
Southwest Water Authority
annual operating report
2007

**People and business succeeding with quality water**

*Southwest Water Authority Vision Statement*

**Providing quality water for southwest North Dakota**

*Southwest Water Authority Mission Statement*

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# Organizational Chart

**North Dakota Legislature**

## Management, Operations and Maintenance

**Southwest Water Authority**
14 Elected Directors
NDCC 61-24.5

**Southwest Water Authority**
Executive Committee
Elected Officers

**Southwest Water Authority**
Mary Massad, Manager/CEO

**Financial/Administration**
Glenn Eckelberg, Marketing Coordinator
Sandra Burwick, CFO/Office Administrator
Kim Turner, Accountant/Assistant Office Administrator
Vickie Franchuk, Accountant
Rachelle Weiler, Assistant Marketing Coordinator
Cindy Miller, Customer Service Representative
Carol Schmaltz, Administrative Assistant

**Operations - Water Distribution**
Lee Messer, Water Distribution Manager
Dan Roller, Operations Specialist
Andrew Erickson, Jr., Chief Water Distribution Operator
Allen Hecker, Assistant Chief Water Distribution Operator
Dale Binstock, Water Distribution Operator
Russ Kostelecky, Water Distribution Operator
Terry Eckelberg, Water Distribution Operator
Clint Scott, Water Distribution Operator
James Murphy, Water Distribuion Operator
Bruce Mutschelknaus, Water Distribution Operator, Elgin
Justin Kohanes, Water Distribution Operator, Beach
Leo Miller, Water Distribution Maintenance Worker, Reeder

**Operations - Water Treatment Plant**
James Dworshak, Water Treatment Plant Manager
Roger Dick, Assistant Water Treatment Plant Manager
Guy Mischel, Water Treatment Plant Operator
Steve Ries, Water Treatment Plant Operator
David Lupo, Water Treatment Plant Operator
John Nadvornick, Water Treatment Plant/Distribution Maintenance Worker

**Outside Consultants**
Bartlett & West Engineers Inc.
Brady, Martz & Associates, LLC, Auditor
Mike Dwyer, Legal Counsel
LoAnn's Marketing Inc., Public Information
Professional Computer Services LLP

## Construction

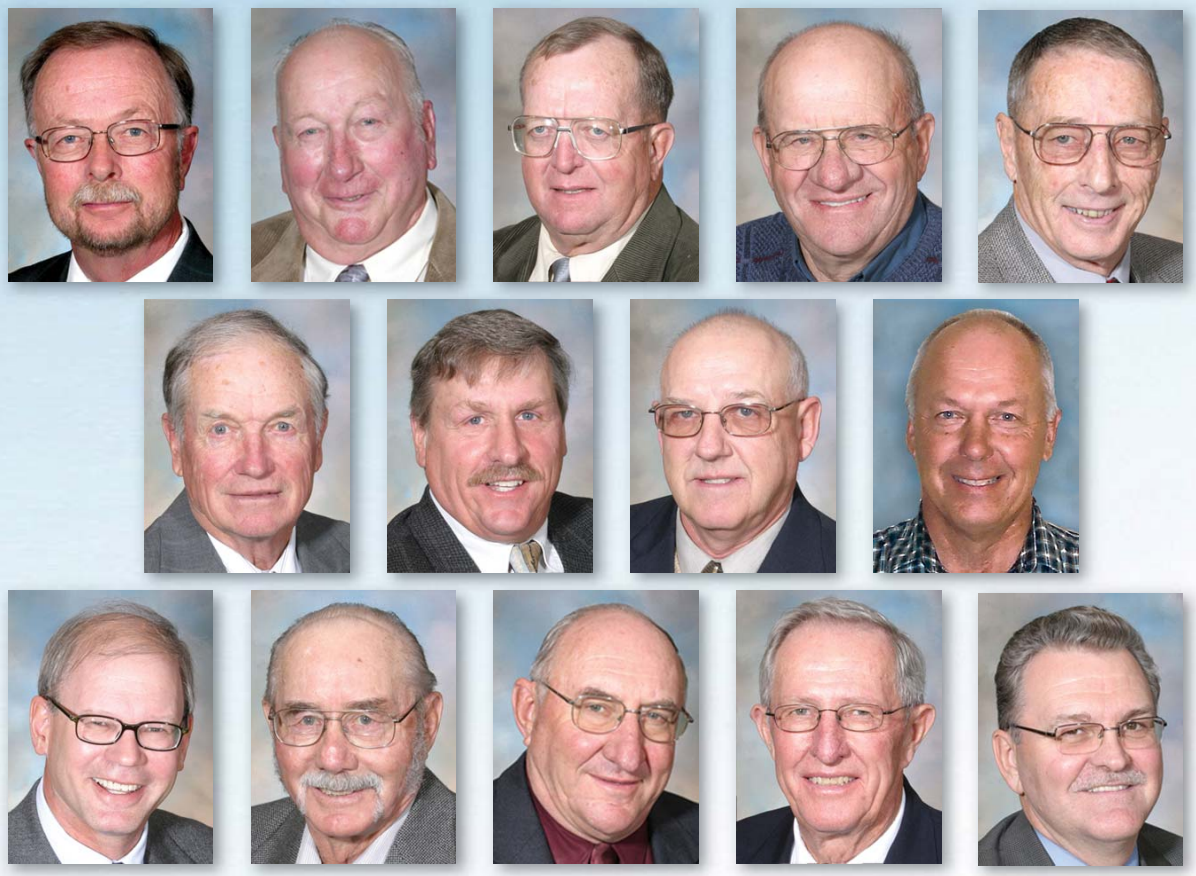
**ND State Water Commission**
Governor/Chairman
Agriculture Commissioner
7 Appointed Members

**Chief Engineer and Secretary to the Water Commission**
Dale Frink, State Engineer

**Water Development**
Todd Sando, Assistant State Engineer

**Southwest Pipeline Project**
Tim Freije, Project Manager
Roger Kolling, Realty Officer
Al Balliet, Field Observer
Perry Weiner, Field Observer

# Southwest Water Authority
# Board of Directors



***Row One:*** Chairperson Loren Myran - Stark County; Vice Chairperson Don Flynn - Bowman County; Secretary Darrel Oech - Golden Valley County; Duane Bueligen - Oliver County; Larry Bares - City of Dickinson

***Row Two:*** Leonard Jacobs - Adams County; James Odermann - Billings County; Brian Roth - Grant County; David Juntunen - Slope County

***Row Three:*** Steve Tomac - Morton County; John Klein - Mercer County; Emanuel Stroh - Dunn County; Ray Bieber - Hettinger County; Larry Ziegler - City of Dickinson

