

2010

Southwest Water Authority

# ANNUAL OPERATING REPORT



# VISION

People and business  
succeeding with quality water

# MISSION

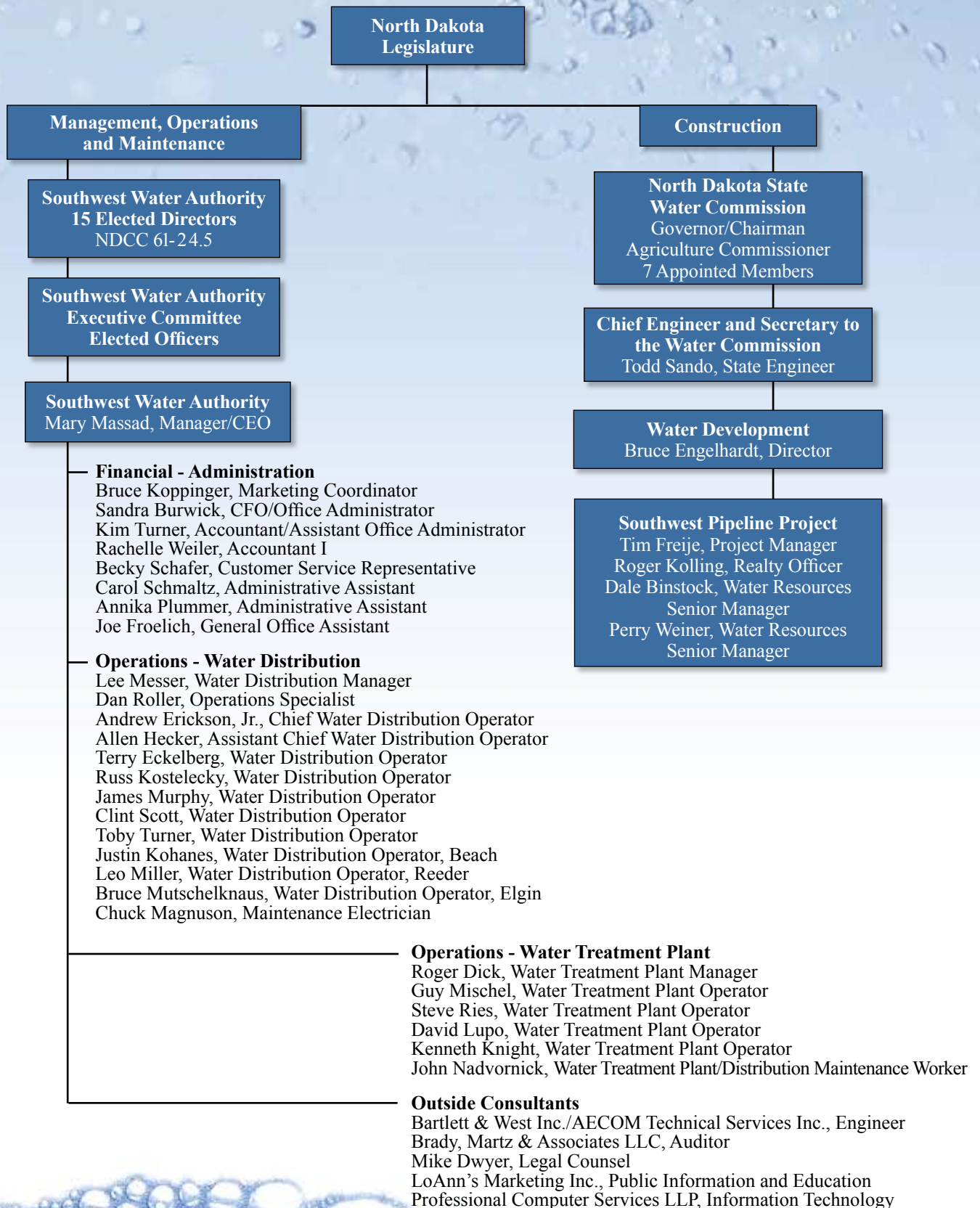
Providing quality  
water for southwest North Dakota

Southwest Water Authority does not discriminate on the basis of race, color, national origin, sex, religion, age, marital status or disability in employment or the provision of services.

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# ORGANIZATIONAL CHART



# SOUTHWEST WATER AUTHORITY BOARD OF DIRECTORS



**Row One:** Chairperson Larry Bares - City of Dickinson; Vice Chairperson James Odermann - Billings County; Secretary Steve Schneider - Stark County; Ray Bieber - Hettinger County; Duane Bueligen - Oliver County

**Row Two:** Jonathon Eaton - Adams County; Marie Johnson - Mercer County; David Juntunen - Slope County; Robert Leingang - City of Mandan; Darrel Oech - Golden Valley County

**Row Three:** Brian Roth - Grant County; George Saxowsky - Morton County; Rick Seifert - Bowman County; Larry Stang - City of Dickinson; Emanuel Stroh - Dunn County

## NORTH DAKOTA STATE WATER COMMISSION

Governor Jack Dalrymple, Chairman, Bismarck, ND  
Doug Goehring, Ag Commissioner, Bismarck, ND  
Arne Berg, Devils Lake, ND  
Maurice V. Foley, Minot, ND  
Larry L. Hanson, Williston, ND

Jack Olin, Dickinson, ND  
Harley Swenson, Bismarck, ND  
Robert G. Thompson, Page, ND  
Douglas Vosper, Neche, ND

# OUR VALUED STAFF



- Row One:** Mary Massad, Manager/CEO; Bruce Koppinger, Marketing Coordinator; Sandra Burwick, CFO/Office Administrator; Lee Messer, Water Distribution Manager; Andrew Erickson, Jr., Chief WDO; Roger Dick, WTP Manager
- Row Two:** Rachelle Weiler, Accountant; Becky Schafer, Customer Service Representative; Carol Schmaltz, Administrative Assistant; Kim Turner, Accountant/Assistant Office Administrator; Annika Plummer, Administrative Assistant; Joe Froelich, General Office Assistant
- Row Three:** Dan Roller, Operations Specialist; Allen Hecker, Assistant Chief WDO; Terry Eckelberg, WDO; Russ Kostelecky, WDO; James Murphy, WDO
- Row Four:** Clint Scott, WDO; Toby Turner, WDO; Justin Kohanes, WDO, Beach; Leo Miller, WDMW, Reeder; Bruce Mutschelknaus, WDO, Elgin
- Row Five:** Chuck Magnuson, Maintenance Electrician; Kenneth Knight, WTP Operator; David Lupo, WTP Operator; Guy Mischel, WTP Operator; Steve Ries, WTP Operator; John Nadvornick, WTP/WDMW
- Definitions:** Chief Executive Officer (CEO); Chief Financial Officer (CFO); Water Distribution Operator (WDO); Water Treatment Plant (WTP); Water Distribution Maintenance Worker (WDMW)

# A SUCCESSFUL PROJECT

*By Todd Sando, ND State Engineer*

The Southwest Pipeline Project (SWPP) continues to make major strides towards completion. Construction is well under way for the Oliver, Mercer, North Dunn (OMND) Regional Service Area, which will add more than a thousand rural users, three cities, and a dozen or more bulk water users, including cabin developments, the energy industry, and rural water systems. The cornerstone of OMND is the new water treatment plant, which is now under construction and scheduled for completion in early 2012. Half of the transmission facilities are either under contract or complete, with the remainder to be bid in early 2011 and 2012. With the treatment and transmission facilities in place, all that remains of OMND is to build rural distribution facilities as time and funding allow. The first two rural distribution contracts will be bid in early and late 2011 with completion in 2012 and 2013. The remaining rural distribution lines, as well as deferred construction items on the rest of the system, could conceivably be funded in the next three biennia. After two and a half decades of construction, the end is nearly in sight.



The SWPP has been a tremendously successful project, and it has evolved and grown a great deal since its inception. That success has not come easy and is a testament of the teamwork, dedication, and devotion of the State Water Commission, the Southwest Water Authority, and the people of southwest North Dakota. Many deserve credit, however, as we were not alone in advancing this project. The United States Department of Agriculture Rural Utility Service, Natural Resources Conservation Service, Bureau of Reclamation, Garrison Diversion Conservancy District, and North Dakota Department of Health through the State Revolving Loan Fund have all contributed significant funding. The SWPP is a clear example of what is possible when a large group of individuals and entities work and strive towards a single comprehensive goal.

*Todd Sando*

## SERVICE AREA 12 COUNTIES



# CHAIRPERSON'S ANNUAL ADDRESS

*By Larry Bares, Chairperson*



The Southwest Water Authority (SWA) Board of Directors welcomed new members Marie Johnson, Steve Schneider, Rick Seifert and Bob Leingang in 2010. Bob represents the city of Mandan, a newly elected position, giving us a 15-member board. Our board has representation in each of the 12 counties where the Southwest Pipeline Project (SWPP) will be built: Adams, Billings, Bowman, Dunn, Golden Valley, Grant, Hettinger, Mercer, Morton, Oliver, Slope and Stark, as well as the cities of Dickinson and Mandan.

We want to thank Loren Myran and Don Flynn for their many years of dedicated service to the SWA Board of Directors. Their leadership on the board was much appreciated. We also mourn the loss of John Klein, Sr., who represented Mercer County. He will be greatly missed.

The board's chief function is to oversee the management, operation and maintenance of the SWPP, a state-owned pipeline built by the North Dakota State Water Commission (NDSWC). We are very fortunate to have Mary Massad, Manager/CEO, and the SWA Staff to carryout the decisions of the board. They are a very hardworking, dedicated group and keep busy year-round with the day-to-day operations of the SWPP.

We are also very fortunate to have had Dale Frink as the State Engineer for the last ten years. Thank you, Dale, for all you have done for us and this project. Dale has worked for the NDSWC for 39 years. Throughout his career he worked diligently to ensure the completion of the SWPP, as well as to meet the water needs throughout the entire state.

As we move forward, along with the NDSWC, we welcome the new State Engineer Todd Sando. The board, management and staff at SWA look forward to working with Todd. Todd has proven himself to be a champion of water for this state and we are confident that he will continue to do so. Welcome Todd!

As we complete the Oliver, Mercer, North Dunn Regional Service Area, the oil industry is in need of large amounts of water. We are working to provide quality water by establishing depots to meet this need. In the planning process, we take into consideration traffic flow, impact on roads, oil activity centers and adequate water supply. Most importantly, we are ever mindful not to affect the flow of water to our communities and rural customers; that is our top priority.

Best wishes to everyone for a great year.

*Larry Bares*

# CONSTRUCTION SUMMARY

*By Tim Freije, Project Manager*

The 2010 construction season was unique in that it was very busy and productive, but didn't add any new customers to the system. The biggest item was the new Oliver, Mercer, North Dunn (OMND) Water Treatment Plant. This treatment plant will feature membrane filtration and softening and will serve the entire OMND Regional Service Area. It will also tie back into the existing system and feed roughly 400 users in the Medora, Beach Regional Service Area, and the cities of Dodge, Golden Valley, Halliday, and Dunn Center. The membrane system procurement contract, bid and awarded in 2009, was a prerequisite to final design on the building and equipment installation contract. This contract was bid in August, awarded in September, and executed in October. Construction commenced in November and is scheduled to be substantially complete in early 2012.



In addition to the new treatment plant, construction of the infrastructure to be served by it is also well underway. A 1.4 million gallon welded steel reservoir, which will also serve as the clearwell for the new treatment plant, was bid and is under construction. The first segment of main transmission line from the water treatment plant to the city of Hazen was started in 2009 and completed in 2010. The second segment of main transmission line was designed and bid in 2010, with completion in 2011. The majority of the design work was also performed in 2010 for: the third segment of main transmission line and elevated reservoir serving Oliver County; the first rural distribution pipeline contract serving half of Mercer County; and the final main transmission pipeline serving Dunn County.

It has indeed been a busy year, with some exciting new advancements yet to come in the upcoming years with the remainder of the project groundwork laid. While we will still undoubtedly face new challenges and opportunities, we look forward to working through these with the Southwest Water Authority to continue on with the project's track record of success.

A handwritten signature in black ink, appearing to read 'Tim Freije'.



