterson Safety Award at the annual NDWPCC banquet. The Bedell Award is a WEF award that is presented to a NDWEA member every three years. Mr. Gefroh was directed to solicit applications from the NDWEA membership for the Peterson Safety Award. The awards committee will be requested to select an NDWEA member for the Bedell Award.

With no further business, the meeting adjourned at 2:00 p.m.

Respectfully submitted, Bill Gefroh NDWEA Secretary/Treasurer



NDWPCC Joint Board Meeting Minutes

January 21, 2009 Mandan, ND

A meeting of the Joint Board of Directors of the North Dakota Water and Pollution Control Conference (NDWPCC); North Dakota Water Environment Association (NDWEA); North Dakota Chapter of the American Public Works Association (NDCAPWA); and North Dakota Section of the American Water Works Association (NDAWWA) was held on January 21, 2009, in the Executive I Room of the Seven Seas Inn, Mandan, ND. The meeting was called to order at 10:31 a.m. by NDWPCC President Lisa Ansley. President Ansley asked those in attendance to introduce themselves and asked that they sign the attendance sheets being circulated. Copies of the meeting agenda and NDWPCC 2008 Financial Report were provided to each member. The following board members and guests were present: Chuck Abel, Lisa Ansley, Sarah BaeHurst, Gary Bracht, Mike Brisben, David Bruschwein, Eric Dodds, Joe Ferguson, Duane Friesz, Bill Gefroh, Dale Heglund, Darrell Hournbuckle, Dan Jonasson, Miranda Kleven, Seth Lynne, Kevin Martin, Chad Miller, Karla Olson, Tim Paustian, Skip Rapp, Rustin Roteliuk, Terry Rust, Darin Schaeffer, Shawn Soehren, Jason Sorenson, Gregg Stewart, Larry Thelen, Don Tucker, Eric Volk, Greg Wavra and Chad Zander.

President Ansley called for a motion to dispense with the reading of the minutes from the October 2008 Joint Board Meeting and NDWPCC Business Meeting, which were mailed to all members. President Ansley noted that a few minor corrections had been made, and the amended minutes were published in the *Official Bulletin*. Terry Rust so moved, Kevin Martin seconded, and the motion carried.

President Ansley next called for the Treasurer's Report. Mike Brisben reported that the Conference had a net loss of \$6,076.27 in fiscal year 2008 and had total assets of \$47,837.02 as of December 31, 2008. Mr. Brisben noted that the change in the fiscal year from October-September to January-December contributed to the net loss. Mr. Brisben indicated that 2008 advertising invoices and an operator expense reimbursement grant payment totaling \$19,175.00 were processed after January 1, 2009 and would be reflected in the 2009 financial report, resulting in projected assets of \$67,012.02. Skip Rapp moved to approve the Treasurer's Report; Karla Olson seconded. Tim Paustian questioned the \$80 music rights

expense. Mr. Brisben explained that the ASCAP fee is a requirement protecting the songwriter and music publisher from copyright infringement if live music is provided during the annual banquet. President Ansley asked if there was any further discussion. Hearing none, President Ansley called for a vote and the motion carried.

President Ansley called for the first item of old business. Miranda Kleven reported that negotiations with the Alerus Center in Grand Forks were still ongoing. Ms. Kleven indicated that a \$2000-\$3000 convention center fee has been proposed and Alerus Center representatives are considering a \$3000 package. Ms. Kleven also noted that it was unclear whether the \$1500 Convention and Visitors Bureau donation would further reduce costs. President Anslev noted that the Grand Forks proposal has been on the agenda for the past 2-3 years and reminded the board members that Grand Forks was proposing a one-time event and not looking to join the current rotation. Mr. Rapp raised the question of room availability with Mr. Brisben reporting that the Canad Inns would guarantee 140 rooms, and nearby hotels would reserve an additional 165. Joe Ferguson indicated that a new hotel across from the Alerus Center would be completed prior to 2013. Sarah BaeHurst asked if backup dates were reserved, and Terry Rust asked if the conference had a timetable. Mr. Brisben noted that two tentative dates were reserved at the Fargo Holiday Inn and recommended that a decision be made no later than the October 2009 joint board meeting.

Continuing with old business, Eric Dodds reported on the *Liquid Assets* documentary broadcast on Prairie Public October 30, 2008. Mr. Dodds indicated follow-up efforts for the second broadcast Thursday, February 5, 2009 were underway. Mr. Brisben and Rustin Roteliuk noted that the NDWPCC and the NDCAPWA had both signed underwriting agreements for the next broadcast. The documentary will be shown from 7:55 p.m. to 9:35 p.m. Mr. Dodds said a mailing advertising the next broadcast is scheduled to go out.

Next President Ansley called on the auditing committee. Bill Gefroh noted that the conference financial records were organized and well kept. Chuck Abel reported that the financial records were accurate and that the audit had been completed.

President Ansley called for any other old business. Hearing none, President Ansley asked that the joint boards have a list of topics and presenters for the Minot Conference ready by the May 2009 board meeting. Mr. Martin volunteered to present a summary of the NAWS project. Mr. Dodds asked for feedback on the type of presentation (lecture/panel) attendees prefer.

Continuing with new business, President Ansley asked Mr. Brisben to report on a proposed increase for the tabletop exhibit program. Mr. Brisben stated that, at the current cost of \$120, the conference lost money the prior three annual conventions. Mr. Brisben explained the breakdown for use of tabletop fees, with \$75 going for booth rental and the breakfast buffet and \$45 for registration, conference membership and the afternoon lunch for the vendor. Mr. Brisben indicated that booth rental (table, tablecloth, chairs, piping, draping) and costs varied at each location. Joint Board Members, who exhibit all agreed that (1) piping and draping add to the exhibits, (2) prices are inexpensive, and (3) an increase would not keep vendors from participating. Tim Paustian asked when prices were last increased. Mr. Brisben indicated that prices had been the same

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for years. Mr. Rapp recommended that any increases be the same for all locations. President Ansley noted that similar questions were asked when advertising rates were increased and agreed an increase in tabletop fees would not limit the number of exhibitors. Kevin Martin moved to raise tabletop exhibitor program fees to \$150; Chuck Abel seconded, and the motion carried.