# ND State Water Commission

Governor John Hoeven, Chairman, Bismarck, ND
Roger Johnson, Agriculture Commissioner, Bismarck, ND
Arne Berg, Devils Lake, ND
Maurice V. Foley, Minot, ND
Larry Hanson, Williston, ND
Elmer Hillesland, Grand Forks, ND
Jack Olin, Dickinson, ND
Harley Swenson, Bismarck, ND
Robert Thompson, Page, ND

# Our Valued Staff

***Row One:*** Mary Massad, Manager/CEO; Glenn Eckelberg, Marketing Coordinator; Sandra Burwick, CFO/Office Administrator; Lee Messer, Water Distribution Manager; Andrew Erickson, Jr., Chief WDO; Jim Dworshak, WTP Manager

***Row Two:*** Vickie Franchuk, Accountant; Cindy Miller, Customer Service Representative; Carol Schmaltz, Administrative Assistant; Kim Turner, Accountant/Assistant Office Administrator; Rachelle Weiler, Assistant Marketing Coordinator

***Row Three:*** Dan Roller, Operations Specialist; Allen Hecker, Assistant Chief WDO; Dale Binstock, WDO; Russ Kostelecky, WDO; Terry Eckelberg, WDO

***Row Four:*** Clint Scott, WDO; James Murphy, WDO; Bruce Mutschelknaus, WDO, Elgin; Justin Kohanes, WDO, Beach; Leo Miller, WDMW, Reeder

***Row Five:*** Roger Dick, Assistant WTP Manager; Guy Mischel, WTP Operator; Steve Ries WTP Operator; David Lupo, WTP Operator; John Nadvornick, WTP/WDMW

Definitions: Water Treatment Plant (WTP); Water Distribution Operator (WDO); Water Distribution Maintenance Worker (WDMW)

# A Great Start and a Strong Finish

***By Dale Frink, ND State Engineer***

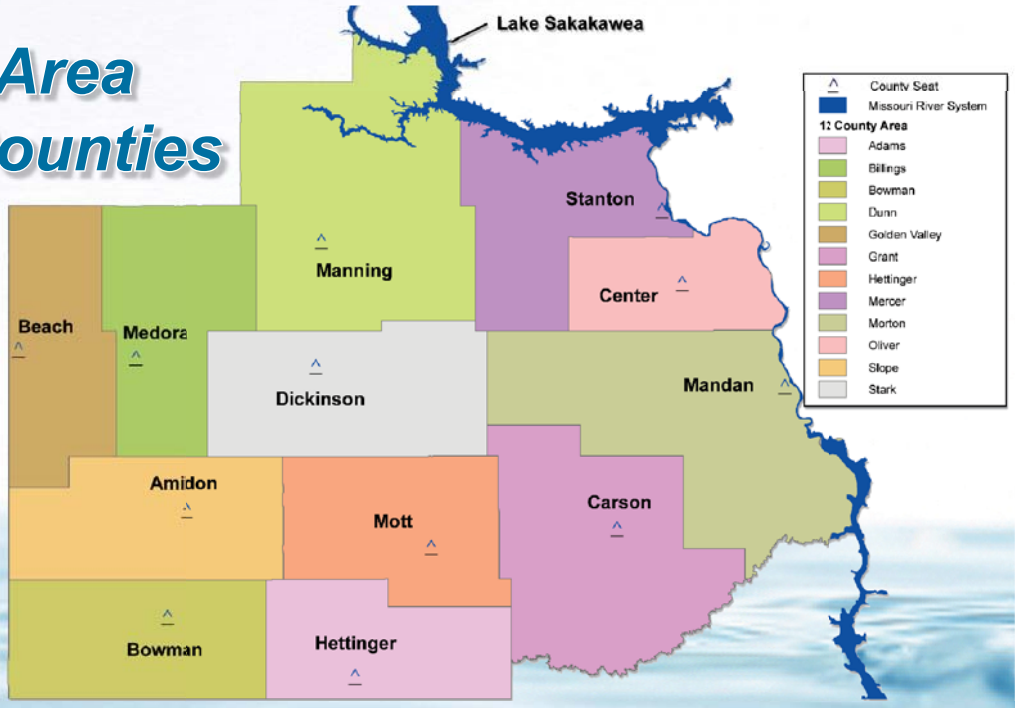
The Southwest Pipeline Project had another great year. The year began with the executive and legislative branches of the North Dakota state government giving the State Water Commission an excellent budget of which $10 million was allocated to the Southwest Pipeline Project. Record high oil prices resulting in increased revenues into the Resources Trust Fund coupled with a major appropriation of federal funds has enhanced the State Water Commission's ability to fund projects statewide.

The third and final phase of the Medora-Beach service area and original project was started this year with the construction of the South Fryburg service area. The remaining portion of Phase III of Medora-Beach will be ready to bid in early 2008 with construction commencing that same year. The installation of backup generators at the raw water pump stations between the Intake and Dickinson increased reliability of the system.

As the Medora-Beach Regional Service Area nears completion, the Oliver, Mercer, North Dunn Regional Service Area (OMND) will begin construction in earnest. The Beulah Interim Service Area was the first contract in the OMND area to provide service to rural users along with the city of Zap. Planning is now in motion to expand the project in the area to include a water treatment plant and service to cities and rural customers. Sign up campaigns took place in 2007 to determine how many cities and rural users will be included in the project with excellent results. The sign up campaign was requisite and great progress as it provided numbers that will be the basis for the design of the project facilities in the area. Design can now begin so construction can commence late in this biennium.

Water supply as a whole in North Dakota is making great strides with work progressing on the Northwest Area Water Supply, rural water systems all over the state, individual cities strengthening their supplies and many merging into regional water systems. The Red River Valley Water Supply project is nearing the end of the time-consuming Environmental Impact Statement process. The Southwest Pipeline Project sets an excellent example of how a regional water system benefits the citizenry both in the area and other systems by providing valuable experience to the state on building water supply projects.

## Service Area - 12 Counties



# Chairman's Annual Address

***By Loren Myran, Chairperson***

The Southwest Water Authority (SWA) vision statement is, "People and business succeeding with quality water." SWA has been successful in reaching that vision. As chairperson of the organization, I would like to reflect on the past year's accomplishments.

As the energy industry has grown in southwest North Dakota, the industrial use of the pipeline has also increased. Red Trail Energy in Richardton has reported an increase in operation efficiency due to high quality water. Buffalo Creek Energy in Bowman was approved for 300 gallons per minute usage for their operations. At this time, it appears Great Northern Energy in South Heart will not need raw water for operations.

Throughout the past year a 1,482 horse power standby generator was installed at the Dodge Pump Station and a 2,205 horse power standby generator at the Richardton Pump Station. While the system gravity flow provided customers a reliable delivery method during a power outage, the addition of standby generators will ensure service dependability.