***Oliver, Mercer, North Dunn Water Treatment Plant Groundbreaking Ceremony  
November 23, 2010***

# MANAGER'S MESSAGE

*By Mary Massad, Manager/CEO*



It is with great pleasure I present to you the 2010 Annual Operating Report for the Southwest Water Authority (SWA). The Southwest Pipeline Project (SWPP) had an unprecedented year for funding and construction in 2010. With several contracts under construction and more contracts in the design phase, we certainly have been busy. Our focus is completing the Oliver, Mercer, North Dunn (OMND) Regional Service Area. An exciting event for the OMND Service Area occurred on November 23, 2010, when SWA held the official groundbreaking for the Water Treatment Plant seven miles north of Zap. Nearly 40 people were in attendance including representatives from the North Dakota State Water Commission (NDSWC), our congressional delegation, the communities and counties in OMND, USDA-Rural Development, Garrison Diversion Conservancy District and more. In addition, to meet the energy industry needs in our region, the Dodge Water Depot was constructed and began operation in August 2010.

As we continue to work toward bringing quality water to the residents of southwest North Dakota, we welcome new faces to our board of directors. Our board grew to 15 members in 2010 with the election of Bob Leingang, who represents the city of Mandan. John Klein, Sr., Mercer County representative, passed away in 2010. SWA appreciates his years of service to the SWPP and SWA, and our condolences go out to his family. Marie Johnson of Beulah was elected as the new director for Mercer County. Also, new to the board are Steve Schneider, representing Stark County, and Rick Seifert, representing Bowman County. SWA welcomes these board members and looks forward to working with them throughout the coming years. We would also like to take this opportunity to thank Loren Myran, Stark County, and Don Flynn, Bowman County, for their many years of service to the SWA and the SWPP.

In 2010, the retirement of our State Engineer Dale Frink, marked a historical change for the SWPP. Thank you, Dale, for your many years of service and sincere commitment to water development statewide.

This gives me the opportunity to welcome our new State Engineer Todd Sando. Todd has been with the NDSWC for 25 years and his dedication to the water industry is admirable. We are truly pleased to have Todd as the State Engineer and look forward to working with him for many years to come.

In order to accomplish our mission of providing quality water for southwest North Dakota, it is essential to have a strong team of employees to carry out the work of SWA. I would like to thank my employees for another successful year. I am able to do my job because of their dedication and hard work each and every day.

SWA would also like to express deep gratitude to U.S. Senator Dorgan and U.S. Congressman Pomeroy for their service to our state. Although U.S. Senator Dorgan's and U.S. Congressman Pomeroy's terms are now complete in Washington, D.C., they were champions for water and have left a legacy for our industry in the state. U.S. Senator Conrad recently announced his intentions to retire in 2012. SWA cannot express adequately our appreciation for their service to our state. In addition, our well wishes and thanks go out to former Governor, now U.S. Senator Hoeven, and U.S. Congressman Berg as they continue their support for North Dakota on the federal level.

SWA appreciates and thanks Governor Dalrymple and his staff, the North Dakota State Legislature, the NDSWC and State Engineer, the Congressional delegation and their staff, USDA and USDA-Rural Development, the Bureau of Reclamation, Garrison Diversion Conservancy District, North Dakota Water Coalition, North Dakota Rural Water Systems Association, the board of directors, staff, and consultants for SWA, and the people of this great state for their unwavering commitment to water.

Water may be technically made up of hydrogen and oxygen, but to the people and businesses of southwest North Dakota, it means much more. SWPP water is a precious resource, one that many wait years to receive. We are privileged to provide this valuable resource to the area.

*Mary Massad*

# BACKGROUND

The Southwest Water Authority (SWA), a political subdivision, was established by the North Dakota State Legislature in 1991 to manage, operate and maintain the Southwest Pipeline Project (SWPP). SWA is governed by a 15-member board of directors representing the following counties: Adams, Billings, Bowman, Dunn, Golden Valley, Grant, Hettinger, Mercer, Morton, Oliver, Slope, and Stark, as well as the cities of Dickinson and Mandan.

The SWPP is state owned and administered by the North Dakota State Water Commission (NDSWC). SWPP transports raw water from Lake Sakakawea to Dickinson where it is treated and delivered to the project's customers in southwest North Dakota and Perkins County, South Dakota. SWA is responsible for the operations and maintenance of the project.

For 25 years, the SWPP has been constructing an efficient network of pipelines, pump stations, reservoirs and treatment facilities to bring southwest North Dakota an adequate quantity of quality water. To date, 28 communities, approximately 4,000 rural service locations, 15 small businesses, and 18 raw water customers, including Dodge Water Depot and Perkins County Rural Water System in South Dakota, are served by the pipeline.

In 2010, SWA began construction of the Oliver, Mercer, North Dunn Regional Service Area (OMND). Construction of the main transmission line from the OMND Water Treatment Plant to the cities of Hazen was completed. The second segment of main transmission line from Hazen to Stanton was awarded and design on the Center Tank and the third segment of main transmission line was completed. A groundbreaking ceremony for the new OMND Water Treatment Plant took place on November 23, 2010, with nearly 40 people in attendance.

The project pumped a total of 1,624,749,000 gallons of water from Lake Sakakawea in 2010. This is an increase of 109,486,600 gallons from 2009. Potable water delivered in 2010 to contract customers was 1,182,114,680 gallons, rural customers used 220,995,700 gallons, construction used 1,620,400 gallons and other customers used 18,607,500 gallons for a total of 1,423,338,280 gallons. Total raw water delivered in 2010 was 158,590,800 gallons. The water delivered to the end user was 97.36% of the total water pumped from Lake Sakakawea by the SWPP.

SWA purchases water from Missouri West Water System for delivery to customers in the Tower Hill, Junction Inn and Crown Butte Pockets of Morton County. Total potable water delivered to these customers in 2010 was 8,996,100 gallons.

SWA also purchases water from the city of Beulah to deliver to the city of Zap and to the rural customers in the Beulah Interim Service Area. Total potable water delivered to these customers in 2010 was 9,717,000 gallons, which includes 6,456,000 gallons to the city of Zap and 3,261,000 gallons to the rural customers.

Total water delivered by SWA was 1,600,642,180 gallons.

# MILL LEVY REPORT

<b>2010 Mill Levy Income</b>					<b>\$276,624.88</b>
	<b>Board of Directors</b>	<b>Administration</b>	<b>Easement</b>	<b>Sign-Up</b>	<b>Total</b>
Per Diem/Salaries	\$52,168.00	\$56,043.25	\$33,520.04	\$33,519.97	\$175,251.26
Benefits/Payroll Taxes	4,933.26	20,183.33	17,092.42	17,091.78	59,300.79
Professional Fees	38,187.89	24,363.99	0.00	11,115.00	73,666.88
Supplies	4,524.24	2,963.54	986.82	1,278.18	9,752.78
Repairs	0.00	1,871.78	918.75	902.24	3,692.77
Travel	31,700.20	1,670.20	2,610.88	1,716.80	37,698.08
Telephone/Internet	3,860.03	2,982.65	3,047.52	3,328.13	13,218.33
Insurance	7,027.56	1,716.60	0.00	0.00	8,744.16
Printing/Promotion	21,313.45	67,677.87	565.08	10,010.47	99,566.87
Postage	1,593.59	1,707.31	296.69	2,351.12	5,948.71
Dues and Subscriptions	12,886.00	8,116.75	469.00	0.00	21,498.75
Development/Education	2,755.00	855.72	994.50	604.50	5,209.72
Depreciation	0.00	1,637.20	3,998.79	3,998.54	9,634.53
Miscellaneous	19,500.00	330.90	0.00	0.00	19,830.90
<b>Total</b>	<b>\$200,449.22</b>	<b>\$192,121.09</b>	<b>\$64,527.49</b>	<b>\$85,916.73</b>	<b>\$543,014.53</b>
<b>Revenue Necessary from Other Sources</b>					<b>\$266,389.65</b>

# DISTRIBUTION OPERATIONS AND MAINTENANCE REPORT

*By Lee Messer, Water Distribution Manager*

The powers of nature were evident once again in 2010 within Southwest Water Authority's Service Area. Ice in January and heavy snow in April caused thousands of power poles and corresponding miles of power lines to break, leaving vast areas without electricity. Many of our pumping stations and reservoir control vaults were included. Fortunately, most of these facilities are located below ground and heat was not a major issue. However, electricity is essential to move water through the pumping stations to the reservoirs for delivery to our customers. A recently purchased generator and several rental units were utilized to maintain service to as many customers as possible. Our staff worked long hours in inclement weather, moving the generators sometimes on treacherous roads, to maintain reservoir levels.



Essential to pump station operation is telemetry communication with upstream and downstream reservoirs to indicate their water level. This communication is maintained through backup batteries in the reservoir control vaults during typical power outages. Telemetry communications during extended outages will, however, drain the batteries in one to two days, and they must be replaced with freshly charged batteries. Two of our affected reservoirs were only accessible by snowmobile and required several trips to install fresh batteries before power was restored.

Natural disasters such as these, while never pleasant, serve to illustrate where we are most vulnerable, and the steps that must be taken to meet the next disaster with minimal negative effects. We also find a deeper appreciation for the efforts of those dedicated professionals who work long hours under trying conditions to restore or maintain essential services. Hats off to all the rural electric linemen, our own distribution operators, and all the support personnel behind the scenes.

System improvements in 2010 included telemetry programming changes to the Golva, Rhame and Coffin Buttes pumping stations. Variable Frequency Drives at these locations monitor pressure and flow rate to vary pump speed and maintain downstream pressure rather than filling reservoirs. Previously, all controls were local, and telemetry simply monitored and provided status reports. During power outages, downstream pressure drops as customers continue to use gravity fed water. When the downstream pressure reached a specific target number, pumps would be locked out when power returned to prevent the pumps from running too fast. Manual control was required to operate the pumps and return the line to normal pressure. If the power outage occurred when roads were impassable or during nonworking hours when the nearest operator is 70 miles away, service interruptions would be unnecessarily long. The programming changes allow remote control of the pumps through one of the telemetry computers following an outage, thereby eliminating the need to have an operator on site.

The scope of operations and maintenance activities in the distribution system continues to broaden as each year brings new challenges. During the past year, the frenzy of activity in the oilfield greatly influenced our work load as new homes, businesses and pipelines carrying petroleum products were constructed. With the new construction comes a demand for water and new service installations, utility locate requests, and in some cases, relocating existing pipelines. Water for oil well fracturing is in high demand and led to the construction of a raw water depot at our Dodge Pump Station.

While we adapt to meet the new challenges, operations and maintenance of existing structures and pipeline facilities must still be met as well. October 2011 will mark 20 years of operation for our raw water facilities. Time has passed quickly, and although the equipment certainly isn't suffering the ravages of time, it does demand more of our time for repairs and maintenance. All things mechanical eventually wear out and the powers of nature never rest.

*Lee Messer*

# WATER TREATMENT REPORT

*By Roger Dick, Water Treatment Plant Manager*



2010 was a busy year for the staff at the Water Treatment Plant (WTP). Wigen Water Technologies was awarded the bid for the ultrafiltration membranes for the new Oliver, Mercer, North Dunn (OMND) WTP. Since they had not previously piloted with Missouri River water, a study was required. The pilot study lasted three and one-half months, during which time the operators collected and recorded a sizable amount of data. Once the study was finished, the membrane manufacturer made operating recommendations for the full-scale system. Construction on the OMND WTP began in the fall of 2010 and is scheduled for completion at the end of 2011 or early 2012.

The WTP staff also spent a considerable amount of time working on both lime slaking systems, which malfunctioned with increasing frequency as the year progressed. With assistance from the manufacturer, a number of problems were finally properly diagnosed and remedied in August.

Both slakers are now operating satisfactorily. During the year, four chemical feed pumps were replaced and a number of delicate instruments were hooked up to an uninterruptable power supply to protect their sensitive electronic components. Also, one of the chlorine feeders failed and had to be replaced. Other items worth mentioning were the replacement of the operations computer, as well as the installation of a new security system.