President Ansley called for the next item of new business. Mr. Brisben shared the dates for the spring operator training sessions and thanked all those who will be presenting. Mr. Brisben noted that the announcement had been mailed to all water and wastewater systems and was published in the October-December 2008 issue of the *Official Bulletin*.

Mr. Brisben next reported on conference numbers for 2008. A total of 348 people preregistered, with 345 people attending. Luncheon attendance for each of the three days was 172, 195 and 130, respectively. The breakfast buffet served 295, the evening buffet served 149, and the banquet served 210. Forty-nine people golfed, 91 participated in the tours, and 12 took the casino excursion.

President Ansley called for any other new business. Ms. Kleven reminded board members of the upcoming Membrane Technology Workshop, April 28 and 29, 2009, at the Kelly Inn, Bismarck, ND. Mr. Brisben noted the announcement and registration form could be found in the latest issue of the *Official Bulletin*. Continuing with new business, Mr. Gefroh raised the question of future conferences in Minot. Mr. Brisben noted the 2012 meeting was booked at the International Inn. Mr. Brisben also shared



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Next, Mr. Dodds reported on the North Dakota State University (NDSU) AWWA/WEF student chapter activities, noting that the student group is looking for joint board support for tours of industrial sites in the Beulah area and Garrison Dam. Mr. Dodds stated the group meets regularly and would welcome volunteer speakers at their meetings. Mr. Dodds also noted that NDSU and the University of Manitoba joint student conference has invited Iowa State and South Dakota State University to participate. This year's conference will be held in Brookings, South Dakota.

President Ansley called for any other new business. Hearing none, President Ansley entertained a motion to adjourn. Miranda Kleven so moved. Terry Rust seconded, and the motion carried.

The meeting adjourned at 11:07 a.m.

The NDWPCC can be thanked for the refreshments and noon luncheon.

Respectfully submitted, Mike Brisben Secretary/Treasurer

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Minot, ND October 20-22, 2009

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Cell: 952-239-2264 mfritze@engamerica.com

AWWA Management Institute Scheduled for September 2009 Advanced Management Institute Planned For October 2009

The five-day Basic American Water Works Association (AWWA) Water Utility Management Institute will be presented in Salt Lake City, Utah, September 21-25, 2009. All sessions are held at the Comfort Suites Hotel (near the airport).

This class brings together water company personnel from every region of the country (and Canada as well) in an atmosphere of learning and sharing important leadership principles. This affordable, top-notch training teaches practical, "real world" supervisory and management skills needed to be effective in today's workplace. The schedule is as follows: Day 1: Foundations of Leadership; Day 2: The Leader's Role in Performance Management; Day 3: Managing Conflict; Day 4: Employee Selection; Day 5: The Leadership of Change. The institute registration fee is \$499.

An Advanced AWWA Water Utility Management Institute is scheduled at the same location the week of October 19-23, 2009. The schedule is as follows: Day 1: Assessment of Leadership Vision, Values and Strategy; Day 2: Team Building; Day 3: Decision Making; Day 4: Transformational Leadership and Vision Alignment; Day 5: Critical Thinking Skills for Problem Resolution and Innovation. The Advanced Institute registration fee is \$499. Optional certification from Utah State University will be available for \$50 extra to members needing to meet training requirements for professional affiliations.

To obtain the basic institute and/or advanced institute schedule and registration information, call Chuck Christensen at (801) 333-3779, or email him at chuckets@msn.com.



Governor Hoeven Proclaims Drinking Water Week

North Dakotans Encouraged To Protect and Conserve the State's Waters

BISMARCK, N.D. – Gov. John Hoeven has declared May 3-9, 2009, as Drinking Water Week in North Dakota.

This annual event is dedicated to the belief that North Dakotans should have a safe and dependable supply of water, both now and in the future. Citizens are called upon to help protect the state's source waters from pollution.

Drinking Water Week recognizes the importance of water source protection and conservation, as well as the value, importance and fragility of the state's water resources.

Organizations involved in the promotion of Drinking Water Week include the North Dakota Department of Health, the North Dakota Section of the American Water Works Association, the North Dakota Water and Pollution Control Conference, the North Dakota Chapter of the American Public Works Association, the North Dakota Water Environment Association and the North Dakota Rural Water Systems Association.

Proclamation Drinking Water Week

May 3-9, 2009

WHEREAS, the citizens of North Dakota recognize that our health, comfort and standards of living depend on an ample supply of safe, high-quality drinking water; and

WHEREAS, water greatly influences our everyday lives through its uses in public health, economic development, power production, agriculture, recreation, and business and industries; and

WHEREAS, many dedicated men and women have made significant contributions in developing, operating and maintaining our public water systems; and

WHEREAS, what we do today to protect our drinking water will affect the prosperity and well-being of future generations; and

WHEREAS, North Dakotans are encouraged to recognize this precious resource and to help protect our source waters from pollution, to practice water conservation, to become involved in local water issues and to plan for its efficient use.

NOW, THEREFORE, as Governor of the State of North Dakota, I do hereby proclaim May 3-9, 2009, DRINKING WATER WEEK in the state of North Dakota.

John Hoeven Governor



Representatives at the signing of the Governor's Proclamation of Drinking Water Week were: Front row (l to r): Melody Kruckenberg, North Dakota Rural Water Systems Association; Governor John Hoeven; Lisa Ansley, North Dakota Water and Pollution Control Conference. Back row (l to r): Duane Friesz, North Dakota Section of the American Water Works Association; Chuck Abel, North Dakota Chapter of the American Public Works; Wayne Kern, Division of Municipal Facilities, North Dakota Department of Health; Bill Gefroh, North Dakota Water Environment Association.



PROCLAMATION PUBLIC WORKS WEEK MAY 17-23, 2009

WHEREAS, public works infrastructure, facilities and services are of vital importance to the health, safety and well-being of the people of North Dakota; and

WHEREAS, it is important for the citizens and civic leaders of this state to gain knowledge of and to maintain a progressive interest in the public works needs and programs of their respective communities; and

WHEREAS, public works professionals, engineers and administrators are responsible for and must design, build, operate and maintain the transportation, water supply, sewage and refuse disposal systems, public buildings, and other structures and facilities essential to serving our citizens; and

WHEREAS, North Dakota's public works professionals, engineers and administrators should be recognized for their dedication and contributions to the growth, development and stability of our state.