A hydraulic analysis review was conducted on the completed portion of the SWPP. This review will provide the necessary data to determine if additional customers can be served in previously constructed areas. The study will also indicate if existing customers could receive additional water. It is a timely study since there are areas where excess capacity is no longer available. This report will help SWA better serve both existing and new customers.

The pipeline has also experienced increased livestock usage, as ranchers have discovered the productivity benefits from utilizing quality water in their operations. Although the spring started out with plenty of moisture, the dry summer and fall required ranchers to find alternative sources of water for livestock.

In previous years, federal funding was used for pipeline construction. As federal resources decreased, the state of North Dakota and the United States Department of Agriculture (USDA) Rural Development became the primary sources of funding. This proved to be a landmark year, with the allocation of $3.936 million dollars in federal funding for continued expansion of the pipeline. This funding will be utilized for SWPP construction in 2008.

The success and continued growth of SWA is possible, due to forward thinking and progressive board members, as well as a highly qualified management team and staff. Under the leadership of the new manager/CEO, Mary Massad, SWA continues to run smoothly. Sign ups have increased this year due to the efforts of Glenn Eckelberg and his assistant. They have done an excellent job of getting northern Dunn, Oliver and Mercer Counties signed up prior to construction of this area. The efficient management of the Water Treatment Plant can be attributed to Jim Dworshak and his staff. Jim retired December 31, 2007, and should be commended for his contributions.

As board chairperson, I feel good about our collective accomplishments and we will strive to carry out the mission of "Providing quality water for southwest North Dakota."

# Construction Summary

***By Tim Freije, Project Manager***

Construction on Phase III of the Medora-Beach Regional Service Area began this year as Phase II was closed out, along with the Beulah Interim Service Area. Final inspection took place on Contract 7-8B Beach-Golva Service Area, Contract 7-8C Morton County Areas and Contract 7-9A Beulah Interim Service Area, which were all substantially completed in 2006.

Contract 7-8D South Fryburg Pocket was bid and awarded to Abbot, Arne, Schwindt of Moorhead, Minnesota in April. This contract consisted of roughly 92 miles of 1½" to 6" PVC pipeline, one VFD (variable frequency drive) booster pump station and 82 users, funded with a $1,426,000 loan and $883,900 grant through the United States Department of Agriculture (USDA) Rural Development Rural Utility Service. Approximately 3.3 miles of pipeline on the Missouri West Water System was paralleled to accommodate the additional users, added to Southwest Pipeline Project Contract 7-8C during construction in Morton County, on this contract.

Contract 4-1C/4-2A, bid in March and awarded to Cummins NPower, provided backup power generators for the Richardton and Dodge Raw Water Pump Stations. The generators were delivered in November with substantial completion in early January 2008. Storms in 2005 knocked power out at the Richardton station for 18 hours and there is a potential for much longer outages. The backup generators will enable the system to deliver about 6,000 gallon per minute or 8.5 million gallons per day, should outages occur at either or both stations in the future.

# The More Things Change, the More they Stay the Same

***By Mary Massad, Manager/CEO***

The more things change the more they stay the same. This old adage seems to hold true for many things in life and this includes the Southwest Water Authority (SWA) and the Southwest Pipeline Project (SWPP). This past year has seen several changes. We had the retirement of Ray Christensen as the manager/CEO who was replaced by myself. I know that Ray leaves big shoes to fill, but our mission and vision remain the same. I will work to carry these out under the direction of SWA's Board of Directors with the help of a very well-qualified team of staff members.

SWA also saw the retirement of Jim Dworshak who has worked at the Water Treatment Plant (WTP) since 1969. Jim had been the WTP manager since 2000, when SWA took over management, operations and maintenance of the WTP. I am pleased that Roger Dick, a longtime WTP operator, has moved into the position of manager at the WTP. Other employees were hired by SWA to keep up with the increasing size and demands of the SWPP.

This year saw the final sign up campaign for Oliver, Mercer, North Dunn (OMND) Service Area. This is the last phase for the SWPP and we will see it through to completion. Many public meetings were held throughout this region, first with the cities and the power companies. The cities who were not previously signed up needed to decide by September 1 if they wanted to sign up for water service with the SWPP. We requested the same from the power companies. Public meetings and special elections were held in Center and Stanton. The city of Hazen has home rule and after public meetings, the Commission voted unanimously to enter into a contract for SWPP water. The elections in Center and Stanton were overwhelming in their support for SWPP water. We then continued with rural signups throughout the region. We now have more than 1,200 rural signups, ten bulk users and three additional communities signed up for water, which speaks to the great need for quality water throughout the region.

Our task and mission stay the same, to provide quality service and quality water to our citizens throughout the region. Construction continues to reach this end. SWA is working toward completion of the Medora Beach Service Area. Design will be under way for the OMND Service Area. We do have completion in sight and will do all we can to reach that goal so all our citizens in southwestern North Dakota can enjoy the quality of life that quality water helps to provide.

My thanks goes out to our dedicated staff, without whom I could not do this job, SWA's Board of Directors, who provide the vision and have been so supportive of me in my new role, the North Dakota State Water Commission (SWC) for their continued support of myself and this project, North Dakota Governor Hoeven for his support, our legislators statewide for their vision and financial support of the SWPP and to our Congressional delegation for their support in funding water projects throughout the state, especially the SWPP.

So as you can see, we have seen changes this past year, but quality water supply and the completion of the SWPP remain our focus.

# 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). The SWA is governed by a 14-member Board of Directors. One director represents each county within the SWPP Service Area, and two directors represent the city of Dickinson. The counties include: Adams, Billings, Bowman, Dunn, Golden Valley, Grant, Hettinger, Mercer, Morton, Oliver, Slope and Stark.

The SWPP, a state-owned project, administered by the ND State Water Commission and operated and maintained by SWA, 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.

For 22 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 3,000 rural service locations, twelve contract customers, eight raw water customers and Perkins County Rural Water System are served by the pipeline.

In 2007, SWA completed the south Fryburg Service Area, south of Belfield, and brought another 82 customers SWPP water.

The project pumped a total of 1,545,751,300 gallons of water from Lake Sakakawea in 2007. This is an increase of 119,016,300 gallons over 2006. Potable water delivered in 2007 was 1,350,799,800 gallons. Contract users consumed 1,157,140,500 gallons and 193,659,300 gallons were used by rural customers. Total raw water delivered in 2007 was 151,190,600 gallons. Potable water used by contractors during construction totaled 1,477,800 gallons. The water delivered to the end user was 97.17% 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 2007 was 6,045,100 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 2007 was 9,262,400 gallons; which includes 7,242,600 gallons to the City of Zap and 2,019,800 gallons to the rural customers.

Total water delivered by SWA is 1,518,775,700 gallons.