The two-year *Cryptosporidium*, *Giardia*, and *E. Coli* monitoring program that began in 2008 concluded in early 2010. Test results were such that the Southwest Water Authority (SWA) qualified for the Environmental Protection Agency's (EPA) "Bin 1" Classification, which means no additional treatment is required. The next round of testing will begin in 2016. Total Organic Carbon (TOC) monitoring was increased from quarterly to monthly during 2010 and testing was also performed on 10 primary inorganic chemicals. Six of the 10 were not detected while the other four were detected at levels well below the maximum contaminant level.

The SWA presented its 12th Annual Drinking Water Quality Report (also known as the Consumer Confidence Report) to the customers served by our WTP and its 4th Annual Report to our customers in the three Morton County Service Areas and the Beulah Interim Service Area. These reports contain important information about our drinking water and are available on SWA's Web site at [www.swa.swc.state.nd.us](http://www.swa.swc.state.nd.us). All five systems were in compliance with EPA's regulations.

The WTP treated 1,491,981,000 gallons of raw water during 2010. Each treatment chemical, its main purpose, and amount used is listed below:

- Lime (CaO): Softening (1,817,613 lbs.)
- Aluminum Sulfate ( $\text{Al}_2(\text{SO}_4)_3$ ): Cationic coagulant added for clarification (55,919 lbs.)
- Flocculant: Anionic emulsion added as a clarification aid (1,801 lbs.)
- Carbon Dioxide ( $\text{CO}_2$ ): pH adjustment (445,052 lbs.)
- Phosphate ( $\text{K}_4\text{O}_7\text{P}_2$ ): Corrosion inhibitor (24,649 lbs.)
- Fluoride ( $\text{H}_2\text{SiF}_6$ ): Promotes dental health (11,873 lbs.)
- Ammonium Sulfate ( $(\text{NH}_4)_2\text{SO}_4$ ): Disinfection (13,192 lbs.)
- Chlorine ( $\text{Cl}_2$ ): Disinfection (55,546 lbs.)

The WTP discharged approximately 850,000 gallons of sludge, which is a combination of chemicals added and impurities removed from the raw water.

## TREATMENT DEFINITIONS:

**an-i-on-ic** \an-i-än-ik\ adj: characterized by an active and especially surface-active anion

**cat-ion-ic** \kat-i-ä-nik\ adj: an ion or group of ions having a positive charge and characteristically moving toward the negative electrode in electrolysis

**co-ag-u-lant** \ko-a-gy-lent\ n: an agent that causes liquids or solids to coagulate

**floc-cu-lant** \flä-ky-lent\ n: substance that causes particles to form larger lumps or masses

A handwritten signature in black ink, appearing to read "Roger Dick". The signature is fluid and cursive, with a long horizontal stroke at the end.

# SERVICE 2010

## TREATED WATER USERS

## GALLONS USED

Alliance Ag Co-op.....	428,900
Assumption Abbey.....	1,167,500
Baker Boy.....	1,579,900
Beach.....	38,055,400
Belfield.....	31,562,200
Billings County.....	651,100
Carson.....	7,812,000
Dickinson.....	692,869,700
Dickinson Research Center.....	874,700
Dodge.....	2,282,000
Dunn Center.....	3,326,480
Elgin.....	16,478,400
Gladstone.....	5,347,800
Glen Ullin.....	23,137,600
Golden Valley.....	7,365,300
Golva.....	2,248,900
GTLE Dakota Plant.....	131,400
Halliday.....	9,153,600
Hebron.....	20,564,100
Hettinger.....	55,136,700
Home on the Range.....	497,900
Karsky Dairy.....	2,231,800
Manning.....	1,670,800
McKenzie County Grazing Association.....	656,800
Medora.....	16,234,000
Missouri Basin.....	5,974,500
Mott.....	23,611,300
Mott Grain.....	1,224,400
New England.....	20,012,900
New Hradec.....	1,040,100
New Leipzig.....	5,900,000
Perkins County Rural Water System.....	118,283,900
Prairie Learning Center.....	1,445,600
Reeder.....	5,020,500
Regent.....	6,624,100
Richardton.....	16,517,700
Sacred Heart Monastery.....	486,000
Scranton.....	13,973,400
Sentinel Butte.....	2,681,700
South Heart.....	10,550,800
Steffes Manufacturing.....	1,598,800
Taylor.....	4,366,000
West Medora Campground.....	1,338,000
Rural Usage.....	220,995,700
Construction.....	1,620,400
Other Usage.....	18,607,500
<b>Total Treated Water.....</b>	<b>1,423,338,280</b>

## RAW WATER USERS

## GALLONS USED

Assumption Abbey.....	157,000
Dodge Depot.....	11,627,000
Haas, C.B. "Buck".....	1,127,000
Hueske, Ken.....	1,341,900
Jurgens, Robert.....	587,000
Gerald Kadrmas 1.....	12,800
Gerald Kadrmas 2.....	0
Lorenz, Ervin.....	93,500
Lorenz, Fred.....	325,600
Moline, Dale and Sue.....	12,000
Neurohr, Dan.....	9,800
Perhus Brothers 1.....	24,700
Perhus Brothers 2.....	85,700
Perhus Brothers 3.....	4,600
Perhus Brothers 4.....	730,200
Red Trail Energy.....	142,047,000
Sacred Heart Monastery.....	359,000
Weigum, Dale.....	46,000
<b>Total Raw Water.....</b>	<b>158,590,800</b>

## BEULAH INTERIM

## GALLONS USED

Zap.....	6,456,000
Rural.....	3,261,000
<b>Total Beulah Interim.....</b>	<b>9,717,000</b>

## MWWS\*

## GALLONS USED

Rural.....	8,996,100
<b>Total MWWS.....</b>	<b>8,996,100</b>

**TOTAL GALLONS USED.....1,600,642,180**

\*Missouri West Water System

# INDEPENDENT AUDITOR'S REPORT

To the Board of Directors  
Southwest Water Authority  
Dickinson, North Dakota

Note: This is not a complete  
set of financial statements.  
A complete set is available at the  
Southwest Water Authority Office.

We have audited the accompanying financial statements of the business-type activities of Southwest Water Authority, as of and for the years ended December 31, 2010 and 2009, which collectively comprise the Southwest Water Authority's basic financial statements as listed in the table of contents. These financial statements are the responsibility of Southwest Water Authority management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and "Government Auditing Standards," issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of Southwest Water Authority, as of December 31, 2010 and 2009, and the respective changes in financial position and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued a report dated March 18, 2011 on our consideration of Southwest Water Authority's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The Management's Discussion and Analysis (MD & A) on pages 3 through 7 are not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The financial information listed as supplementary information in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supporting schedules have been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

Brady, Martz

BRADY, MARTZ & ASSOCIATES, P.C.

March 18, 2011

BRADY  
MARTZ

CERTIFIED PUBLIC ACCOUNTANTS  
AND CONSULTANTS

**SOUTHWEST WATER AUTHORITY  
DICKINSON, NORTH DAKOTA**

**Management's Discussion and Analysis**

**December 31, 2010 and 2009**

As management of the Southwest Water Authority, we offer readers of the Southwest Water Authority's financial statements this narrative overview and analysis of the financial activities of the Southwest Water Authority for the fiscal years ended December 2010, 2009 and 2008. We encourage readers to consider the information presented here in conjunction with Southwest Water Authority's financial statements and footnotes, which are presented within this report.

**Financial Highlights**

The assets of the Southwest Water Authority totaled \$14,529,629 as of the end of the year 2010 compared with \$13,912,763 as of the end of the year 2009 and \$14,017,942 as of the end of the year 2008. This is a total increase in total assets of \$616,866 between 2010 and 2009, and a decrease in total assets of \$105,179 between 2009 and 2008. The liabilities totaled \$1,039,781 for 2010 compared with \$1,080,463 for 2009 and \$1,107,011 for 2008. The net assets exceeded its liabilities at the close of the most recent fiscal year by \$13,489,848. This compares with the year ending December 31, 2009 by \$12,832,300 for an increase in net assets of \$657,548 between 2010 and 2009 and the year ending December 31, 2008 by \$12,910,931 for a decrease in net assets of \$78,631 between 2009 and 2008.

The majority of assets are in the form of cash and cash equivalents in the form of short-term CD's as well as investments held at the American Trust Center.

Assets held in the American Trust Center total \$9,691,695 at year-end compared with \$8,497,847 at year-end of 2009 and \$7,270,928 at year-end of 2008. The amount that is the Replacement and Extraordinary Maintenance Fund is \$8,523,737 at year-end compared with \$7,332,901 at year-end 2009 and \$6,371,359 at year-end 2008. This is an increase of \$1,190,836 between 2010 and 2009, and an increase of \$961,542 between 2009 and 2008. The North Dakota Legislature established the Replacement and Extraordinary Maintenance Fund when the Southwest Pipeline Project was authorized. This fund was created to cover costs of an extraordinary nature and/or to replace parts of an aging distribution system. It is funded by water customers system wide. The current rate is \$.35 per 1,000 gallons sold to all customers. In addition, \$.10 per 1,000 gallons sold to rural customers is also collected for the rural distribution system. The fees are deposited on a monthly basis into this fund.

The amount in the Escrow Fund is \$428,981 at year-end compared with \$457,206 at year-end 2009 and \$400,742 at year-end 2008. This is a decrease of \$28,225 between 2010 and 2009, and an increase of \$56,464 between 2009 and 2008. Of this amount, \$308,007 is restricted. This compares with \$282,382 as of year-end 2009, which is an increase of \$25,625 between 2010 and 2009, and \$360,445 as of year-end 2008, which is a decrease of \$78,063 between 2009 and 2008. These are the hookup fees paid by customers who sign up for water. When water becomes available, the hookup fees are recognized as revenue. If, however, the Southwest Water Authority is unable to serve these individuals, the hookup fees must be refunded.

Total cash in bank as of the end of the year is \$2,734,632 compared with \$2,980,910 at the end of 2009 and \$4,081,474 at the end of 2008. This is a decrease of \$246,278 between 2010 and 2009 and a decrease of \$1,100,564 between 2009 and 2008. This is made up of checking and money market accounts as well as certificates of deposit.

The liabilities total \$1,039,781 for 2010 compared with \$1,080,463 at year-end 2009 and \$1,107,011 at year-end 2008. This is a decrease in liabilities of \$40,682 between 2010 and 2009, and a decrease of \$26,548 between 2009 and 2008. Of this amount, \$622,882 is current liabilities mostly in the form of accounts payable. This compares with 2009 ending balance of \$653,193 in current liabilities, and ending balance of \$612,157 in current liabilities for 2008. This is a decrease in current liabilities of \$30,311 between 2010 and 2009, and an increase of \$41,036 between 2009 and 2008. The long-term liabilities total \$416,899 at year-end compared with \$427,270 at year-end 2009 and \$494,854 at year-end 2008. Of this amount, \$308,007 is deferred revenue for year-end 2009 compared with \$282,382 year-end 2009, and \$360,445 year-end 2008. Deferred revenue or hookup fees are held in escrow for customers who have signed up for water service with the Southwest Pipeline Project. When service becomes available, these funds will be released and will then be recognized as revenue. If the Southwest Pipeline Project is unable to provide water service, these hookup fees will be refunded to the individual. Also included in long-term liabilities for 2010 are rental deposits from tenants/customers of \$49,000, compared with \$88,250 for year-end 2009, and \$89,727 for year-end 2008.

**SOUTHWEST WATER AUTHORITY  
DICKINSON, NORTH DAKOTA**

**Management's Discussion and Analysis - Continued**

**December 31, 2010 and 2009**

**Overview of the Financial Statements**

This discussion and analysis are intended to serve as an introduction to the Southwest Water Authority's basic financial statements. The Southwest Water Authority's basic financial statements comprise four components: 1) Balance Sheet, 2) Statement of Revenues, Expenses and Changes in Net Assets, 3) Statement of Cash Flows and 4) Notes to the Financial Statements. This report also contains other supplementary information in addition to the basic financial statements themselves.

**Basic Financial Statements**

The basic financial statements are designed to provide readers with a broad overview of the Southwest Water Authority's finances, in a manner similar to a private-sector business.

The *balance sheet* presents information on all of the Southwest Water Authority's assets and liabilities, with the difference between the two reported as *net assets*. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Southwest Water Authority is improving or deteriorating.