NOW, THEREFORE, as Governor of the State of North Dakota, I do hereby proclaim May 17-23, 2009, **PUBLIC WORKS WEEK** in the state of North Dakota.

John/Hoeven

ATTEST:

Alvin A. Jaeger Secretary of State

> 600 E Boulevard Ave. Bismarck, ND 58505-0001 Phone: 701.328.2200 Fax: 701.328.2205 www.nd.gov

49th Annual Water And Wastewater Operator Training Program

by Craig Bartholomay, North Dakota Department of Health

This past March and April, the North Dakota
Department of Health, the North Dakota Water and
Pollution Control Conference, the North Dakota
Section of the American Water Works Association, the
North Dakota Chapter of the American Public Works
Association, and the North Dakota Water Environment
Association sponsored the 49th Annual Water and
Wastewater Operator Training Program.

There were six sessions offered with a total of 227 attendants. Water treatment and distribution classes were offered March 2-4, March 9-11, March 23-25, and March 30-April 1 (cancelled due to a snowstorm). Wastewater treatment and collection classes were offered April 14-16 and April 21-22.

TRAINING SESSIONS	NUMBER OF ATTENDANTS				
Water Treatment and Distribution					
March 2, 3, 4	56				
March 9, 10, 11	48				
March 23, 24, 25	48				
March 30, 31, April 1*	0				
Wastewater Treatment and Collection					
April 14, 15, 16	36				
April 20, 21, 22	39				
Total number of attendants	227**				
*Cancelled due to weather ** Some operators attended more than one session					

The objectives for these classes are to fulfill the continuing education credit (CEC) requirement for certified operators, to present information regarding

regulations and avoiding mistakes that can lead to noncompliance, to discuss general operation and maintenance topics, and to give operators an opportunity to take certification exams. The courses are not geared specifically to prepare operators for certification exams.

During the training classes, there were six operator examination sessions scheduled. These were reserved for the last day of each session. The department administered 135 examinations this year, with a passage rate of 74 percent.

EXAMINATION SESSION	NUMBER OF EXAMINATIONS
	WRITTEN
March 4	34
March 11	18
March 25	19
April 1 (cancelled)	0
April 16	32
April 22	32
Total number of examinations	135

The following is a breakdown of the certification examinations that were written during the 2009 operator training sessions:

	ΙA	Ι	II	III	IV	TOTALS
Water Treatment	8	15	6	4	1	34
Water Distribution	16	24	4	1	1	46
Wastewater Treatment	3	12	5	5	1	26
Wastewater Collection	6	20	3	0	0	29
Totals	33	71	18	10	3	135



Attendance Roster: 49th Annual Water and Wastewater Operator Training Sessions

Environmental Training Center, Bismarck - Training Credits Issued

Water Treatment and Distribution (12 credits) March 2-4, 2009

Ault, Tracy Minot

Backowski, John Cargill Sweeteners

Baier, Jared Minot
Bommersbach, Terry West Fargo
Bosch, Frank Jr. Strasburg

Buchholz, Alfred Country Club Co-op

Carpenter, Dwight
Casey, Frank
Chomitzky, Myron
Clark, Mike
Dean, John
Delisle, Ronald
West Fargo
West Fargo
Bismarck
Bismarck

Demaray, Darwin Tappen Public School

Dunn, Steve Lidgerwood Engh, Reggie Minot

Folk, Charles Knife River Indian Village

Freeman, John West Fargo Friesz, Duane Mandan

Froelich, Gary F. Antelope Valley Station

Gietzen, Curtis Inactive Gorley, John Pick City

Hecker, Allen T. Southwest Water Authority
Helbling, Dale South Central Regional Water

Hesch, Wade Allen Valley City Hill, Ira Grand Forks

Hofer, Ben Sundale Hutterian Assoc.

Horning, Donald Zap

Hunt, Joseph Jamestown Imhoff, Jerry Elgin Isakson, Kurt LaMoure

Jallo, Leslie O. Walsh Rural Water District

James, Ryan West Fargo
Kindelspire, Del LaMoure
Kolrud, Greg Fargo
Leingang, Terry Riverdale
Marks, Curtis A. Newburg

Melby, Calvin G. R & T Water System

Midboe, Tim Grand Forks
Miller, Roger Medora
Monroe, James Ellendale
Murr, Leo Wahpeton

Mutzenberger, Myron Great River Energy - Stanton

Neibauer, Douglas South Central RWD North

Olson, Christopher M. Casselton
Pifer, Bill Bismarck
Rath, Jamie Mandan
Reisnour, Brad Carrington

Retterath, Mick Valley City Routledge, Matt Bismarck Schreiner, Gary B. Bismarck Sievers. Vernell **Taylor** Skiba, Bruce R Bismarck Stockert, Don Steele Thomas, James L. Cando Weiner, Perry **NAWS** Zimprich, Randy Gardner



Water Treatment and Distribution (12 credits) March 9-11, 2009

Albrecht Kenny Jr, Mandan Bachmeier, Bob Granville Baisch, Darell Bismarck

Berger, Sheldon Antelope Valley Station

Bernier, Kevin Abercrombie

Binstock, Dale Southwest Water Authority

Carter, Ross Sherwood
Cogdill,Clint Burlington
Erickson, Kenny Harvey

Falcon, Lloyd R & T Water System

Finnson, Jon K. Langdon Fricke, Randall Bismarck Fuchs, Dane New Salem

Gerlach, Vaughan U.S. Bureau Of Reclamation Gruenberg, Larry A. Great River Energy - Stanton

Haaland, Amy Cargill Sweeteners

Hammond, David Abercrombie

Herrmann, Kevin Antelope Valley Station Holznagel, Laren Coal Creek Station

Johnson, Allen M. Minot Kappes, Tom Mark Inactive

Klein, Linda Leland Olds Station

Kohanes, Justin Southwest Water Authority

Lueck, Glen R. Inactive Luvaas, Scott Rhame

McCamy, Kyle Moore Engineering

Mosbrucker, Kerry Mott

Narum, Gene ADM Corn Processing

Nowell, James D. New Town

Olson, Rick E. Williams Rural Water District

Ostwald, Jason Crary
Overmoe, Daniel Mayville
Phelps, Rodney St. John

Poland, Vickie Midwest Assistance Program

Rasmussen, Wesley Minot Rolla, Gregory Bismarck

Ryckman, Michael South Central Regional Water

Sanderson, Milo Flaxton Schantz, Erick Mandan

Schwarz, Gerald Leland Olds Station Stompro, Melissa Watford City Swenson, Richard New Rockford

Thompson, Michael Grand Forks-Traill Water

District

Vesey, Curt Casselton

Voigt, Shawn Dakota Gasification Co.