To educate youth on the importance of quality water, SWA held its eighth annual "Make A Splash" Water Festival, September 20-21, 2007. Fifth grade students throughout the SWA's 12-county service area were invited to attend the event, held at the Dickinson Recreation Center. A special Thursday evening session, "Family Night," was open to the public attracting over 725 participants.

# Operations & Maintenance Report

The water distribution staff is responsible for transmission of raw water from the Intake facility at Lake Sakakawea to the Water Treatment Plant (WTP) in Dickinson, and distribution of treated water to customers. The treated water is obtained from one of three sources. The WTP provides water for distribution to 27 cities and rural customers in Adams, Billings, Bowman, Dunn, Golden Valley, Grant, Hettinger, Slope, Stark, and western Morton counties. Water to the three eastern Morton County Pocket Areas (North Crown Butte, Junction Inn, and Tower Hill) is purchased from Missouri West Water System of Mandan. The Beulah WTP provides water for distribution to the Beulah Interim Service Area, including the city of Zap. Networks comprised of pipes, valves, reservoirs and pump stations are utilized to convey water through both the raw water transmission and treated water distribution systems. With headquarters in Dickinson and remotely stationed operators in Reeder, Elgin and Beach, the water distribution staff performs a wide variety of Operations and Maintenance (O&M) tasks within these networks to ensure dependable service to our customers.

## Maintenance Activities

Routine maintenance activities are completed at scheduled intervals at all the distribution facilities and pipeline appurtenances. Various components are inspected, tested and exercised to see if they need to be adjusted, repaired, cleaned and painted. A partial listing of installed equipment and quantities lends some perspective to the amount of work involved to maintain service to over 3,000 miles of pipeline with related appurtenances, including:

1) Approximately 3,150 manually operated valves either buried or in manholes
2) Over 650 air release or combination air valves
3) Over 1,000 blowoffs or cleanouts utilized for draining or flushing lines
4) Over 130 pressure reducing valve (PRV) locations with 21 of these sites containing two or more PRV's
5) 68 motor driven pumps in 23 locations ranging in size from 2 to 900 Horsepower
6) 75 system metering locations including service connections to communities
7) Four raw water reservoirs and 12 treated water facilities and related control vaults
8) Approximately 3,000 rural service connections with metering equipment
9) 12 cathodic protection rectifiers/anode beds with over 300 monitoring sites

The distribution operators are assigned to specific geographic areas and are responsible for the maintenance items within that area. On any given day, they may be exercising pipeline appurtenances, repairing leaks, cleaning reservoirs, locating pipelines per One-Call locate requests from excavators, working on pumps or control valves, maintenance on heating, ventilation, dehumidification or electrical systems, fencing, mowing, grass seeding, spraying weeds or any of a number of other possibilities.

## Operations Activities

Routine operations activities include service hookups to new customers. In 2007, these new customers were provided by the completion of construction in the Morton County pockets and the Beulah Interim Service Area in the fall of 2006 and the south Fryburg area in the fall of 2007. Subsequent customers continue to provide a number of new hookups as well. Monitoring and maintaining water quality within the distribution system is a high priority and is accomplished through various testing techniques. The distribution operators check chlorine residuals monthly at all prefabricated steel vaults and at multiple points spread throughout the system to determine if adequate levels are being maintained. If they find that the residual has dropped below acceptable levels, water is flushed from the line until the normal levels are present.

# O&M Report Continued

In a typical month, operators will check chlorine residuals in 200 to 300 locations. Several water samples are also collected each month from predetermined and random sites for nitrification testing performed by personnel at the Water Treatment Plant, in Dickinson. Environmental Protection Agency/North Dakota State Health Department (NDSHD) mandated testing from designated sites includes 11 monthly bacteriological samples, a Total Trihalomethane/Haloacidic Acid quarterly sample and Lead and Copper samples. Analytical testing of these samples is performed by NDSHD approved laboratories.

Water distribution is a 24-hour a day process. When the doors close at the end of a business day or on weekends, the distribution system continues to deliver water to consumers. The distribution systems are operated automatically through a Supervisory Control and Data Acquisition (SCADA) system or by local controls in vaults. But, no system is fail-safe and therefore must be monitored. One member of the distribution staff is constantly on-call, both to monitor the distribution system and to respond to emergency situations. Anyone needing emergency assistance after business hours can reach our on-call representative by following the instructions on the telephone answering machine.

# Water Treatment Report

“Providing quality water for southwest North Dakota” is the number one priority of the Water Treatment Plant (WTP) staff. This is a task that is taken very seriously, as the WTP is responsible for producing quality water for nearly 40 public water systems. The WTP staff is also responsible for complying with a number of increasingly complex and very strict Environmental Protection Agency regulations that are intended to ensure safe drinking water.

Producing quality water involves multiple treatment processes, a significant amount of testing and very close monitoring. It begins as soon as water is drawn from Lake Sakakawea, continues throughout the various treatment processes and concludes at the furthermost points of the distribution system. The treatment processes use of a number of chemicals that perform a variety of tasks. Although some treatment chemicals perform multiple tasks, each chemical, its primary function and amount used is listed below:

- Sodium Permanganate:  Taste and odor reduction (4,123 lbs.)
- Lime:  Softening (1,763,962 lbs.)
- Aluminum Sulfate:  Clarification (52,572 lbs.)
- Flocculant:  Clarification aid (2,100 lbs.)
- Carbon Dioxide:  pH adjustment (374,024 lbs.)
- Phosphate:  Corrosion inhibitor (20,154 lbs.)
- Fluoride:  Reduction of dental caries (9,016 lbs.)
- Ammonium Sulfate:  Disinfection (11,260 lbs.)
- Chlorine:  Disinfection (48,856 lbs.)
- Water Treated = 1,408,303,000 gallons
- Sludge Discharged from the WTP = Approximately 1,000,000 gallons (Sludge is a combination of chemicals added and impurities removed from the water)

# Water Treatment Report Continued

A considerable amount of time is spent in the lab testing water for the following characteristics: chlorine residual, turbidity, pH, hardness, calcium and magnesium, alkalinity, TDS (total dissolved solids), temperature, fluoride, phosphate, monochloramine, free ammonia, total ammonia, nitrite, nitrate, permanganate residual, as well as taste and odor. This extensive testing allows us to evaluate overall water quality and helps us make the most effective use of each treatment chemical. WTP staff also tests water from the three Morton County Service Areas and the Beulah Interim Service Area, even though we are not directly responsible for treating water for these new water systems.