**CONDENSED BALANCE SHEETS**

	2010	2009	2008
<b>ASSETS</b>			
Unrestricted current assets	\$ 4,886,246	\$ 5,173,821	\$ 6,145,885
Restricted noncurrent assets	8,762,796	7,928,890	7,142,929
Capital assets	880,587	810,052	729,128
 Total Assets	<u>\$ 14,529,629</u>	<u>\$ 13,912,763</u>	<u>\$ 14,017,942</u>
 <b>LIABILITIES</b>			
Current Liabilities	\$ 622,882	\$ 653,193	\$ 612,157
Long-term liabilities	416,899	427,270	494,854
 Total liabilities	<u>1,039,781</u>	<u>1,080,463</u>	<u>1,107,011</u>
 <b>NET ASSETS</b>			
Invested in capital assets, net of related debt	880,587	810,052	729,128
Restricted net assets	8,762,796	7,928,890	7,142,929
Unrestricted net assets	3,846,465	4,093,358	5,038,874
 Total Net Assets	<u>13,489,848</u>	<u>12,832,300</u>	<u>12,910,931</u>
 Total Liabilities and Net Assets	<u>\$ 14,529,629</u>	<u>\$ 13,912,763</u>	<u>\$ 14,017,942</u>

**SOUTHWEST WATER AUTHORITY  
DICKINSON, NORTH DAKOTA**

**Management's Discussion and Analysis - Continued**

**December 31, 2010 and 2009**

The *Statement of Revenues, Expenses, and changes in Net Assets* presents information showing how the entity's net assets changed during the most recent fiscal year. All changes in net assets are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

**STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET ASSETS**

	2010	2009	2008
Operating revenues:			
Sales	\$ 6,828,462	\$ 6,459,759	\$ 6,340,479
Hook up fee transfers	40,823	103,708	135,649
Other	72,366	94,757	142,123
Total operating revenues	<u>6,941,651</u>	<u>6,658,224</u>	<u>6,618,251</u>
Operating expenses:			
Transmission	3,287,592	3,445,604	2,818,842
Distribution	2,002,402	2,052,625	1,795,187
Board of directors	200,449	194,257	177,967
Administrative	491,408	442,165	376,365
Easement acquisition	64,527	69,418	73,759
Rural water sign-up	85,917	76,273	83,816
Customer service	88,966	98,798	77,854
Treatment	861,506	923,371	871,202
Total operating expenses	<u>7,082,767</u>	<u>7,302,511</u>	<u>6,274,992</u>
Operating income/(loss)	<u>(141,116)</u>	<u>(644,287)</u>	<u>343,259</u>
Nonoperating revenue:			
Property taxes	276,625	257,555	236,071
Unrealized gain/(loss) on investments	97,009	(100,020)	72,001
Investment income	425,030	408,121	479,727
Total nonoperating revenue	<u>798,664</u>	<u>565,656</u>	<u>787,799</u>
Change in net assets	657,548	(78,631)	1,131,058
Total net assets - beginning of year	<u>12,832,300</u>	<u>12,910,931</u>	<u>11,779,873</u>
Total net assets - end of year	<u>\$ 13,489,848</u>	<u>\$ 12,832,300</u>	<u>\$ 12,910,931</u>

**SOUTHWEST WATER AUTHORITY  
DICKINSON, NORTH DAKOTA**

**Management's Discussion and Analysis - Continued**

**December 31, 2010 and 2009**

**Fund financial statements**

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The Southwest Water Authority uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. The Southwest Water Authority has one fund, an enterprise fund. The enterprise fund is for the Operations and Maintenance of the Southwest Pipeline Project. The main sources of revenue for this fund are from the sale of water and from a mill levy that is levied by the Southwest Water Authority in the amount of one mill in each of the twelve counties that are a part of the Southwest Water Authority.

The revenues from the sale of water totaled \$6,828,462 compared with \$6,459,759 for 2009, and \$6,340,479 for 2008. This is an increase in revenues of \$368,703 between 2010 and 2009, and an increase of \$119,280 between 2009 and 2008. The net income/net loss for each department are transmission net loss of \$324,450, distribution net income of \$85,153 and treatment net income of \$43,801. This compares with net income/net loss by department for 2009 of transmission net loss of \$245,980, distribution net loss of \$1,859 and treatment net loss of \$111,804, and net income/net loss by department for 2008 of transmission net income of \$48,570, distribution net income of \$97,389 and treatment net loss of \$52,354.

The mill levy generated income of \$276,625 for 2010 compared with \$257,555 for the year 2009 and \$236,071 for the year 2008. This is an increase of \$19,070 between 2010 and 2009, and an increase of \$21,484 between 2009 and 2008. The administration activities had a net loss of \$94,475 compared with a net income of \$5,866 for 2009, and a net income of \$89,770 for 2008. Administration includes activities for the board of directors, administration, sign up and easements.

The actual revenues and expenses were within the overall budget. Revenues were within budgeted numbers for the year without any significant variance. The revenues were less than 2% of projections and the expenses were within reason of the budget parameters by being under budget within 2%.

The Southwest Water Authority sold a total of 1,600,642,180 gallons of water in 2010 compared with 1,497,743,900 gallons of water in 2009 and 1,597,024,000 gallons of water in 2008. This is an increase of 102,898,280 gallons between 2010 and 2009, and a decrease of 99,280,100 gallons between 2009 and 2008. This is 1.95% over the projection for the year of 1,570,000,000 gallons for 2010.

**Requests for Information**

This financial report is designed to provide a general overview of the Southwest Water Authority's finances for all those with an interest in the Southwest Water Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to: Chief Financial Officer, Southwest Water Authority, 4665 Second Street SW, Dickinson, ND 58601-7231. You can also contact the Southwest Water Authority online at [swa@swwater.com](mailto:swa@swwater.com) or visit on the web at [www.swa.swc.state.nd.us](http://www.swa.swc.state.nd.us).

**SOUTHWEST WATER AUTHORITY  
DICKINSON, NORTH DAKOTA**

**Balance Sheets**

**December 31, 2010 and 2009**

	<u>2010</u>	<u>2009</u>
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents - unrestricted	\$ 1,265,525	\$ 561,584
Investments	2,725,108	3,758,120
Receivables:		
Accounts (net of allowance of \$2,566 and \$5,739 in 2010 and 2009, respectively)	536,117	522,915
Interest	15,911	27,253
Prepaid expenses	22,467	40,913
Inventory	321,118	263,056
<b>Total current assets</b>	<u>4,886,246</u>	<u>5,173,821</u>
<b>Noncurrent Assets</b>		
Restricted assets:		
Cash and cash equivalents	191,373	535,401
Investments	8,523,737	7,332,901
Interest receivable	47,686	60,588
Capital Assets:		
Land	7,657	7,657
Improvements, furniture and equipment, net	872,930	802,395
<b>Total noncurrent assets</b>	<u>9,643,383</u>	<u>8,738,942</u>
<b>Total Assets</b>	<u><u>\$ 14,529,629</u></u>	<u><u>\$ 13,912,763</u></u>
<b>LIABILITIES AND NET ASSETS</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 371,834	\$ 393,374
Due to ND State Water Commission	-	21,154
Accrued salaries	113,684	108,422
Compensated absences, current portion	85,949	80,304
Accrued expenses	51,415	49,939
<b>Total current liabilities</b>	<u>622,882</u>	<u>653,193</u>
<b>Long-term Liabilities</b>		
Compensated absences, net of current portion	59,892	56,638
Deferred revenue	308,007	282,382
Rental/customer deposits	49,000	88,250
<b>Total long-term liabilities</b>	<u>416,899</u>	<u>427,270</u>
<b>Total liabilities</b>	<u>1,039,781</u>	<u>1,080,463</u>
<b>Net Assets</b>		
Invested in capital assets, net of related debt	880,587	810,052
Restricted for replacement	8,762,796	7,928,890
Unrestricted	3,846,465	4,093,358
<b>Total Net Assets</b>	<u>13,489,848</u>	<u>12,832,300</u>
<b>Total Liabilities and Net Assets</b>	<u><u>\$ 14,529,629</u></u>	<u><u>\$ 13,912,763</u></u>

**SOUTHWEST WATER AUTHORITY  
DICKINSON, NORTH DAKOTA**

**Statements of Revenues, Expenses and Changes in Fund Net Assets**

**For the Years Ended December 31, 2010 and 2009**

	2010	2009
Operating revenues:		
Sales	\$ 6,828,462	\$ 6,459,759
Hook up fee transfers	40,823	103,708
Other	72,366	94,757
	<hr/>	<hr/>
Total operating revenues	6,941,651	6,658,224
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Operating expenses:		
Transmission	3,287,592	3,445,604
Distribution	2,002,402	2,052,625
Board of directors	200,449	194,257
Administrative	491,408	442,165
Easement acquisition	64,527	69,418
Rural water sign-up	85,917	76,273
Customer service	88,966	98,798
Treatment	861,506	923,371
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Total operating expenses	7,082,767	7,302,511
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Operating loss	(141,116)	(644,287)
	<hr/>	<hr/>
Nonoperating revenue:		
Property taxes	276,625	257,555
Unrealized gain/(loss) on investments	97,009	(100,020)
Investment income	425,030	408,121
	<hr/>	<hr/>
Total nonoperating revenue	798,664	565,656
	<hr/>	<hr/>
Change in net assets	657,548	(78,631)
	<hr/>	<hr/>
Total net assets - beginning of year	12,832,300	12,910,931
	<hr/>	<hr/>
Total net assets - end of year	\$ 13,489,848	\$ 12,832,300
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# POTABLE WATER USAGE

User	January	February	March	April	May	June	July	August	September	October	November	December	User Total
Alliance Ag Co-op	1.00	0.0	0.0	0.0	45.30	7.50	91.50	77.40	104.20	0.0	83.20	18.80	428.90
Assumption Abbey	95.70	82.70	99.10	101.00	86.00	85.00	156.00	120.00	81.00	99.00	82.00	80.00	1,167.50
Baker Boy	64.80	95.80	63.80	117.80	180.10	188.60	135.20	128.20	161.00	146.10	156.90	141.60	1,579.90
Beach	3,094.70	2,254.90	2,247.10	3,186.00	2,642.30	2,954.70	4,566.90	5,087.80	3,903.20	3,259.40	2,471.40	2,387.00	38,055.40
Belfield	2,900.90	2,743.10	2,541.00	2,313.40	1,910.60	2,413.70	3,748.30	3,517.90	2,526.50	2,588.50	2,091.80	2,266.50	31,562.20
Billings County	0.0	0.0	0.0	0.0	233.80	78.00	99.80	116.50	116.10	6.30	0.60	0.0	651.10
Carson	708.20	556.80	551.70	673.70	619.40	727.40	847.40	736.80	655.10	692.60	524.40	518.50	7,812.00
Dickinson	46,988.70	40,095.10	39,611.70	47,164.80	47,472.50	58,469.60	93,587.40	88,307.10	68,173.70	67,080.40	50,003.60	45,915.10	692,869.70
Dickinson Research Center	45.10	44.60	36.60	86.80	118.40	163.80	66.20	38.40	67.00	91.80	56.20	59.80	874.70
Dodge	172.00	147.00	143.00	178.00	182.00	243.00	304.00	261.00	165.00	182.00	145.00	160.00	2,282.00
Dunn Center	289.00	224.80	214.30	230.60	239.50	264.90	374.80	326.00	268.30	292.18	281.40	320.70	3,326.48
Elgin	1,462.50	1,187.10	1,163.80	1,367.60	1,210.20	1,522.40	1,688.80	1,650.70	1,417.10	1,488.80	1,170.80	1,148.60	16,478.40
Gladstone	480.00	401.70	366.70	451.10	377.90	504.40	568.50	528.20	436.50	459.40	384.40	389.00	5,347.80
Glen Ullin	2,138.00	1,669.30	1,521.80	1,974.00	1,688.20	1,985.30	2,770.70	2,359.30	1,843.90	1,918.50	1,619.50	1,649.10	23,137.60
Golden Valley	556.40	473.70	516.00	646.70	567.70	763.20	984.80	854.80	763.30	602.30	303.10	333.30	7,365.30
Golva	188.80	145.10	137.40	166.80	162.20	211.40	302.90	286.30	170.90	161.50	127.80	187.80	2,248.90
GTLE	0.0	60.20	34.50	14.90	21.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	131.40
Dakota Plant													
Halliday	1,004.30	1,035.80	1,116.80	1,097.40	594.00	628.80	771.50	714.70	699.40	530.40	441.50	519.00	9,153.60
Hebron	1,507.10	1,357.00	1,233.50	1,672.30	1,392.00	1,883.90	2,355.10	2,202.50	1,697.80	2,227.40	1,481.30	1,554.20	20,564.10
Hettinger	4,374.00	3,441.20	3,227.00	3,861.20	3,516.00	4,426.00	7,080.00	6,022.10	5,383.00	5,117.00	4,208.20	4,481.00	55,136.70
Home on the Range	44.90	38.00	37.50	43.50	38.50	39.00	41.50	42.50	35.00	47.90	41.30	48.30	497.90
Karsky Dairy	191.20	168.70	155.20	204.20	193.80	213.40	185.90	219.00	165.40	188.10	167.70	179.20	2,231.80
Manning	112.90	109.50	102.50	113.40	119.50	199.60	221.90	215.00	164.90	138.30	85.90	87.40	1,670.80
MCGA*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	286.50	130.80	169.00	70.50	0.0	656.80
Medora	378.20	290.80	311.20	645.40	882.80	2,034.60	3,662.50	3,627.50	2,177.60	1,127.60	580.60	515.20	16,234.00
Per 1,000 Gallons													