Wallman, Donald Bowman
Weil, Christy Zap
Werlinger, Jerome Bismarck

Water Treatment and Distribution (12 credits) March 23-25, 2009

Anderson, Brian Lee Grand Forks Air Force Base
Anderson, Carl Williams Rural Water District

Andre, Justin Minot
Bement, Thomas Bismarck
Berg, Gilbert L. New Town
Bergstrom, Kenny Williston

Burton, Keith International Peace Garden

Cain, Gerald Garrison
Carroll, Jim Marmarth

Cavanaugh, David North Prairie RWU-System III

Dachtler, Gregory
Degenstein, Keith
Degenstein, Leon
Bismarck
Mohall
Harvey

Doepke, Gary
Gernand, Gerard
Gorsuch, Alan

Antelope Valley Station
South Central RWD North
T. Roosevelt Nat'l Park South

Hanson, Jerry Northwood Hayes, Roy Hazen

Herman, Tom Upper Souris WUA-system I

Johnson, Ryan McVille Kary, Bruce Dickinson

Kinyon, Jonathan Grand Forks Air Force Base

Kopp, Steve Fargo Kuchar, Dale Osnabrock LaPorte, Ellis Bowdon

Larson, Gregory R & T Water System

Linstad, Stefan W. Park River
Marier, Gary Casselton
Moulton, Timothy R. Velva
Murray, Steven H. McClusky

Northagen, Leroy Fordville Public School Nostdahl, Laurie Lou Coal Creek Station

O'clair, R. Dean Mohall

Oster, Robert South Central Regional Water

Pearson, Douglas L. Minot Air Force Base
Sayler, Tom Leland Olds Station
Smith, Dean R & T Water System
Standish, Norman Fort Berthold Rural Water

Streich, T.J. Maxbass

Ternes, Maurice Antelope Valley Station

Trosen, Dan Carrington

Vance, Joshua T. Roosevelt Nat'l Park South

Wangsness, Larry Portal
Ward, Brian A. Fargo
Wilmer. Jeffrey Park River
Winson, Keith Maddock
Wold, Brett Watford City

Young Bird, Robert Jr. Fort Berthold Rural Water

Wastewater Treatment and Collection (12 credits) April 14-16, 2009

Benge, Dennis
Berg, Gilbert L.
Beyreis, Alan J.
Binder, Terry
Bewbells
New Town
Garrison
Flasher

Black Cloud, Edward Standing Rock Sioux Tribe

Buchholz, Alfred Country Club Co-op

Burianek, Anthony Jon Grafton Cascaden, Taylor Parshall

Coleman, Mark American Crystal Sugar

Hillsboro

balancing **progress** with **perspective**

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Dean, John
Elmer, Lance
Enderud, Richard
Forbord, Todd M.
Gorley, John
Hanson, Chad
Hanson, Charles D.
Koval, Christopher
Elmer, Lance
Hebron
Dickinson
Grafton
Pick City
Minot
J.R. Simplot
Cargill Swee

Koval, Christopher Cargill Sweeteners Laducer, Kelly Belcourt Public Utilities

Miller, Roger Medora

Miller, Stephen A. Antelope Valley Station

Monroe, James Ellendale Mosser, Frank Maddock

Murphy, Tony Belcourt Public Utilities

Nagel, Nathan Hettinger Niemann, Lyle Grafton Olson, Christopher M. Casselton Overmoe, Daniel Mayville

Pearson, Douglas L. Minot Air Force Base

Rask, Scott E. Belfield

Richter, Mike Cargill Sweeteners

Routledge, Matt
Schulz, Theodore
Sharbono, Wade
Stockert, Don
Wald, Ronald M.

Bismarck
Watford City
Devils Lake
Steele
Steele
Edgeley

Wallman, Donald Bowman

Wastewater Treatment and Collection (12 credits) April 20-22, 2009

Anderson, Brian Lee Grand Forks Air Force Base

Anderson, Lee Fargo

Berg, Shane Minot Air Force Base Biller, Alex Moore Engineering

Devillers, Joel Carrington Gackle, Victor Kulm

Goettel, Mike American Crystal Sugar

Hillsboro

Hanson, Jerry Northwood

Johnson, Harlan American Crystal Sugar

Hillsboro

Johnson, Justin Lee Beulah Jore, Ron Arnegard

Klabunde, Jerod Moore Engineering Leopold, Keith Minndak Farmers Coop

(Wahpeton)

Lesmeister, Walter New Rockford

Little Swallow, Newlyn Three Affiliated Tribes Manning, David Cargill Sweeteners

Marier, Gary Casselton

Mcpherson, Douglas Minot Air Force Base

Meidinger, Larry D. Ashley

Metzen, Barry
Mosbrucker, Kerry
Murray, Steven H.
Nowell, James D.
Oldham, Matt
Phelps, Rodney
Roller, Lee Roy M.
Schools J.R. Simplot
McClusky
New Town
Fargo
St. John
Belfield

Schock, Paul Dakota Gasification Co. Schuster, Jeremy Minot Air Force Base

Smith, Ryan Milnor
Tank, Michael T. Medora
Thomas, James L. Cando
Tufte, Jerold Glenfield
Vesey, Curt Casselton
Wald, Donald Wahpeton

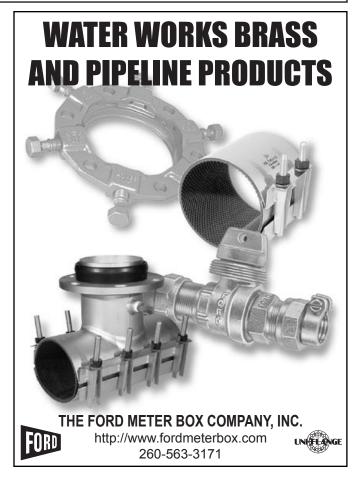
White Owl, Anthony Three Affiliated Tribes
White Tail, Anson Fort Berthold Rural Water

Widmer, Dellanor Kulm Yali, Kevin Crary Zamarron, Hugo Mapleton



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Operators Pass Certification Exams (March 4, 2009 to April 22, 2009) Congratulations to these Operators!