Environmental Protection Agency (EPA) regulations require the continuous monitoring and recording of two critical measurements: chlorine residual and turbidity (a measure of water clarity). The continuous monitoring/recording of chlorine residual shows the level of disinfection at all times. This is important because a residual that is too low leaving the Water Treatment Plant (WTP) could result in high levels of potentially harmful microorganisms in the distribution system. A residual that is too high could result in elevated disinfection by-products, which could impact human health. The EPA requires us to continuously monitor all filtered water turbidity and record it at intervals as often as every 15 minutes. Special emphasis is placed on turbidity because high turbidity can act as a shield for harmful microorganisms, which can cause disinfection to be less effective. Alternately, low turbidity can be an indication that the potentially harmful protozoan Cryptosporidium is being removed effectively during filtration (We are pleased to report that our turbidity has historically been well below the maximum allowed.) To summarize, chlorine residual and turbidity are monitored very closely because they give us a “real-time” view of two extremely important water quality indicators.

Preventive maintenance tops a long list of other day-to-day WTP work activities. Routine maintenance and repairs are performed and documented on a variety of equipment that ranges from chemical feeders, pumps, motors and valves, to calibration of chlorine analyzers and feeders, turbidimeters and lab equipment. Some items worth noting were the replacement of three aging chlorine analyzers with state-of-the-art models and the installation of office cubicles at the WTP. There was also a need for more chemical storage at the Dodge Pump Station after the addition of Red Trail Energy, a large bulk user, so a Risk Management Program (RMP) was put into place. The RMP is an EPA regulation designed to deal with the proper handling of a chemical leak, should one occur.

The SWA presented its 9th Annual Consumer Confidence Report to the customers served by our WTP and its first annual report to our newest customers in the three Morton County Service Areas and the Beulah Interim Service Area. These reports provide important information about our drinking water and are available on Southwest Water Authority’s Web site (www.swa.swc.state.nd.us). We are pleased to report that all five systems were in compliance with all of EPA’s regulations and we remain committed to doing so in the future, along with our mission of “Providing quality water for southwest North Dakota.”

# Treatment Definitions

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

**cat·ion·ic** \kat-i-ä-nik\ adj: an ion or group of ions having a positie 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.

# Service 2007

| Treated Water Users | Gallons Used |
|---|---|
| Assumption Abbey | 1,534,500 |
| Baker Boy | 1,870,800 |
| Beach | 43,980,400 |
| Belfield | 31,132,800 |
| Billings County | 821,800 |
| Carson | 9,110,900 |
| Dickinson | 678,322,900 |
| Dickinson Research Center | 474,000 |
| Dodge | 3,467,000 |
| Dunn Center | 2,978,900 |
| Elgin | 21,618,300 |
| Gladstone | 5,245,200 |
| Glen Ullin | 24,433,800 |
| Golden Valley | 4,896,200 |
| Golva | 2,645,300 |
| Halliday | 9,102,000 |
| Hebron | 21,312,900 |
| Hettinger | 62,165,400 |
| Home on the Range | 589,700 |
| Dean Karsky | 2,054,900 |
| Manning | 1,956,600 |
| Medora | 15,823,800 |
| Missouri Basin | 5,120,700 |
| Mott | 24,327,800 |
| Mott Grain | 1,044,700 |
| New England | 23,068,600 |
| New Hradec | 1,245,100 |
| New Leipzig | 6,451,400 |
| Perkins County Rural Water | 84,761,500 |
| Prairie Learning Center | 1,370,200 |
| Reeder | 5,022,800 |
| Regent | 8,738,300 |
| Richardton | 16,965,700 |
| Sacred Heart Monastery | 861,000 |
| Scranton | 12,882,600 |
| Sentinel Butte | 1,868,100 |
| South Heart | 10,572,700 |
| Steffes Manufacturing | 1,578,200 |
| Taylor | 4,284,000 |
| West Medora Campground | 1,439,000 |
| Rural Usage | 193,659,300 |
| Construction | 1,477,800 |
| ***Total Treated Water*** | ***1,352,277,600*** |

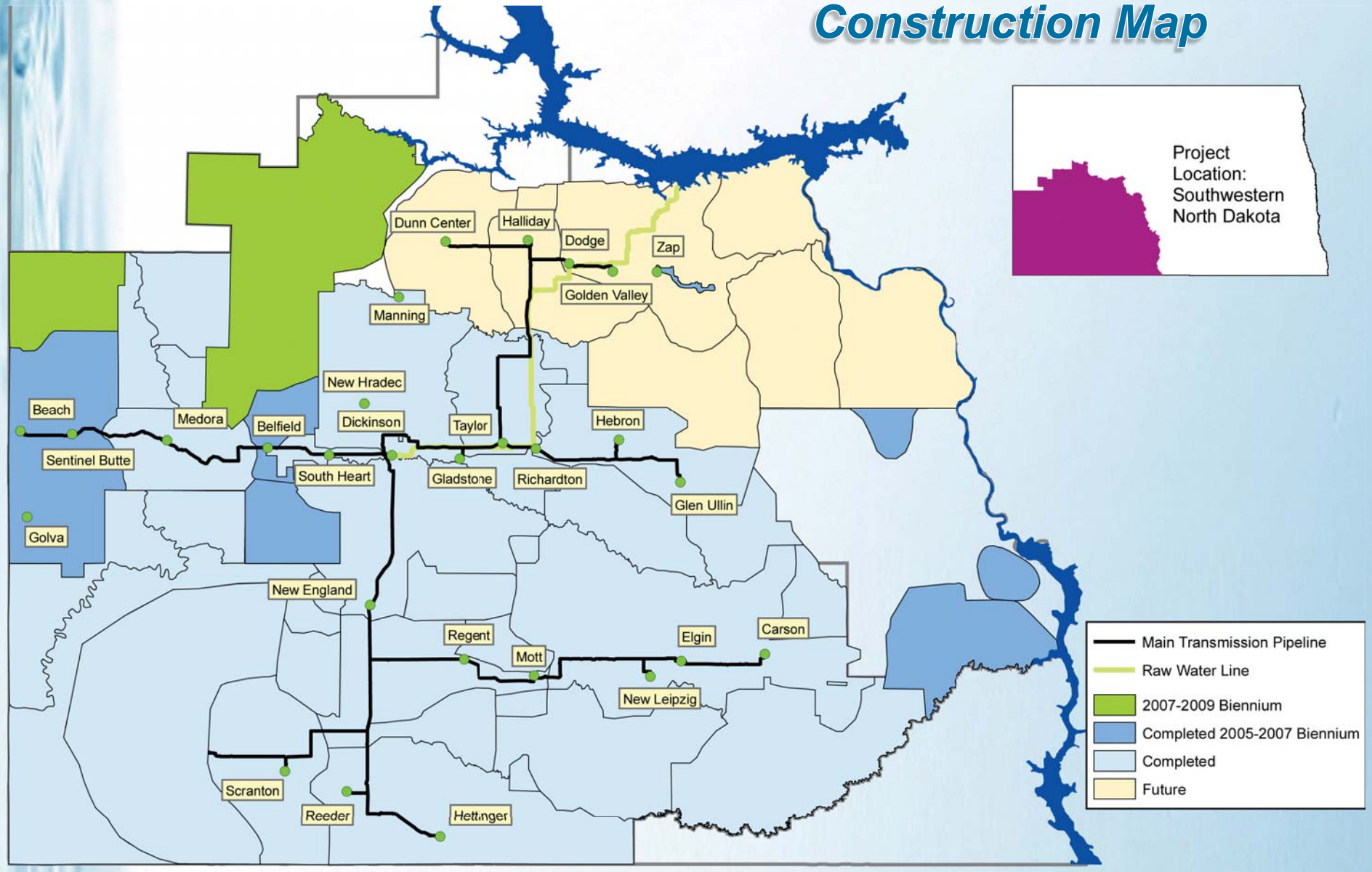
| Raw Water Users | Gallons Used |
|---|---|
| Assumption Abbey | 128,200 |
| Jurgens Farms | 983,000 |
| Ervin Lorenz | 113,600 |
| David Perhus 1 | 62,300 |
| David Perhus 2 | 100,900 |
| Red Trail Energy | 148,156,000 |
| Sacred Heart Monastery | 380,000 |
| Taylor Nursery | 1,266,600 |
| ***Total Raw Water*** | ***151,190,600*** |