# POTABLE WATER USAGE CONTINUED

User	January	February	March	April	May	June	July	August	September	October	November	December	User Total
Missouri Basin	263.90	481.80	550.20	480.90	376.60	601.20	393.90	613.80	478.50	552.60	387.50	793.60	5,974.50
Mott	1,960.20	1,621.10	1,698.80	2,062.80	1,698.30	2,414.40	2,285.30	2,072.20	1,853.90	2,524.10	1,844.90	1,584.30	23,611.30
Mott Grain	0.50	0.0	0.0	0.0	283.50	234.90	247.60	80.30	136.80	211.80	14.40	14.60	1,224.40
New England	1,596.60	1,291.40	1,132.70	1,811.80	1,402.20	2,284.00	2,799.60	2,025.80	1,611.80	1,724.90	1,092.70	1,239.40	20,012.90
New Hradec	82.30	64.40	63.20	73.00	67.70	124.50	133.90	101.10	83.80	91.00	82.20	73.00	1,040.10
New Leipzig	495.90	383.40	357.90	602.50	428.60	524.60	721.20	597.00	454.40	540.40	430.50	363.60	5,900.00
PCRWS**	9,864.30	8,951.40	8,667.50	11,546.00	8,764.70	11,231.80	11,679.30	9,655.30	8,496.10	10,393.80	8,972.50	10,061.20	118,283.90
PLC***	149.70	105.70	188.70	141.00	114.00	59.70	107.00	152.80	69.90	95.30	81.70	180.10	1,445.60
Reeder	284.80	456.70	368.40	345.60	348.70	526.20	507.70	476.40	350.00	465.80	490.80	399.40	5,020.50
Regent	387.80	367.40	341.10	565.50	521.10	818.80	720.30	626.20	745.00	706.40	404.20	420.30	6,624.10
Richardton	1,310.30	1,160.30	1,142.40	1,378.60	1,107.50	1,455.30	1,886.40	1,775.80	1,463.40	1,489.60	1,134.70	1,213.40	16,517.70
SHM****	44.00	36.00	40.00	43.00	42.00	51.00	54.00	46.00	36.00	36.00	32.00	26.00	486.00
Scranton	1,202.50	1,026.00	1,023.20	1,057.00	880.40	1,288.30	1,397.60	1,331.40	1,040.70	1,501.30	1,118.80	1,106.20	13,973.40
Sentinel Butte	180.70	140.70	180.60	121.60	108.40	118.30	208.20	179.70	139.90	182.30	173.50	947.80	2,681.70
South Heart	740.60	626.60	613.60	757.40	710.50	873.00	1,595.60	1,265.00	973.50	971.20	697.20	726.60	10,550.80
SM*****	105.10	133.00	78.30	153.40	163.70	117.80	102.90	78.50	165.40	162.80	207.20	130.70	1,598.80
Taylor	312.00	271.00	248.00	319.00	295.00	371.00	662.00	534.00	405.00	383.00	290.00	276.00	4,366.00
WMC*****	24.00	19.00	19.00	27.00	77.00	190.00	339.00	280.00	139.00	46.00	39.00	139.00	1,338.00
Monthly Total	85,803.60	73,758.80	72,145.80	87,796.70	81,875.40	103,293.00	150,453.10	139,617.50	109,949.80	110,692.78	84,072.90	82,655.30	1,182,114.68

## Beulah Interim Potable Water Contract

User	January	February	March	April	May	June	July	August	September	October	November	December	User Total
Zap	519.30	472.20	440.20	508.10	485.90	655.30	714.60	643.20	532.60	561.70	462.30	460.60	6,456.00
Monthly Total	519.30	472.20	440.20	508.10	485.90	655.30	714.60	643.20	532.60	561.70	462.30	460.60	6,456.00
Grand Total	86,322.90	74,231.00	72,586.00	88,304.80	82,361.30	103,948.30	151,167.70	140,260.70	110,482.40	111,254.48	84,535.20	83,115.90	1,188,570.68

Per 1,000 Gallons

Definitions: \*McKenzie County Grazing Association (MCGA); \*\*Perkins County Rural Water System (PCRWS); \*\*\*Prairie Learning Center (PLC); \*\*\*\* Sacred Heart Monastery (SHM); \*\*\*\*\* Steffes Manufacturing (SM); \*\*\*\*\*West Medora Campground (WMC)

# RURAL WATER USAGE HISTORY

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1995	638,000	722,000	797,000	841,000	934,000	1,282,000	1,601,000	1,708,000	1,822,000	1,531,000	1,839,000	2,130,000	15,845,000
1996	2,674,000	2,513,000	3,001,000	3,096,000	2,994,000	3,537,000	4,435,000	4,829,000	5,598,000	4,342,000	4,026,400	5,328,000	46,373,400
1997	4,508,000	4,513,300	3,876,400	4,383,300	4,642,000	5,516,800	6,041,300	6,136,200	5,623,200	6,124,000	4,679,100	4,853,000	60,896,600
1998	5,213,600	5,108,300	4,694,500	4,889,400	5,105,200	7,228,400	5,945,000	7,279,200	6,742,300	6,672,900	6,136,000	4,776,100	69,790,900
1999	5,627,700	5,355,100	4,912,600	6,081,700	5,589,900	6,078,700	7,307,200	8,430,100	7,579,700	7,742,800	6,717,200	7,047,500	78,470,200
2000	7,567,600	7,178,100	6,538,000	7,618,300	7,979,600	8,979,700	8,886,400	9,147,300	10,089,100	10,638,200	7,627,100	7,166,100	99,415,500
2001	7,566,100	7,182,800	6,803,000	7,199,700	7,890,200	9,377,700	8,687,300	8,853,700	10,633,300	10,084,400	7,364,200	7,860,900	99,503,300
2002	8,803,100	7,351,300	7,367,300	8,452,700	8,591,300	11,816,800	12,067,400	12,878,000	11,186,900	16,109,900	9,111,700	8,463,100	122,199,500
2003	9,747,700	9,030,800	8,645,200	8,999,500	10,030,800	12,353,200	12,869,800	14,851,300	14,823,500	19,743,800	10,257,100	9,372,700	140,725,400
2004	10,499,300	9,838,200	8,627,700	9,678,100	11,882,600	12,985,500	15,676,800	14,729,100	14,405,200	19,217,100	10,106,100	9,765,600	147,411,300
2005	10,438,000	9,806,900	9,593,300	11,043,100	11,416,100	13,780,800	13,786,700	14,552,400	16,177,400	24,084,600	11,281,500	10,926,200	156,887,000
2006	10,776,500	10,172,100	10,680,600	11,034,400	12,665,800	18,998,700	21,531,000	20,735,000	19,695,200	28,022,600	11,186,500	11,873,900	187,372,300
2007	12,497,800	11,560,700	11,039,200	12,102,600	14,103,500	16,218,600	17,820,500	23,819,000	17,055,500	30,487,300	14,029,500	12,925,100	193,659,300
2008	13,256,200	12,979,800	12,662,100	13,831,600	15,257,600	19,691,600	22,704,700	21,999,800	22,500,900	40,761,800	13,149,000	14,159,700	222,954,800
2009	14,782,400	11,839,600	11,280,700	14,287,900	14,710,300	18,129,000	19,826,900	17,906,800	18,429,600	34,945,500	12,820,500	13,051,800	202,011,000
2010	13,762,800	15,195,500	14,102,900	15,545,800	16,175,900	18,537,900	19,911,300	20,349,400	19,243,400	30,133,600	16,420,800	21,616,400	220,995,700

## Missouri West Water System (MWWS) Rural Water Usage History (Purchased from MWWS.)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2006	0	0	0	0	0	0	0	2,600	42,800	237,000	132,600	96,700	511,700
2007	315,500	147,600	236,300	278,000	303,000	356,600	376,500	920,500	383,400	1,783,300	629,200	315,200	6,045,100
2008	529,400	445,600	479,400	501,200	543,500	499,600	703,900	625,200	687,500	3,574,500	370,100	432,200	9,392,100
2009	561,800	308,300	338,200	434,900	324,500	687,200	531,100	611,500	499,400	3,806,500	329,400	564,900	8,997,700
2010	501,200	402,700	629,500	549,800	509,100	546,400	803,400	626,000	628,200	748,500	2,531,000	484,300	8,996,100

## Beulah Interim Service Rural Water Usage History (Purchased from the city of Beulah.)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2006	0	0	0	0	0	0	0	0	0	0	0	19,600	19,600
2007	54,300	62,700	54,200	67,800	89,600	146,600	182,400	312,000	209,200	481,900	160,400	198,700	2,019,800
2008	155,400	167,200	125,500	160,800	193,300	310,100	490,700	421,000	507,700	588,300	168,800	151,300	3,440,100
2009	235,300	141,200	170,900	170,300	210,900	217,000	316,000	337,300	653,300	490,900	186,400	169,200	3,298,700
2010	163,600	137,700	144,800	193,800	265,600	298,800	381,100	438,600	457,900	267,900	231,100	280,100	3,261,000

2010 Total	14,427,600	15,735,900	14,877,200	16,289,400	16,950,600	19,383,100	21,095,800	21,414,00	20,329,500	31,186,000	19,182,900	22,380,800	223,252,800
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# WATER SERVICE CONTRACTS