NAME	CITY OR EMPLOYER	CERTIFICATE
Brian Lee Anderson	Grand Forks Air Force Base	Water Distribution 01, Wastewater Treatment 01, Wastewater Collection 01
Carl Anderson	Williams Rural Water District	Water Distribution 01
Barry Arntz	Grand Forks	Water Distribution 04
Tracy Ault	Minot	Water Distribution 01
John Backowski	Cargill Sweeteners	Water Distribution 1A, Wastewater Collection 1A
Dennis Benge	Bowbells	Wastewater Treatment 01, Wastewater Collection 01
Kenny Bergstrom	Williston	Water Distribution 02
Alan J. Beyreis	Garrison	Wastewater Treatment 01, Wastewater Collection 01
Terry Bommersbach	West Fargo	Water Treatment 1A
Frank Bosch, Jr.	Strasburg	Water Distribution 01
Anthony Jon Burianek	•	Wastewater Treatment 01, Wastewater Collection 01
Dwight Carpenter	Horace	Water Distribution 01
Taylor Cascaden	Parshall	Wastewater Collection 01
Larry Chadwick	Prairie Learning Center	Water Distribution 1A
Benjamin Chisholm	Grand Forks	Wastewater Treatment 01
Myron Chomitzky	West Fargo	Water Distribution 01
Mike Clark	West Fargo	Water Distribution 02
Clint Cogdill	Burlington	Water Treatment 02
Mark Coleman	American Crystal Sugar	Wastewater Treatment 03
Tylura Colombia	Hillsboro	waste water Treatment of
John Dean	Bismarck	Water Distribution 01, Wastewater Collection 01
Darwin Demaray	Tappen Public School	Water Distribution 1A
Maynard Demaray	Fort Berthold Rural Water	Water Treatment 1A, Water Distribution 1A
Steve Dunn	Lidgerwood	Water Treatment 1A, Water Distribution 1A
Richard Enderud	Dickinson	Wastewater Treatment 02, Wastewater Collection 02
Reggie Engh	Minot	Water Distribution 03
Todd M. Forbord	Grafton	Wastewater Treatment 01, Wastewater Collection 01
John Gorley	Pick City	Water Distribution 1A
Amy Haaland	Cargill Sweeteners	Water Distribution 1A, Wastewater Collection 1A
Charles D. Hanson	J.R. Simplot	Wastewater Treatment 02
Daniel Hanson	Grand Forks	Water Distribution 01
Forrest L. Haug	Grand Forks	Wastewater Treatment 03
Duane Holien	Cando	Water Treatment 03
Ryan James	West Fargo	Water Treatment 1A
Ryan James	West Fargo	Water Distribution 01
Justin Lee Johnson	Beulah	Wastewater Treatment 02, Wastewater Collection 02
Ryan Johnson	McVille	Water Treatment 1A, Water Distribution 1A
Christopher Koval	Cargill Sweeteners	Wastewater Treatment 01, Wastewater Collection 01
Dale Kuchar	Osnabrock	Water Distribution 1A
Ellis LaPorte	Bowdon	Water Distribution 1A, Wastewater Collection 1A
David Lupo	Southwest Water Authority	Water Treatment 03
Gary Marier	Casselton	Water Distribution 01, Wastewater Collection 01
Douglas Mcpherson	Minot Air Force Base	Wastewater Treatment 1A, Wastewater Collection 01
Tim Midboe	Grand Forks	Water Treatment 04
James Monroe	Ellendale	Water Distribution 01, Wastewater Treatment 01,
		Wastewater Collection 01
Terry Morey	Dickinson	Wastewater Treatment 01, Wastewater Collection 01
Tony Murphy	Belcourt Public Utilities	Wastewater Collection 01

NAME CITY OR EMPLOYER CERTIFICATE

Laurie Lou Nostdahl Coal Creek Station Water Distribution 01

Christopher M. Olson Casselton Water Distribution 01, Wastewater Treatment 01

Rick E. Olson Williams Rural Water District Water Distribution 01

Jason Ostwald Crary Water Distribution 1A

Daniel Overmoe Mayville Water Treatment 03

Henry L. Renville Trenton Water Users Assoc. Water Distribution 1A

Matt Routledge Bismarck Water Distribution 01, Wastewater Collection 01

Jeremy Schuster Minot Air Force Base Wastewater Collection 01 Brother John Seiler Assumption Abbey Water Distribution 1A

Wade Sharbono Devils Lake Wastewater Treatment 01, Wastewater Collection 01

Dean Smith R & T Water System Water Treatment 03

James L. Thomas Cando Water Distribution 1A, Wastewater Collection 1A

Dan Trosen Carrington Water Distribution 01

Curt Vesey Casselton Water Distribution 01, Wastewater Collection 01
Shawn Voigt Dakota Gasification Co Water Treatment 02, Water Distribution 02
Donald Wallman Bowman Water Distribution 01, Wastewater Collection 01

Mark WasemAntelope Valley StationWater Treatment 1APerry WeinerNAWSWater Distribution 01Jeffrey WilmerPark RiverWater Treatment 01Jaret WirtzMcKenzie County Rural WaterWater Distribution 01Randy ZimprichGardnerWater Distribution 1A



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Operator Certification Exams Scheduled

The summer operator certification exam session will be held on Wednesday, August 12, 2009, at the Environmental Training Center located at 2369 East Main Avenue in Bismarck. Examination times will be from 8:00 a.m. to 4:00 p.m. To ensure adequate time for exams, testing must begin by 11:00 a.m. Please indicate time of arrival on exam application form. If you don't have a copy of the registration form, you can print one by visiting: http://www.ndhealth.gov/mf/forms/Operator_Certification_Application.pdf. Renewal fees must be paid prior to testing.