| Beulah Interim | Gallons Used |
|---|---|
| Zap | 7,242,600 |
| Rural | 2,019,800 |
| ***Total Beulah Interim*** | ***9,262,400*** |

| Morton County | Gallons Used |
|---|---|
| Rural | 6,045,100 |
| ***Total Morton County*** | ***6,045,100*** |

***Total Water 1,518,775,700***

# Southwest Pipeline Project Construction Map



# Independent Auditor's Report

BRADY MARTZ

CERTIFIED PUBLIC ACCOUNTANTS AND CONSULTANTS

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

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

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, 2007 and 2006, 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, 2007 and 2006, 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 February 27, 2008 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 read in conjunction with this report in considering the results or our audits.

The Management's Discussion and Analysis (MD & A) on pages 3 through 6 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.**

February 27, 2008

## SOUTHWEST WATER AUTHORITY
## MANAGEMENT'S DISCUSSION AND ANALYSIS
## DECEMBER 31, 2007 AND 2006

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 31, 2007 and 2006. 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 $12,841,754 as of the end of the year 2007 compared with $11,024,084 as of the end of the year 2006. This is an increase in total assets of $1,817,670. The liabilities totaled $1,061,881 for 2007 compared with $779,995 for 2006. The net assets exceeded its liabilities at the close of the most recent fiscal year by $11,779,873. This compares with the year ending December 31, 2006 by $10,244,089 for an increase in net assets of $1,535,784.

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 Investment Center.

Assets held in the Trust Department at the American Investment Center total $7,305,917 at year-end compared with $6,310,022 at year-end of 2006. The amount that is the Replacement and Extraordinary Maintenance Fund is $6,161,325 at year-end compared with $5,235,890 at year-end 2006. This is an increase of $925,435. 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 $516,885 at year-end compared with $485,093 at year-end 2006. This is an increase of $31,792. Of this amount, $347,570 is restricted. This compares with $192,368 as of year-end 2006, which is an increase of $155,202. 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 $4,300,863 compared with $3,755,261 at the end of 2006. This is an increase of $545,602. This is made up of checking and money market accounts as well as certificates of deposit.

The liabilities total $1,061,881 for 2007 compared with $779,995 at year-end 2006. This is an increase in liabilities of $281,886. Of this amount, $595,836 is current liabilities mostly in the form of accounts payable. This compares with 2006 ending balance of $459,061 in current liabilities. This is an increase of current liabilities of $136,775. The long-term liabilities total $466,045 at year-end compared with $320,934 at year-end 2006. Of this amount, $347,570 is deferred revenue for year-end 2007 compared with $192,368 year-end 2006. 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. The balance in long-term liabilities $86,010 is rental deposits from tenants/customers compared with $84,810 for year-end 2006.

### 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) Nots 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 | 2007 | 2006 |
|---|---|---|
| ASSETS | | |
| Unrestricted current assets | $ 6,023,115 | $ 4,983,040 |
| Restricted noncurrent assets | 6,220,305 | 5,463,171 |
| Capital assets | 598,334 | 577,873 |
| Total Assets | $ 12,841,754 | $ 11,024,084 |
| LIABILITIES | | |
| Current Liabilities | $ 595,836 | $ 459,061 |
| Long-term liabilities | 466,045 | 320,934 |
| Total liabilities | 1,061,881 | 779,995 |
| NET ASSETS | | |
| Invested in capital assets, net of related debt | 598,334 | 577,873 |
| Restricted net assets | 6,220,305 | 5,277,964 |
| Unrestricted net assets | 4,961,234 | 4,388,252 |
| Total Net Assets | 11,779,873 | 10,244,089 |
| Total Liabilities and Net Assets | $ 12,841,754 | $ 11,024,084 |

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 resut in cash flows in future fiscal periods.

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

| | 2007 | 2006 |
|---|---|---|
| Operating revenues: | | |
| Sales | $ 6,003,038 | $ 5,243,278 |
| Hook up fee transfers | 112,201 | 166,732 |
| Other | 194,457 | 27,669 |
| Total operating revenues | 6,309,696 | 5,437,679 |
| Operating expenses: | | |
| Transmission | 2,613,205 | 2,481,985 |
| Distribution | 1,551,071 | 1,252,857 |
| Board of directors | 162,969 | 122,446 |
| Administrative | 382,147 | 362,268 |
| Easement acquisition | 46,694 | 48,986 |
| Rural water sign-up | 64,292 | 51,480 |
| Customer service | 63,929 | 66,902 |
| Treatment | 746,461 | 694,682 |
| Grass seeding | 7 | 206 |
| Total operating expenses | 5,630,775 | 5,081,812 |
| Operating income | 678,921 | 355,867 |
| Nonoperating revenue: | | |
| Property taxes | 219,607 | 209,722 |
| Unrealized gain (loss) on investments | 143,017 | (46,342) |
| Investment income | 494,239 | 410,280 |
| Total nonoperating revenue | 856,863 | 573,660 |
| Change in net assets | 1,535,784 | 929,527 |
| Total net assets - beginning of year | 10,244,089 | 9,314,562 |
| Total net assets - end of year | $ 11,779,873 | $ 10,244,089 |

**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 $6,003,038 compared with $5,243,278 for 2006. This is an increase in revenues of $759,760. The net incomes for each department are transmission of $322,183, distribution net income of $25,081 and treatment net income of $29,389. This compares with net income by department for 2006 of transmission net income of $154,140, distribution net income of $82,017 and treatment net income of $33,469.