User	Billed+	O&M++	Treatment	Reserve	Replacement	Cup. Repayment	Demand	Total
Alliance Ag Co-op	1,200.00	\$1,271.97	\$780.02	\$84.00	\$420.02	\$1,248.01	\$0.00	\$3,804.02
Assumption Abbey	1,167.50	\$1,249.23	\$758.89	\$58.39	\$408.64	\$1,214.20	\$1,214.20	\$4,903.55
Baker Boy	1,579.90	\$1,674.72	\$1,026.94	\$110.60	\$552.97	\$1,643.08	\$0.00	\$5,008.31
Beach	38,055.40	\$40,338.71	\$24,736.04	\$2,663.88	\$13,319.42	\$39,577.63	\$0.00	\$120,635.68
Belfield	31,562.20	\$33,455.93	\$20,515.47	\$2,209.37	\$11,046.81	\$32,824.69	\$0.00	\$100,052.27
Billings County	1,200.00	\$1,272.01	\$780.02	\$84.01	\$420.02	\$1,247.99	\$0.00	\$3,804.05
Carson	7,812.00	\$8,280.71	\$5,077.82	\$546.86	\$2,734.22	\$8,124.49	\$0.00	\$24,764.10
Dickinson	692,869.70	\$734,441.89	\$450,365.34	\$48,500.90	\$242,504.43	\$720,584.48	\$0.00	\$2,196,397.04
Dickinson Research Center	1,200.00	\$1,284.01	\$780.00	\$60.00	\$420.00	\$1,371.12	\$1,124.86	\$5,039.99
Dodge	2,282.00	\$2,418.92	\$1,483.30	\$159.74	\$798.70	\$2,373.28	\$0.00	\$7,233.94
Dunn Center	3,326.48	\$3,526.07	\$2,162.24	\$232.86	\$1,164.29	\$3,459.54	\$0.00	\$10,545.00
Elgin	16,478.40	\$17,467.12	\$10,710.98	\$1,153.51	\$5,767.46	\$17,137.52	\$0.00	\$52,236.59
Gladstone	5,347.80	\$5,668.65	\$3,476.10	\$374.36	\$1,871.76	\$5,561.73	\$0.00	\$16,952.60
Glen Ullin	23,137.60	\$24,525.86	\$15,039.48	\$1,619.64	\$8,098.20	\$24,063.10	\$0.00	\$73,346.28
Golden Valley	7,365.30	\$7,807.22	\$4,787.48	\$515.58	\$2,577.89	\$7,659.91	\$0.00	\$23,348.08
Golva	2,248.90	\$2,406.34	\$1,461.81	\$112.47	\$787.14	\$2,338.86	\$2,338.86	\$9,445.48
GTLE Dakota Plant	1,200.00	\$1,301.98	\$780.01	\$84.00	\$420.01	\$1,248.00	\$0.00	\$3,834.00
Halliday	9,153.60	\$9,702.81	\$5,949.86	\$640.78	\$3,203.78	\$9,519.75	\$0.00	\$29,016.98
Hebron	20,564.10	\$21,797.95	\$13,366.70	\$1,439.50	\$7,197.47	\$21,386.66	\$0.00	\$65,188.28
Hettinger	55,136.70	\$58,444.90	\$35,838.86	\$3,859.56	\$19,297.85	\$57,342.17	\$0.00	\$174,783.34
Home on the Range	1,200.00	\$1,284.00	\$780.00	\$60.00	\$420.00	\$1,248.00	\$1,248.00	\$5,040.00
Karsky Dairy	2,231.80	\$2,365.68	\$1,450.69	\$156.22	\$781.15	\$2,321.09	\$0.00	\$7,074.83
Manning	1,670.80	\$1,787.76	\$1,086.06	\$83.58	\$584.82	\$1,737.65	\$1,737.65	\$7,017.52
MCGA*	1,200.00	\$1,272.00	\$780.01	\$84.01	\$420.01	\$1,248.00	\$0.00	\$3,804.03
Medora	16,234.00	\$17,208.05	\$10,552.11	\$1,136.38	\$5,681.91	\$16,883.35	\$0.00	\$51,461.80
Missouri Basin	5,974.50	\$6,332.95	\$3,883.45	\$418.21	\$2,091.10	\$6,213.48	\$0.00	\$18,939.19
Mott	23,611.30	\$25,027.98	\$15,347.38	\$1,652.79	\$8,263.99	\$24,555.75	\$0.00	\$74,847.89
Mott Grain	1,224.40	\$1,297.84	\$795.88	\$85.72	\$428.56	\$1,273.37	\$0.00	\$3,881.37
New England	20,012.90	\$21,213.67	\$13,008.40	\$1,400.91	\$7,004.53	\$20,813.42	\$0.00	\$63,440.93
New Hradec	1,040.10	\$1,112.91	\$676.09	\$52.03	\$364.06	\$1,081.71	\$1,081.71	\$4,368.51
New Leipzig	5,900.00	\$6,253.99	\$3,835.02	\$413.00	\$2,065.02	\$6,136.01	\$0.00	\$18,703.04
PCRWS**	118,283.90	\$125,380.94	\$76,884.57	\$8,279.89	\$41,399.40	\$0.00	\$0.00	\$251,944.80
PLC***	1,445.60	\$1,532.29	\$939.68	\$101.20	\$506.00	\$1,503.00	\$0.00	\$4,582.17
Reeder	5,020.50	\$5,321.72	\$3,263.34	\$351.45	\$1,757.19	\$5,221.33	\$0.00	\$15,915.03
Regent	6,624.10	\$7,021.55	\$4,305.69	\$463.70	\$2,318.46	\$6,889.06	\$0.00	\$20,998.46

<i>User</i>	<i>Billed+</i>	<i>O&amp;M++</i>	<i>Treatment</i>	<i>Reserve</i>	<i>Replacement</i>	<i>Cap. Repayment</i>	<i>Demand</i>	<i>Total</i>
Richardton	16,517.70	\$17,508.76	10,736.53	\$1,156.25	\$5,781.22	\$17,178.41	\$0.00	\$52,361.17
Sacred Heart Monastery	486.00	\$520.02	\$315.90	\$24.30	\$170.10	\$505.44	\$505.44	\$2,041.20
Scranton	13,973.40	\$14,811.80	\$9,082.73	\$978.14	\$4,890.71	\$14,532.37	\$0.00	\$44,295.75
Sentinel Butte	2,681.70	\$2,842.60	\$1,743.14	\$187.72	\$938.63	\$2,788.97	\$0.00	\$8,501.06
South Heart	10,550.80	\$11,183.86	\$6,858.03	\$738.55	\$3,692.79	\$10,972.82	\$0.00	\$33,446.05
Steffes Manufacturing	1,598.80	\$1,694.69	\$1,039.25	\$111.93	\$559.61	\$1,662.76	\$0.00	\$5,068.24
Taylor	4,366.00	\$4,627.96	\$2,837.90	\$305.62	\$1,528.10	\$4,540.64	\$0.00	\$13,840.22
WMC****	1,338.00	\$1,431.66	\$869.70	\$66.90	\$468.30	\$1,391.52	\$1,391.52	\$5,619.60
<b>Total</b>	<b>1,186,073.88</b>	<b>\$1,257,371.68</b>	<b>\$770,948.91</b>	<b>\$82,818.51</b>	<b>\$415,126.74</b>	<b>\$1,110,624.36</b>	<b>\$10,642.24</b>	<b>\$3,647,532.44</b>

#### Total From Raw Water Contracts

<i>User</i>	<i>Billed+</i>	<i>O&amp;M++</i>	<i>Treatment</i>	<i>Reserve</i>	<i>Replacement</i>	<i>Cap. Repayment</i>	<i>Demand</i>	<i>Total</i>
Assumption Abbey	157.00	\$166.42	\$0.00	\$14.12	\$54.97	\$163.28	\$0.00	\$398.79
Dodge Depot	11,627.00	\$17,440.50	\$7,557.55	\$813.89	\$9,882.95	\$58,600.08	\$0.00	\$94,294.97
Haas, C.B. "Buck"	1,127.00	\$1,194.63	\$0.00	\$101.44	\$394.47	\$1,172.07	\$0.00	\$2,862.61
Hueske, Ken	1,341.90	\$1,422.41	\$0.00	\$120.76	\$469.68	\$1,395.58	\$0.00	\$3,408.43
Jurgens, Robert	587.00	\$622.22	\$0.00	\$52.83	\$205.45	\$610.48	\$0.00	\$1,490.98
Gerald Kadrmas 1	29.17	\$30.92	\$0.00	\$2.63	\$10.21	\$30.34	\$0.00	\$74.10
Gerald Kadrmas 2	29.17	\$30.91	\$0.00	\$2.62	\$10.22	\$30.34	\$0.00	\$74.09
Lorenz, Ervin	100.00	\$106.00	\$0.00	\$9.00	\$35.01	\$104.00	\$0.00	\$254.01
Lorenz, Fred	325.60	\$345.15	\$0.00	\$29.32	\$113.99	\$338.61	\$0.00	\$827.07
Moline, Dale and Sue	100.00	\$106.00	\$0.00	\$9.00	\$35.01	\$104.00	\$0.00	\$254.01
Neurohr, Dan	100.00	\$106.00	\$0.00	\$9.00	\$35.01	\$104.00	\$0.00	\$254.01
Perhus Brothers 1	100.00	\$106.00	\$0.00	\$9.01	\$35.02	\$104.00	\$0.00	\$254.03
Perhus Brothers 2	100.00	\$106.00	\$0.00	\$9.01	\$35.02	\$104.00	\$0.00	\$254.03
Perhus Brothers 3	100.00	\$106.00	\$0.00	\$9.01	\$35.01	\$104.00	\$0.00	\$254.02
Perhus Brothers 4	730.20	\$774.01	\$0.00	\$65.72	\$255.60	\$759.41	\$0.00	\$1,854.74
Red Trail Energy	160,000.00	\$169,600.00	\$0.00	\$14,400.00	\$56,000.05	\$166,399.96	\$0.00	\$406,400.01
Sacred Heart Monastery	500.00	\$530.00	\$0.00	\$45.00	\$175.00	\$520.00	\$0.00	\$1,270.00
Weigum, Dale	54.17	\$57.43	\$0.00	\$4.87	\$18.96	\$56.33	\$0.00	\$137.59
<b>Total</b>	<b>177,108.21</b>	<b>\$192,850.60</b>	<b>\$7,557.55</b>	<b>\$15,707.23</b>	<b>\$67,801.63</b>	<b>\$230,700.48</b>	<b>\$0.00</b>	<b>\$514,617.49</b>

#### Total Beulah Interim Service Contract

<i>User</i>	<i>Billed+</i>	<i>O&amp;M++</i>	<i>Treatment</i>	<i>Reserve</i>	<i>Replacement</i>	<i>Cap. Repayment</i>	<i>Demand</i>	<i>Total</i>
Zap	6,456.00	\$10,006.83	\$0.00	\$839.30	\$2,905.23	\$6,714.23	\$0.00	\$20,465.59
<b>Total</b>	<b>6,456.00</b>	<b>\$10,006.83</b>	<b>\$0.00</b>	<b>\$839.30</b>	<b>\$2,905.23</b>	<b>\$6,714.23</b>	<b>\$0.00</b>	<b>\$20,465.59</b>
<b>Grand Total</b>	<b>1,369,638.09</b>	<b>\$1,460,229.11</b>	<b>\$778,506.46</b>	<b>\$99,365.04</b>	<b>\$485,833.60</b>	<b>\$1,348,039.07</b>	<b>\$10,642.274</b>	<b>\$4,182,615.52</b>

+ Per 1,000 Gallons Billed ++ Operations and Maintenance

Definitions: \*McKenzie County Grazing Association (MCGA); \*\*Perkins County Rural Water System (PCRWS); \*\*\*Prairie Learning Center (PLC);  
 \*\*\*West Medora Campground (WMC)

# ANNUAL CAPITAL REPAYMENT

Capital repayment is a portion of the water rate charged by Southwest Water Authority to pay back the cost of construction of the pipeline. In 1982, a study determined that due to economic constraints in southwest North Dakota there would be a limit to the amount customers could pay in order to cover the cost of construction. Since capital repayment is based on the ability to pay, the portion of the rate designated for capital repayment is indexed to the Consumer Price Index and adjusted annually.

For all contract customers, the capital repayment rate is based upon a per thousand gallons charge. For all rural customers, the capital repayment rate is a portion of the minimum payment. This money is paid monthly to the North Dakota State Water Commission or the bond bank.

Below is a chart showing the payment history of capital repayment by water users throughout the system:

	<b>1991-1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Contract	\$224,065.00	\$190,433.00	\$292,997.00	\$408,563.00	\$418,179.77
Rural	\$0.00	\$5,540.00	\$7,475.00	\$95,616.00	\$316,814.38
<b>Total</b>	<b>\$224,065.00</b>	<b>\$195,973.00</b>	<b>\$300,472.00</b>	<b>\$504,179.00</b>	<b>\$734,994.15</b>

	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Contract	\$487,828.22	\$568,497.91	\$580,865.33	\$634,275.73	\$751,392.41
Rural	\$370,085.00	\$347,293.46	\$445,131.91	\$524,952.50	\$556,470.52
<b>Total</b>	<b>\$857,913.22</b>	<b>\$915,791.37</b>	<b>\$1,025,997.24</b>	<b>\$1,159,228.23</b>	<b>\$1,307,862.93</b>

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Contract	\$800,159.52	\$861,015.31	\$846,041.48	\$897,289.69	\$1,067,345.59
Rural	\$630,004.66	\$718,768.94	\$774,667.77	\$809,668.64	\$881,134.67
<b>Total</b>	<b>\$1,430,164.18</b>	<b>\$1,579,784.25</b>	<b>\$1,620,709.25</b>	<b>\$1,706,958.33</b>	<b>\$1,948,480.26</b>

	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
Contract	\$1,244,385.61	\$1,269,698.28	\$1,255,131.37	\$1,344,386.07	\$14,142,550.29
Rural	\$1,063,680.25	\$1,184,034.70	\$1,363,856.74	\$1,432,160.52	\$11,527,355.66
<b>Total</b>	<b>\$2,308,065.86</b>	<b>\$2,453,732.98</b>	<b>\$2,618,988.11</b>	<b>\$2,776,546.59</b>	<b>\$25,669,905.95</b>

# REPLACEMENT AND EXTRAORDINARY MAINTENANCE FUND

In 1981, when the Southwest Pipeline Project (SWPP) was authorized, the North Dakota Legislature established the Replacement and Extraordinary Maintenance (REM) Fund. This fund was set up to cover costs of an extraordinary nature or to replace parts of the system as they reach their life expectancy. Disbursements from this account have to meet criteria and be approved by the North Dakota State Water Commission (NDSWC) and Southwest Water Authority (SWA) Board of Directors.