Please contact Craig Bartholomay at the North Dakota Department of Health at 701-328-6626 with any questions regarding operator certification and/or exams.





Fluoridation Facts

- ♦ Thousands of research studies and 60 years of experience have shown that water fluoridation is safe, effective and the best method of improving oral health in a community.
- ♦ Fluoride is naturally present in all water sources, even the ocean. Water fluoridation is the controlled adjustment of the natural fluoride concentration in a public water supply up to a level recommended for preventing tooth decay.
- ♦ Water fluoridation is recognized as one of the 10 major public health achievements of the 20th century by the Centers for Disease Control and Prevention (CDC).
- ♦ Although tooth decay is largely preventable, it remains the most common chronic disease of children aged 5 to 17 years. In the U.S., tooth decay affects:
 - 1 out of 4 elementary school children
 - 2 out of 3 adolescents
 - 9 out of 10 adults
- ♦ Both children and adults benefit from water fluoridation. Studies have demonstrated that people in communities with fluoridated water have 20 to 40 percent less tooth decay than those in communities without fluoridated water.

- The cost to fluoridate water for the lifetime of one person is less than the cost to treat one cavity.
- Every dollar spent on fluoridation saves \$38 in avoided dental bills
- ♦ For North Dakota, the most benefit to oral health is achieved when waters are fluoridated to 1.2 milligrams per liter (mg/L).
- ♦ Optimal fluoridation is achieved when the fluoride level in potable water is maintained in the control range of 1.0 to 1.7 mg/L (parts per million).
- One part per million means one part of fluoride is diluted in a million parts of water which might be compared to:
 - 1 inch in 16 miles
 - ♦ 1 minute in 2 years
 - 1 cent in \$10,000
- ◆ The benefits of fluoridation are quickly lost when fluoride levels drop below the optimal range. The U.S. Environmental Protection Agency (EPA) has set both the maximum contaminant level (MCL) and the maximum contaminant level goal (MCLG) for fluoride at 4 mg/L. In addition, the secondary maximum contaminant level goal (SMCLG) of 2 mg/L has been set for fluoride to minimize potential dental fluorosis (staining of the teeth).
- **♦** Monitor water fluoride levels daily to ensure optimal fluoridation, and adjust feed rates as necessary.
- ♦ Send split samples monthly to the state health laboratory to verify accuracy in measuring fluoride levels.

For questions on the Fluoridation Program in North Dakota or the health effects of fluoride, contact the Division of Municipal Facilities, 701-328-5258.

The following websites are good sources of information about fluoridation:

- ♦ American Dental Association: www.ada.org/public/topics/fluoride/index.asp
- Centers for Disease Control and Prevention: www.cdc.gov/OralHealth/topics/fluoridation.htm
- American Water Works Association: http://awwa.org/Advocacy/pressroom/fluoride.cfm

Minutes of the Board of Trustees Meeting North Dakota Section of AWWA

January 21, 2009

The winter meeting of the North Dakota Section of the American Water Works Association was held at the Seven Seas Inn and Conference Center of Mandan, N.D. on January 21, 2009. Present at the meeting were Chair Joe Ferguson; Chair-elect Duane Friesz; Trustees Dean Sletten, Eric Volk, Tim Paustian and Jason Sorenson; Secretary/Treasurer Chad Miller; Assistant Secretary Treasurers David Bruschwein, Larry Thelen, and Greg Wavra. Others attending the meeting were Lisa Ansley and Miranda Kleven.

The meeting was called to order by Mr. Ferguson at 8:04 a.m.

The Secretary's Report was presented by Mr. Miller. Mr. Paustian moved to approve the minutes of the October 8, 2008 Board Meeting. Mr. Friesz seconded, and the motion passed.

Mr. Wavra presented the Treasurer's Report. As of December 31, 2008, the section had income of \$35,209.39 and expenses of \$37,979.58. The section has \$38,034.04 in the check and money market accounts. The section also has \$80,000 in scholarship endowments and a reserve account. Also presented by Mr. Wavra and Mr. Thelen was an itemized breakdown of each income and expense for the 2008 calendar year. Ms. Kleven inquired about the Surface Water Workshop's profit. Mr. Wavra will be able to answer this question by the next board meeting. Mr. Sletten moved to accept the Treasurer's Report. Mr. Sorenson seconded, and the motion carried.

Committee Reports

Mr. Sletten stated he was unable to obtain the current number of active members due to technical difficulties. The most recent number he found was 243. He also noted there is difficulty recruiting operators as members. The operators tend to question what AWWA will give back. This issue may be a task for the Public Relations Committee.

Education and Research Committee

Ms. Kleven stated that scholarship applications were due in May. Some students also will be attending the Strategic Planning Meeting in Grand Forks. She also stated the Science Fair will be held April 3, 2009 in Fargo, N.D., and there is a need for judges. Ms. Kleven noted the Surface Water Workshop for 2010 is

scheduled for April 27-29 at the Ramada Plaza Suites in Fargo, N.D.

Mr. Bruschwein stated the new scholarship amount was increased from \$500 to \$1000, and there is now only one scholarship due to the discontinuation of the MSU-Bottineau water program.

Water Utility Council

Mr. Ferguson stated Mr. Sorenson and Mr. Jochim will be traveling to Washington, D.C. for the AWWA Fly-In on March 24 and 25.

Water for People

Mr. Bruschwein noted the section received a thankyou note from Ken Miller of Water for People in appreciation for the donation.

Director's Report

The report was given by Ms. Ansley in the absence of Mr. Jack Long. Ms. Ansley stated she and Mr. Long will be attending the Winter Board of Director's Meeting in Tucson, Ariz., January 23-25.

Mr. Wavra presented the 2009 budget to the board. A motion to approve the budget was stated by Mr. Friesz and seconded by Mr. Volk. The motion was passed.