The mill levy generated income of $219,607 for 2007 compared with $209,722 for the year 2006. This is an increase of $9,885. The administration activities had a net income of $183,409 compared with a net income of $138,145 for 2006. 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 within 5% of projections and the expenses were within reason of the budget parameters by being over budget by less than 1%.

The Southwest Water Authority sold a total of 1,518,775,700 gallons of water in 2007 compared with 1,402,347,730 gallons of water in 2006. This is an increase of 116,427,970 gallons from 2006. This is 2% over the projection for the year of 1,486,600,000 gallons.

**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 or visit on the web at www.swa.swc.state.nd.us.

**SOUTHWEST WATER AUTHORITY**
**DICKINSON, NORTH DAKOTA**
**BALANCE SHEETS**
**DECEMBER 31, 2007 AND 2006**

| ASSETS | 2007 | 2006 |
|---|---|---|
| Current Assets | | |
| Cash and cash equivalents - unrestricted | $ 1,343,862 | $ 1,344,843 |
| Investments | 3,893,922 | 2,970,577 |
| Receivables: | | |
| Accounts (net of allowance of $9,868 and $3,159 in 2007 and 2006, respectively) | 428,123 | 324,166 |
| Interest | 50,526 | 39,497 |
| Prepaid expenses | 52,258 | 63,466 |
| Inventory | 254,424 | 240,491 |
| Total current assets | 6,023,115 | 4,983,040 |
| Noncurrent Assets | | |
| Restricted assets: | | |
| Cash and cash equivalents | 107,464 | 185,207 |
| Investments | 6,053,861 | 5,235,890 |
| Interest receivable | 58,980 | 42,074 |
| Capital Assets: | | |
| Land | 3,291 | 3,291 |
| Improvements, furniture and equipment, net | 595,043 | 574,582 |
| Total noncurrent assets | 6,818,639 | 6,041,044 |
| Total Assets | $ 12,841,754 | $ 11,024,084 |

| LIABILITIES AND NET ASSETS | 2007 | 2006 |
|---|---|---|
| Current Liabilities | | |
| Accounts payable | $ 393,638 | $ 274,749 |
| Due to ND State Water Commission | 5,364 | 4,614 |
| Accrued salaries | 87,559 | 80,817 |
| Compensated absences, current portion | 71,166 | 65,781 |
| Accrued expenses | 38,109 | 33,100 |
| Total current liabilities | 595,836 | 459,061 |
| Long-term Liabilities | | |
| Compensated absences, net of current portion | 32,465 | 43,756 |
| Deferred revenue | 347,570 | 192,368 |
| Rental/customer deposits | 86,010 | 84,810 |
| Total long-term liabilities | 466,045 | 320,934 |
| Total liabilities | 1,061,881 | 779,995 |
| Net Assets | | |
| Invested in capital assets, net of related debt | 598,334 | 577,873 |
| Restricted for replacement | 6,220,305 | 5,277,964 |
| Unrestricted | 4,961,234 | 4,388,252 |
| Total Net Assets | 11,779,873 | 10,244,089 |
| Total Liabilities and Net Assets | $ 12,841,754 | $ 11,024,084 |

SOUTHWEST WATER AUTHORITY
DICKINSON, NORTH DAKOTA

## STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

## FOR THE YEARS ENDED DECEMBER 31, 2007 AND 2006

| | 2007 | 2006 |
|---|---|---|
| Operating revenues: | | |
| Sales | $ 6,003,038 | $ 5,243,278 |
| Hook up fee transfers | 112,201 | 166,732 |
| Other | 194,457 | 27,669 |
| Total operating revenues | 6,309,696 | 5,437,679 |
| Operating expenses: | | |
| Transmission | 2,613,205 | 2,481,985 |
| Distribution | 1,551,071 | 1,252,857 |
| Board of directors | 162,969 | 122,446 |
| Administrative | 382,147 | 362,268 |
| Easement acquisition | 46,694 | 48,986 |
| Rural water sign-up | 64,292 | 51,480 |
| Customer service | 63,929 | 66,902 |
| Treatment | 746,461 | 694,682 |
| Grass seeding | 7 | 206 |
| Total operating expenses | 5,630,775 | 5,081,812 |
| Operating income | 678,921 | 355,867 |
| Nonoperating revenue: | | |
| Property taxes | 219,607 | 209,722 |
| Unrealized gain (loss) on investments | 143,017 | (46,342) |
| Investment income | 494,239 | 410,280 |
| Total nonoperating revenue | 856,863 | 573,660 |
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| Total net assets - beginning of year | 10,244,089 | 9,314,562 |
| Total net assets - end of year | $ 11,779,873 | $ 10,244,089 |

The accompanying notes are an integral part of these financial statements.

# SWPP Timeline

SWPP Authorized; SWPP Final Design Authorized; SWPP Final Construction Authorized; Construction Begins; Garrison MR&I Funding

| | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***PROJECTS*** | | | | | | | | | | | | | | | | | | | | |
| West River Diversion | | | | | | | | | | | | | | | | | | | | |
| SW Area Water Supply | | | | | | | | | | | | | | | | | | | | |
| Southwest Pipeline Project | | | | | | | | | | | | | | | | | | | | |
| ***ORGANIZATIONS*** | | | | | | | | | | | | | | | | | | | | |
| West River Water Supply District | | | | | | | | | | | | | | | | | | | | |
| West River Joint Board | | | | | | | | | | | | | | | | | | | | |
| Southwest Water Authority (Nonprofit) | | | | | | | | | | | | | | | | | | | | |
| Southwest Water Authority (Political Subdivision) | | | | | | | | | | | | | | | | | | | | |
| ***FUNDING*** (In Millions) | | | | | | | | | | | | | | | | | | | | |
| State Resources Trust Fund | | | | | | — | — | — | — | — | — | — | 23.6 | — | — | — | — | — | — | — |
| 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 | | | | | | | | | | | | | | | | | | | | |
| ***TOTAL*** | | | | | | | | | | | | | ***23.6*** | | | | ***7.38*** | ***8.33*** | ***6.67*** | ***2.65*** |

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 Bowman-Scranton Phase; State Funding Medora-Beach Phase; State & USDA Funding Medora-Beach Phase II; State & USDA Funding Medora-Beach Phase III