A portion of the water rate charged by SWA is for REM. The rate is charged on every 1,000 gallons of water billed. The REM rate is one of the components of the rate structure which is paid by all customers, both contract and rural.

Originally, the rate was set at \$0.30 per 1,000 gallons of water sold, but in 1998 a rate study was completed to determine the fairness and correctness of the rate structure. The study concluded, in order to meet the future extraordinary maintenance needs of the pipeline, the rate for REM should be increased to \$0.35 per 1,000 gallons and has remained this amount since 1999.

In order to comply with the North Dakota Century Code, when SWA took over operations and maintenance of the SWPP from the NDSCW in 1996, an account was established to track REM Funds separately. The following table summarizes account activity:

	<b>1991-1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Beginning Balance	\$0	\$735,372	\$1,016,563	\$1,315,966	\$1,630,497	\$2,002,873
Contributions						
Contract	727,434	230,837	234,566	254,697	298,472	320,454
Rural	7,938	17,899	22,994	27,361	33,369	43,850
Interest	0	22,006	56,919	83,945	98,511	121,376
Dividends	0	13,025	6,524	9,070	5,601	9,137
Fiduciary Fees	0	(2,575)	4,655	(6,105)	(7,302)	(8,602)
Disbursements	0	0	(16,945)	(54,438)	(56,275)	(174,195)
<b>Ending Balance</b>	<b>\$735,372</b>	<b>\$1,016,563</b>	<b>\$1,315,966</b>	<b>\$1,630,497</b>	<b>\$2,002,873</b>	<b>\$2,314,893</b>

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Beginning Balance	\$2,314,893	\$2,804,274	\$3,301,016	\$3,835,485	\$4,220,502	\$4,787,646
Contributions						
Contract	329,448	333,308	346,330	335,340	347,808	425,777
Rural	44,066	53,121	62,334	67,709	64,725	82,115
Interest	127,292	160,258	150,883	188,652	198,149	202,716
Dividends	16,575	4,016	3,985	2,279	5,633	8,203
Fiduciary Fees	(9,552)	(12,177)	(14,190)	(15,845)	(17,417)	(19,135)
Disbursements	(18,448)	(41,784)	(14,874)	(193,119)	(31,754)	(149,084)
<b>Ending Balance</b>	<b>\$2,804,274</b>	<b>\$ 3,301,016</b>	<b>\$ 3,835,485</b>	<b>\$4,220,502</b>	<b>\$4,787,646</b>	<b>\$5,338,238</b>

	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
Beginning Balance	\$5,338,238	\$6,141,750	\$7,004,573	7,865,343	
Contributions					
Contract	467,831	472,933	457,040	478,501	6,060,766
Rural	90,793	106,858	101,620	115,801	942,553
Interest	258,201	295,859	329,085	333,304	2,627,157
Dividends	8,335	12,461	1,943	12,413	119,201
Fiduciary Fees	(21,648)	(25,288)	(28,918)	(32,218)	(225,628)
Disbursements	0	0	0	0	(750,914)
<b>Ending Balance</b>	<b>\$6,141,750</b>	<b>\$7,004,573</b>	<b>\$7,865,343</b>	<b>\$8,773,144</b>	<b>\$8,773,144</b>

# ELECTRIC POWER USAGE

Southwest Water Authority (SWA) purchases power from the federal government through the Department of Energy for the several main transmission pumping facilities throughout the system. These expenses are identified as Western Area Power Association (WAPA) costs. Local utility companies then supply or distribute the power to each location. These expenses are identified as wheeling costs. SWA pays the local utility companies to wheel the power provided by WAPA.

Below is a chart illustrating the history of power usage at these locations:

<b>Location</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
Intake PS	1,645,820	1,855,579	2,192,366	2,129,824	2,302,460	2,334,674
Richardton PS	956,087	1,070,952	1,250,174	1,241,108	1,347,075	1,378,141
Dickinson PS	21,299	343,654	495,616	495,618	752,435	831,898
Dodge PS	47,820	238,364	386,470	385,973	405,366	384,563
Jung Lake PS	0	0	0	0	24,331	187,528
Bucyrus PS	0	0	0	0	223,039	128,217
<b>Total</b>	<b>2,671,026</b>	<b>3,508,549</b>	<b>4,324,626</b>	<b>4,252,523</b>	<b>5,054,706</b>	<b>5,245,021</b>

<b>Location</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Intake PS	2,573,895	2,661,280	2,771,644	2,930,468	2,909,556	3,033,794
Richardton PS	1,485,588	1,550,685	1,630,154	1,724,962	1,688,295	1,733,036
Dickinson PS	940,441	1,036,288	1,128,038	1,241,497	1,241,087	1,312,768
Dodge PS	429,567	454,764	548,086	612,649	566,817	538,056
Jung Lake PS	236,441	315,255	380,975	450,324	461,738	483,550
Bucyrus PS	127,212	139,462	136,942	136,226	139,823	161,163
WTP	223,935	312,018	324,991	322,634	323,419	342,292
Burt PS	23,803	87,630	93,624	97,740	97,593	102,398
Scranton PS	0	0	29,326	59,815	53,329	60,091
Fryburg PS	0	0	0	0	29,680	121,760
Beach PS	0	0	0	0	25,059	92,475
<b>Total</b>	<b>6,040,882</b>	<b>6,557,382</b>	<b>7,043,780</b>	<b>7,576,315</b>	<b>7,536,396</b>	<b>7,948,383</b>

<b>Location</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Intake PS	3,646,031	3,885,118	4,078,122	3,765,704	4,030,674
Richardton PS	2,220,764	2,332,003	2,513,034	2,348,976	2,500,017
RCPS	1,649,870	1,650,689	1,754,317	1,745,306	1,835,419
Dodge PS	946,905	1,046,691	1,168,607	1,008,730	1,079,017
Jung Lake PS	713,773	671,259	729,246	719,990	934,241
Bucyrus PS	282,261	275,195	299,368	307,187	339,801
WTP	397,147	390,070	412,482	414,057	418,775
Burt PS	113,815	107,907	101,559	91,737	99,225
Scranton PS	73,489	75,759	77,418	43,222	42,344
Fryburg PS	167,147	186,280	201,960	202,750	221,720
Beach PS	119,306	128,422	145,331	136,842	140,567
<b>Total</b>	<b>10,330,508</b>	<b>10,749,393</b>	<b>11,481,444</b>	<b>10,784,501</b>	<b>11,641,800</b>

**Definitions: Pump Station (PS); Water Treatment Plant (WTP); Ray Christensen Pump Station (RCPS), formerly Dickinson PS**

# RATE HISTORY

**Contract Water Rate (Rates shown are for constant flow service. Demand flow customers pay double the capital repayment portion of the water rate.)**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
O&M	\$0.80	\$0.50	\$0.60	\$0.67	\$0.81	\$0.85	\$0.83	\$0.88	\$0.91	\$1.05
Treatment	\$0.56	\$0.64	\$0.69	\$0.65	\$0.55	\$0.55	\$0.52	\$0.56	\$0.53	\$0.53
REM	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.35	\$0.35	\$0.35
Capital Repayment	\$0.62	\$0.68	\$0.70	\$0.72	\$0.74	\$0.76	\$0.78	\$0.79	\$0.80	\$0.83
Reserve Fund	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.05	\$0.15	\$0.20
<b>Total</b>	<b>\$2.28</b>	<b>\$2.12</b>	<b>\$2.29</b>	<b>\$2.34</b>	<b>\$2.40</b>	<b>\$2.46</b>	<b>\$2.43</b>	<b>\$2.63</b>	<b>\$2.74</b>	<b>\$2.96</b>

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
O&M	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.06	\$1.06
Treatment	\$0.53	\$0.53	\$0.55	\$0.55	\$0.55	\$0.60	\$0.60	\$0.60	\$0.65	\$0.70
REM	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35
Capital Repayment	\$0.85	\$0.87	\$0.89	\$0.91	\$0.94	\$0.98	\$1.00	\$1.05	\$1.04	\$1.05
Reserve Fund	\$0.20	\$0.18	\$0.14	\$0.12	\$0.09	\$0.09	\$0.07	\$0.07	\$0.07	\$0.07
<b>Total</b>	<b>\$2.98</b>	<b>\$2.98</b>	<b>\$2.98</b>	<b>\$2.98</b>	<b>\$2.98</b>	<b>\$3.07</b>	<b>\$3.07</b>	<b>\$3.12</b>	<b>\$3.17</b>	<b>\$3.23</b>

**Rural Monthly Minimum (These prices include 2,000 gallons of water from 1997 to 2010.)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
\$25.00	\$25.00	\$25.00	\$26.95	\$28.00	\$33.90	\$33.90	\$35.10	\$35.80	\$37.55	\$38.25
2003	2004	2005	2006	2007	2008	2009	2010	2011		
\$38.25	\$38.25	\$38.25	\$38.25	\$39.45	\$39.45	\$41.10	\$41.10	\$42.10		

**Rural Water Rates (Per 1,000 gallons.)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
\$2.50	\$2.50	\$2.50	\$2.50	\$2.55	\$2.55	\$2.59	\$3.05	\$3.15	\$3.60	\$3.60
2003	2004	2005	2006	2007	2008	2009	2010	2011		
\$3.60	\$3.60	\$3.60	\$3.60	\$3.65	\$3.65	\$3.65	\$3.70	\$3.75		

**Potable Water (These numbers do not include construction water. Amounts below are listed in 1,000 gallons.)**

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
655,640	523,308	612,163	697,411	806,175	826,590	908,168	823,340	1,001,669	1,030,755	1,066,537
2003	2004	2005	2006	2007	2008	2009	2010			
1,119,869	1,113,088	1,133,512	1,388,361	1,366,208	1,422,334	1,352,929	1,440,431			

**Rural Water Rates:** From July 2002 to December 2006, rural usage greater than 10,000 gallons per month was billed at a rate of \$2.60 per 1,000 gallons. From January 2007 to December 2009, rural usage greater than 10,000 gallons per month was billed at a rate of \$2.65 per 1,000 gallons. From January 2010 to December 2010, rural usage greater than 10,000 gallons per month was billed at a rate of \$2.70 per 1,000 gallons. From January 2011 to December 2011, rural usage greater than 10,000 gallons per month will be billed at a rate of \$2.75 per 1,000 gallons.

# RATES 2010

The water rate for rural customers in 2010 consisted of a minimum payment of \$41.10 per month and included 2,000 gallons of water. The rate for water use in excess of the 2,000 gallons was \$3.70 per 1,000 gallons. On July 1, 2002, Southwest Water Authority implemented a volume discount for rural customers, reducing water rates from \$3.70 to \$2.70 on usage over 10,000 gallons. Also, customers with pasture taps received a rate reduction from \$3.70 to \$2.70 on water usage in excess of 60,000 gallons, billed annually.