Mr. Wavra reported there are now five entities in the state who have entered into a Water and Wastewater Agency Response Network (WARN) agreement. Mr. Wavra plans to attend the upcoming WARN Chairs Meeting in Denver. On May 20, 2009, there is a water sector incident command system meeting where the group plans to assign officers. Mr. Wavra noted the need for the North Dakota WARN organization to create its exclusive web site.

Ms. Kleven reported that the Membrane Technology Workshop will be held April 28-29, 2009 at the Kelly Inn in Bismarck, N.D.

Several minutes were taken for discussion on trustee committee rotation. It was noted by Mr. Bruschwein the rotation is as follows: 1st year trustee, Membership Committee; 2nd year trustee, Audit Committee; 3rd year, Water for People and Audit Committee; 4th year, Education and Research Committee and Trustee Nominating Committee; Chair Elect, Water

Utility Council and Public Relations Committee; and Chair, all committees. Mr. Sletten moved to set the rotation. Mr. Paustian seconded, and the motion passed. Therefore, the rotation places Mr. Sorenson on the Membership Committee; Mr. Volk on the Audit Committee; Mr. Paustian on the Water for People and Audit Committee; Mr. Sletten on the Education and Research Committee and the Trustee Nominating Committee; Mr. Friesz on the Water Utility Council and Public Relations Committee; and Mr. Ferguson on all committees

Mr. Ferguson appointed Mr. Paustian, Mr. Sorenson and Mr. Sletten to the Trustee Nomination Committee. Mr. Volk, Mr. Friesz and Mr. Miller were appointed to the Operator Meritorious Nomination Committee. Mr. Bruschwein is now on the Fuller Award Nomination Committee because he won the award at the North Dakota Water and Pollution Control Conference last October.

There was discussion about the Regional Meeting of Section Officers. The meeting will be held in Toronto, Ontario. Mr. Paustian noted that he will be attending. Mr. Volk and Mr. Sletten commented they also might attend

A couple of minutes were used to discuss the 2009 annual conference and exposition (ACE) held in San Diego, Calif. Mr. Paustian, Mr. Long, Mr. Ferguson, Mr. Friesz and Mr. Bruschwein will be attending.

Mr. Ferguson led discussion about this year's donation amounts. He stated the Water for People amount will be \$1,000; American Water Works Association Research Foundation (AWWARF), \$250; Gateway to Science Center, \$1000; Dakota Science Center, \$750.

Mr. Bruschwein noted the underwriting cost for AWWA *Liquid Assets* broadcast was \$500.

Ms. Ansley announced that Mr. Bruschwein has been awarded the Kenneth J. Miller Founder Award for his work with Water for People. The award will be presented at 2009 ACE.

Mr. Bruschwein asked the board to reimburse Mr. Wavra for his association membership dues

because he is the assistant treasurer. Mr. Sletten made the motion, and Mr. Friesz seconded. The motion carried.

Mr. Ferguson took a couple of minutes to entertain the idea of purchasing air-time during Drinking Water Week, to advertise AWWA. Mr. Ferguson reported air-time on a local network would cost approximately \$300 for each 30-second airing. Discussion continued about alternative ways to get AWWA on television.

Mr. Thelen commented about the need to start developing the water week advertisement.

Mr. Sletten moved to adjourn. The motion was seconded by Mr. Friesz. The meeting adjourned at 9:30 a.m.

Respectfully submitted, Chad Miller Secretary-Treasurer

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AWWA Membrane Workshop Held in April

Armed with a \$4,000 grant from the American Water Works Association (AWWA), the North Dakota Section of the AWWA hosted a Membrane Technology Workshop this spring in Bismarck. Membrane technology is a cost-effective method of providing high-quality drinking water to users around the region, and the North Dakota Section wanted to aim the workshop at current and future membrane operators.

Held on April 28 and 29, 2009 at the Kelly Inn in Bismarck, the 122 registrants included operators, managers, technology developers, researchers, health department officials, consultants and vendors. The day-and-a-half workshop incorporated a tour of the South Central Regional Water District's new membrane facility, presentations given by experts in the field, and discussion forums led by operators and vendors. Subject areas discussed were regulatory design considerations and approval, design pros and cons, cost considerations, concentrate disposal, membrane maintenance, and transitioning staff to membranes – just to name a few.



Membrane Tour - South Central Regional Water District, Tuesday, April 28



Operations Track: Wednesday, April 29

Specialists flew in from as far away as Florida, New York and Kansas City to provide expertise to attendees. A case study of the Grand Forks-Traill membrane facility was a highlight for the audience. Another favorite was a panel discussion with membrane facility operators from the cities of Alexander and Gwinner and the Grand Forks Traill and South Central Regional Water Districts. Sponsors Pall Water Processing, GE Water & Process Technologies and Siemens Water Technologies Corporation hosted a social on the first evening of the workshop.

The event brought in twice as many attendees as expected and feedback was positive so the event was deemed a success. The North Dakota Section of the AWWA has already begun planning for the next big event. The Surface Water Treatment Workshop, a joint effort with the Minnesota and South Dakota Sections of the AWWA, will take place next April in Fargo, N.D.

ND WARN to Hold Training

The North Dakota Water and Wastewater Agency Response Network (ND WARN) will hold a one-day Incident Command System (ICS) and National Incident Management Systems (NIMS) training program specific to the water sector. The training will be conducted by the Horsley Witten Group. ICS is the incident management system that is the national standard for responding to any incident anywhere in the U.S. Understanding NIMS is an important step for establishing utility mutual aid networks that include ND WARN

This training will be held in Bismarck at the Environmental Training Center on Tuesday, September 22, 2009. Training will begin at 8:30 a.m. and run until 4:00 p.m. The Operator Certification Program will offer four credit hours for this training. There is room for 50 people, so please register early.

For additional information, contact Greg Wavra, North Dakota Department of Health, Division of Municipal Facilities at (701) 328-5224. To view a detailed agenda and to register for the workshop, please log on to http://www.horsleywitten.com/ICStraining.