## RURAL CUSTOMERS UNDER 10,000 GALLONS

Treatment .....	\$0.65
Transmission Operations and Maintenance .....	\$1.06
Transmission Replacement and Extraordinary Maintenance .....	\$0.35
Transmission Reserve .....	\$0.07
Distribution Operations and Maintenance .....	\$1.32
Distribution Replacement .....	\$0.10
Distribution Reserve .....	\$0.15
<b>Total .....</b>	<b>\$3.70</b>

## RURAL CUSTOMERS OVER 10,000 GALLONS

Treatment .....	\$0.65
Transmission Operations and Maintenance .....	\$0.72
Transmission Replacement and Extraordinary Maintenance .....	\$0.35
Transmission Reserve .....	\$0.00
Distribution Operations and Maintenance .....	\$0.88
Distribution Replacement .....	\$0.10
Distribution Reserve .....	\$0.00
<b>Total .....</b>	<b>\$2.70</b>

The standard rural minimum fee (\$41.10) is broken into three separate components: meter fee, capital repayment, operations and maintenance. The capital repayment (\$31.65) and meter fee (\$5.00) portions of the minimum are used to pay the interest and principal on the Series A and Series B Bonds, with the remaining balance paid to the Resources Trust Fund. These bonds help fund construction. After two years, the meter fee is paid to the operations and maintenance fund, covering capital and routine operations and maintenance costs. The final portion of the monthly minimum (\$4.45) is for the operations and maintenance fund to cover fixed costs.

The 2010 rate for demand contract customers was \$4.20 per 1,000 gallons of potable water.

## DEMAND CONTRACT CUSTOMERS

Treatment .....	\$0.65
Transmission Operations and Maintenance .....	\$1.07
Transmission Replacement and Extraordinary Maintenance .....	\$0.35
Capital Repayment .....	\$1.04
Demand Charge .....	\$1.04
Transmission Reserve .....	\$0.05
<b>Total .....</b>	<b>\$4.20</b>

The 2010 rate for contract customers was \$3.17 per 1,000 gallons of potable water.

## CONTRACT CUSTOMERS

Treatment .....	\$0.65
Transmission Operations and Maintenance .....	\$1.06
Transmission Replacement and Extraordinary Maintenance .....	\$0.35
Capital Repayment .....	\$1.04
Transmission Reserve .....	\$0.07
<b>Total .....</b>	<b>\$3.17</b>

The raw water contract rate was \$2.55 per 1,000 gallons of water. Raw water customers do not pay for the cost of treatment.

# RATES 2011

## RURAL RATES

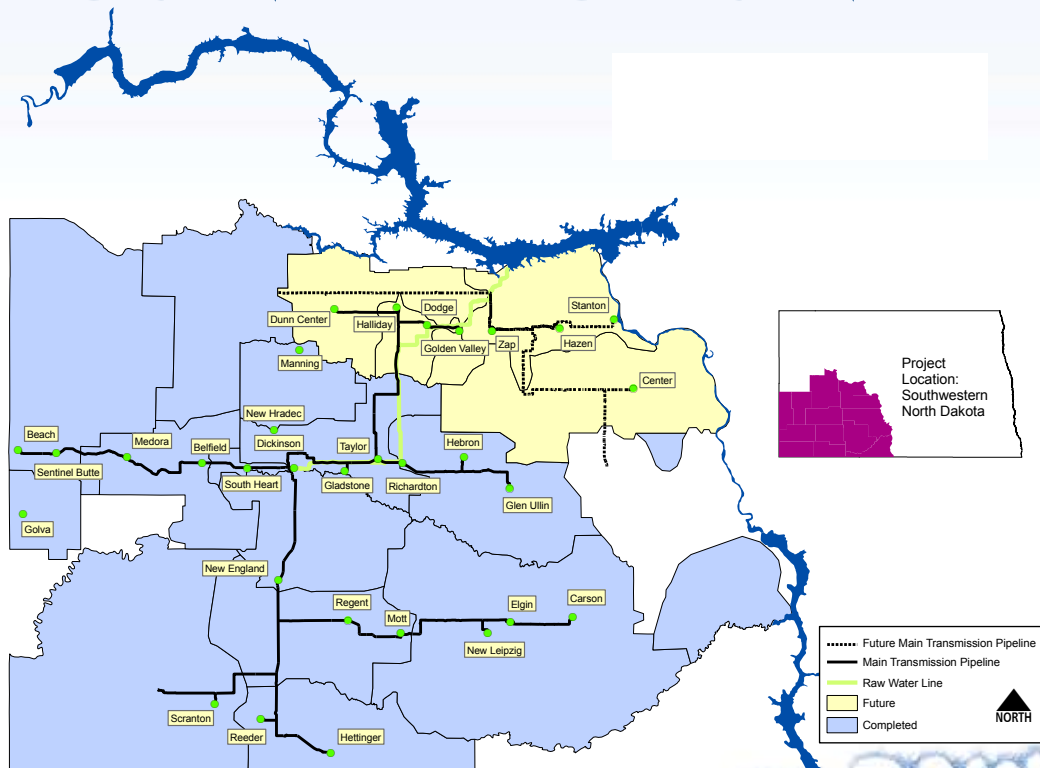
The rural monthly minimum will increase to \$42.10 which includes 2,000 gallons of water with a monthly meter reading. This also includes capital repayment (\$32.01), meter fee (\$5.00) and operations and maintenance (\$5.09). The capital repayment amount is tied to the Consumer Price Index and adjusted annually by the North Dakota State Water Commission. Capital repayment was increased by \$0.36 for 2011.

The rural customer rate per 1,000 gallons will increase to \$3.75 up to 10,000 gallons and over 10,000 gallons will increase to \$2.75. Country Club Estates, near Beulah, and several rural customers will not receive the volume discount of \$2.75 service is provided to the Oliver, Mercer, North Dunn Regional Service Area by the Southwest Pipeline Project.

## CONTRACT CUSTOMERS

There will be a rate increase for demand, contract and raw customers. The demand rate will be \$4.28 per 1,000 gallons of potable water. The contract customer rate will be \$3.23 per 1,000 gallons of potable water. The raw water contract rate will be \$2.55 per 1,000 gallons of water. Capital repayment will increase \$0.01 for all, demand charge will also increase \$0.01, and treatment will increase \$0.05 for both demand and contract customers. Also, for demand customers, operations and maintenance will decrease \$0.01 and reserve will increase \$0.02.

# SOUTHWEST PIPELINE PROJECT CONSTRUCTION MAP



# SOUTHWEST PIPELINE PROJECT FUNDING SOURCES

## STATE FUNDING (IN MILLIONS OF DOLLARS)

Resources Trust Fund .....	\$ 57.17
Water Development Trust Fund .....	\$ 8.47
<b>Subtotal .....</b>	<b>\$ 65.64</b>

## GRANTS

Garrison Diversion Conservancy District	
Municipal Rural & Industrial Fund .....	\$ 78.40
USDA-Rural Development .....	\$ 15.09
Natural Resources Conservation Service PL566 .....	\$ 0.93
<b>Subtotal .....</b>	<b>\$ 94.42</b>

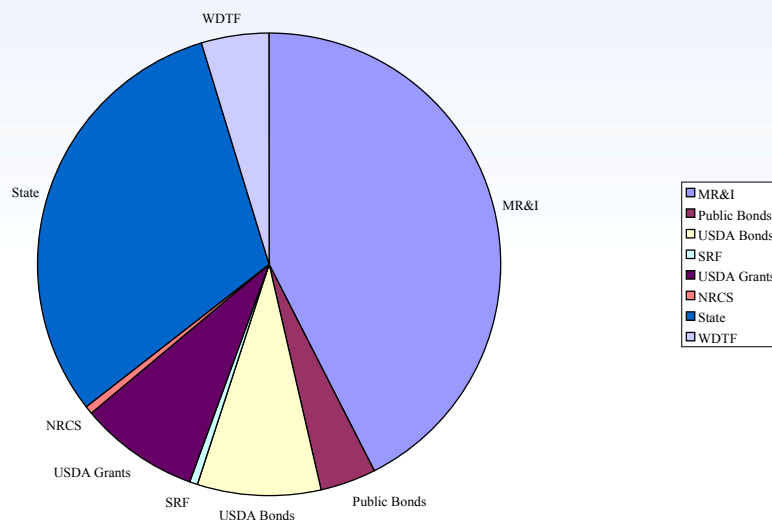
## STATE BONDS REPAID BY USERS

Public Revenue Bonds .....	\$ 7.04
USDA-Rural Development .....	\$ 15.70
ND Drinking Water Revolving Loan Fund .....	\$ 1.50
<b>Subtotal .....</b>	<b>\$ 24.24</b>

**Total Funding .....** **\$184.30**

## FUNDING SOURCES

\$184.30 Million as of December 31, 2010



# PHASED DEVELOPMENT PLAN

**Final Development Phase.....** Oliver, Mercer, North Dunn Phase

# SOUTHWEST PIPELINE PROJECT TIMELINE

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>PROJECTS</b>																				
West River Diversion																				
SW Area Water Supply																				
Southwest Pipeline Project																				
<b>ORGANIZATIONS</b>																				
West River Water Supply District																				
West River Joint Board																				
Southwest Water Authority (Nonprofit)																				
Southwest Water Authority (Political Subdivision)																				
<b>FUNDING (In Millions)</b>																				
State Resources Trust Fund													23.60							
Garrison Diversion MR&I																	7.38	8.33	6.67	2.65
Natural Resources Conservation Service																				
Revenue Bonds																				
USDA - Rural Development (Loans)																				
USDA - Rural Development (Grants)																				
Drinking Water State Revolving Loan Fund																				
Water Development Trust Fund																				
<b>TOTAL</b>													23.60				7.38	8.33	6.67	2.65

Construction Begins

SWPP Final Construction Authorized

SWPP Final Design Authorized

SWPP Authorized

Garrison MR&I Funding

Location of Water Treatment Plant

Rural Water Integration

Service to Dickinson

First Rural Water Service (Roshau)

Service Beyond Dickinson

Full Scale Rural Service

Transfer of Operations to SWA

USDA-Rural Dev. Funds and Rev. Bonds

Garrison MR&I Funding

SB 2188 Passed

State Funding Medora-Beach Phase

State & USDA Funding Medora-Beach Phase II

State & USDA Funding Medora-Beach Phase III

Stimulus Funding for OMND WTP

SB 2193 Passed

Received MR&I Funding: First Time Since 1999

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
<b>PROJECTS</b>																					
West River Diversion																					
SW Area Water Supply																					
Southwest Pipeline Project																					
<b>ORGANIZATIONS</b>																					
West River Water Supply District																					
West River Joint Board																					
Southwest Water Authority (Nonprofit)																					
Southwest Water Authority (Political Subdivision)																					
<b>FUNDING (In Millions)</b>																					
State Resources Trust Fund	0.04	0.06	0.68	0.77	1.46	1.77	1.18	0.70	1.34	4.21	0.83	0.33	3.06	2.38	3.05	1.62	.69	2.70	5.43	1.27	57.17
Garrison Diversion MR&I	5.32	6.87	5.30	10.10	7.77	5.41	0.18	2.47	1.24									2.94	1.13	4.64	78.40
Natural Resources Conservation Service				0.13	0.41	0.39															0.93
Revenue Bonds							3.96	3.08													7.04
USDA - Rural Development (Loans)							3.50	0.02	1.38	0.50	0.23	1.63	1.54			2.47	1.43	3.00			15.70
USDA - Rural Development (Grants)							1.04	1.54	1.59	2.48	0.92	1.04	0.56	1.30	1.93	0.52	2.07	0.10			15.09
Drinking Water State Revolving Loan Fund									1.00	0.50						0.09	1.05				1.50
Water Development Trust Fund									1.45	5.17	0.26	0.45									8.47
<b>TOTAL</b>	5.36	6.93	5.98	11.00	9.64	7.57	5.32	10.79	4.14	8.18	5.76	6.65	5.99	4.93	4.35	6.11	3.69	10.71	6.66	5.91	184.30

The background of the entire page is a light blue gradient with numerous water bubbles of various sizes. A solid dark blue horizontal bar is positioned at the top. At the bottom, there is a decorative border consisting of a row of larger, more detailed water bubbles.

**Southwest Water Authority**

4665 2nd Street SW  
Dickinson, ND 58601-7231

**Telephone:** 701-225-0241 • **Toll-Free:** 1-888-425-0241

**Fax:** 701-225-4058

**Web Site:** [www.swa.swc.state.nd.us](http://www.swa.swc.state.nd.us)

**E-Mail:** [swa@swwater.com](mailto:swa@swwater.com)