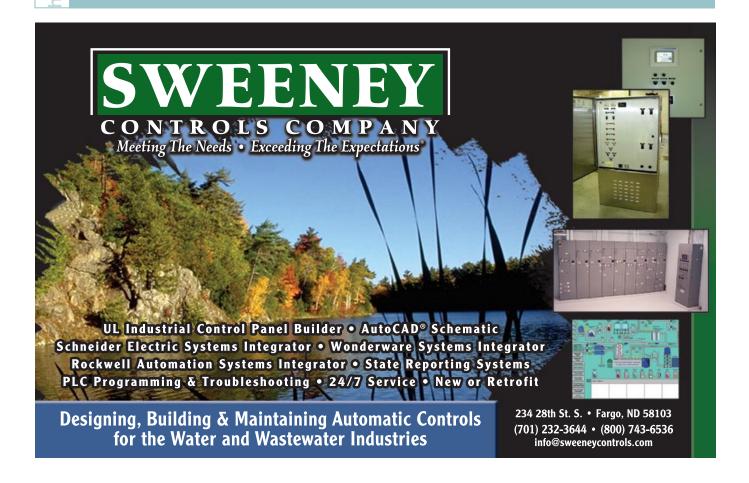
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CALL FOR PAPERS

Minnesota, North Dakota and South Dakota AWWA request abstracts for both verbal and poster presentations for the 2010 Surface Water Treatment Workshop.

Abstracts Due September 30, 2009

Notification of Acceptance October 16, 2009

Presentations Due March 31, 2010

This regional conference presented by MNAWWA, NDAWWA and SDAWWA will provide current technical, process and operational information to engineers, scientists, municipalities and end users of surface water treatment facilities. The technical sessions at the 2010 Surface Water Treatment Workshop will include all topics related to surface water in Minnesota, North Dakota and South Dakota.

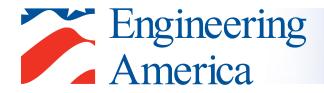
TOPICS MAY INCLUDE: WATER TREATMENT & TECHNOLOGY **EMERGING ISSUES WATER RESOURCES** Advanced Oxidation Water Reuse Nanotechnology Taste & Odor Removal Organic Compounds Supply Management Membrane Technology PCPs/EDCs Sustainability Green Technology Source Water Protection Cold Water Treatment **Invasive Species** Disinfection **DISTRIBUTION REGULATORY & ADMINISTRATIVE** Residuals Management **DBPs Future Regulations** Softening Technologies **Nitrification** LT2 Chlorination Stage II Bacterial growth Revenue Adequacy Storage technologies Water Conservation

The presentation selection committee will view quality of the abstract as an indication of the quality expected in the presentation and final manuscript. Review of the abstracts will be based on the following criteria:

- Relevance to the theme of the conference and the theme of the individual session(s)
- Significance of the work to a broad audience
- Technical content
- Originality of the work, including new concepts, innovations, or data

To submit an abstract for a presentation or poster, send an electronic copy to Bo Johnston at Black & Veatch by September 30, 2009.

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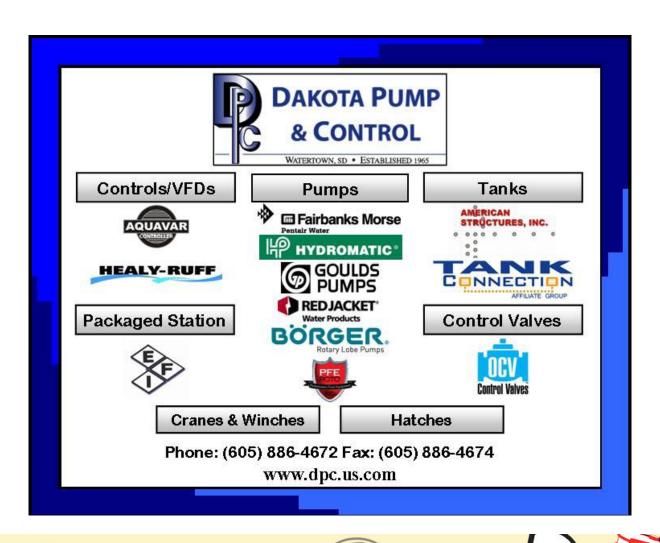
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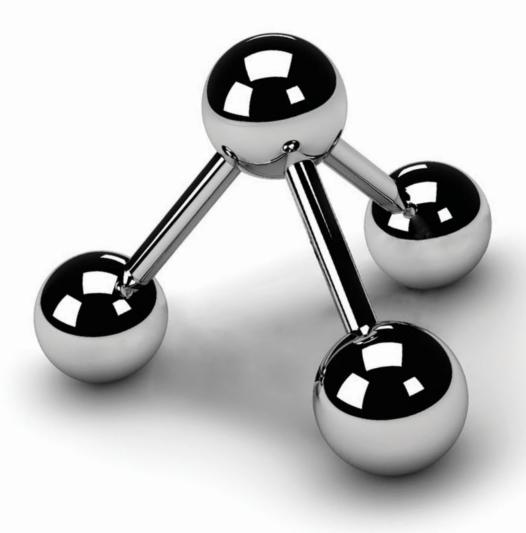








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Arsenic Rule	Katie Luther	701-328-5258			
Consumer Confidence Reports	LeeAnn Tillotson	701-328-5293			
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Filter and Backwash Recycle Rule	Gary Stefanovsky	701-328-5287			
Fluoride Addition	Katie Luther	701-328-5258			
Groundwater Rule	Gary Stefanovsky	701-328-5287			
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Inspections: Northwest	Bob Markhouse	701-328-6623			
Inspections: Southeast	Chad Miller	701-328-6375			
Inspections: Southwest	Darin Billing	701-328-6624			
Lead and Copper Rule	Katie Luther	701-328-5258			
Surface Water Treatment Rule: Interim Enhanced, Long Term 1 Enhanced, Long Term 2 Enhanced	Greg Wavra	701-328-5224			
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Operator Certification	Craig Bartholomay	701-328-6626			
Operator Expense Reimbursement	Tara Ritter	701-328-5269 or 6627			
Operator Training	Mike Brisben	701-328-6622			
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Public Water System Updates (changes to source, treatment, contact, etc.)	Katie Luther	701-328-5258			
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Total Coliform Rule	Jeni Walsh	701-328-5231			
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Volatile Organic Chemicals (VOCs)	Lydia Fewless	701-328-5221			
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