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***PROJECTS*** | | | | | | | | | | | | | | | | | | |
| West River Diversion | | | | | | | | | | | | | | | | | | |
| SW Area Water Supply | | | | | | | | | | | | | | | | | | |
| Southwest Pipeline Project | | | | | | | | | | | | | | | | | | |
| ***ORGANIZATIONS*** | | | | | | | | | | | | | | | | | | |
| West River Water Supply District | | | | | | | | | | | | | | | | | | |
| West River Joint Board | | | | | | | | | | | | | | | | | | |
| Southwest Water Authority (Nonprofit) | | | | | | | | | | | | | | | | | | |
| Southwest Water Authority (Political Subdivision) | | | | | | | | | | | | | | | | | | |
| ***FUNDING*** (In Millions) | | | | | | | | | | | | | | | | | | |
| State Resources Trust Fund | 0.04 | 0.06 | 0.68 | 0.77 | 1.46 | 1.77 | 1.18 | 0.7 | 1.34 | 4.21 | 0.83 | 0.33 | 3.06 | 2.38 | 3.05 | 1.62 | 0.69 | 47.76 |
| Garrison Diversion MR&I | 5.32 | 6.87 | 5.3 | 10.1 | 7.77 | 5.41 | 0.18 | 2.47 | 1.24 | | | | | | | | | 69.70 |
| Natural Resources Conservation Service | | | | 0.13 | 0.41 | 0.39 | | | | | | | | | | | | 0.90 |
| Revenue Bonds | | | | | | | 3.96 | 3.08 | | | | | | | | | | 7.00 |
| USDA - Rural Development (Loans) | | | | | | | | 3.5 | 0.02 | 1.38 | 0.5 | 0.23 | 1.63 | 1.54 | | 2.47 | 1.43 | 12.70 |
| USDA - Rural Development (Grants) | | | | | | | | 1.04 | 1.54 | 1.59 | 2.48 | 0.92 | 1.04 | 0.56 | 1.3 | 1.93 | 0.52 | 12.95 |
| Drinking Water State Revolving Loan Fund | | | | | | | | | | 1 | 0.5 | | | | | | | 1.50 |
| Water Development Trust Fund | | | | | | | | | | | 1.45 | 5.17 | 0.26 | 0.45 | | 0.90 | 1.05 | 8.43 |
| ***TOTAL*** | ***5.36*** | ***6.93*** | ***5.98*** | ***11*** | ***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*** | ***160.94*** |

# Potable Water Usage

| User | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | User Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assumption Abbey | 112.1 | 77.0 | 107.4 | 111.3 | 95.6 | 143.9 | 258.7 | 229.9 | 110.4 | 103.2 | 102.5 | 82.5 | 1,534.5 |
| Baker Boy | 184.3 | 165.0 | 155.8 | 110.7 | 103.9 | 144.8 | 182.5 | 186.2 | 196.0 | 166.3 | 142.5 | 132.8 | 1,870.8 |
| Beach | 3,140.7 | 2,315.2 | 2,562.0 | 3,153.6 | 3,502.8 | 4,281.7 | 5,237.2 | 6,962.3 | 3,629.2 | 3,244.2 | 3,297.5 | 2,654.0 | 43,980.4 |
| Belfield | 2,357.4 | 1,883.1 | 2,328.5 | 2,437.2 | 2,225.2 | 3,968.2 | 3,740.8 | 4,067.4 | 2,447.1 | 2,033.5 | 1,985.6 | 1,658.8 | 31,132.8 |
| Billings County | | | | | | 53.0 | 370.4 | 145.2 | 6.8 | 37.0 | 144.0 | 65.4 | 821.8 |
| Carson | 740.9 | 624.7 | 582.1 | 696.6 | 708.6 | 775.7 | 1,094.8 | 1,132.5 | 745.7 | 699.4 | 715.0 | 594.9 | 9,110.9 |
| Dickinson | 50,071.4 | 39,916.6 | 39,905.0 | 48,198.5 | 48,412.2 | 63,725.3 | 92,224.7 | 95,255.9 | 61,938.0 | 50,530.4 | 48,354.8 | 39,790.1 | 678,322.9 |
| Dickinson Research | 13.6 | 26.0 | 18.2 | 22.6 | 39.3 | 102.3 | 65.0 | 56.2 | 25.4 | 24.2 | 22.3 | 58.9 | 474.0 |
| Dodge | 398.0 | 318.0 | 186.0 | 243.0 | 320.0 | 354.0 | 408.0 | 396.0 | 235.0 | 204.0 | 218.0 | 187.0 | 3,467.0 |
| Dunn Center | 220.1 | 187.7 | 180.3 | 235.7 | 225.7 | 294.9 | 370.2 | 373.8 | 217.1 | 219.2 | 225.5 | 228.7 | 2,978.9 |
| Elgin | 1,618.7 | 1,269.5 | 1,312.4 | 1,664.8 | 1,660.1 | 1,853.5 | 2,429.2 | 2,630.6 | 1,888.1 | 1,954.6 | 2,020.0 | 1,316.8 | 21,618.3 |
| Gladstone | 496.7 | 330.4 | 372.8 | 401.8 | 397.3 | 528.8 | 526.6 | 631.7 | 419.2 | 370.2 | 412.3 | 357.4 | 5,245.2 |
| Glen Ullin | 2,108.8 | 1,754.7 | 1,684.0 | 2,035.4 | 1,817.7 | 2,231.9 | 2,862.5 | 2,896.1 | 1,792.5 | 1,790.5 | 1,924.4 | 1,535.3 | 24,433.8 |
| Golden Valley | 397.9 | 277.0 | 263.9 | 340.9 | 395.5 | 464.1 | 651.6 | 690.9 | 421.2 | 341.8 | 347.1 | 304.3 | 4,896.2 |
| Golva | 171.2 | 139.5 | 133.1 | 178.8 | 194.8 | 202.3 | 402.3 | 533.7 | 182.8 | 185.5 | 169.7 | 151.6 | 2,645.3 |
| Halliday | 1,024.8 | 746.4 | 699.9 | 907.2 | 728.8 | 796.1 | 919.4 | 955.2 | 519.6 | 495.7 | 618.0 | 690.9 | 9,102.0 |
| Hebron | 1,748.5 | 1,397.5 | 1,326.0 | 1,692.9 | 1,583.0 | 1,995.2 | 2,559.6 | 2,573.3 | 1,699.9 | 1,674.0 | 1,593.0 | 1,470.0 | 21,312.9 |
| Hettinger | 4,613.2 | 3,464.0 | 3,495.1 | 4,434.1 | 4,741.9 | 5,991.1 | 8,782.1 | 8,058.9 | 5,327.9 | 5,100.5 | 4,448.2 | 3,708.4 | 62,165.4 |
| Home On the Range | 43.7 | 41.0 | 38.5 | 47.1 | 43.9 | 57.8 | 60.7 | 65.9 | 42.9 | 47.5 | 52.7 | 48.0 | 589.7 |
| Karsky Dairy | 139.9 | 178.6 | 144.1 | 166.2 | 193.6 | 197.3 | 182.1 | 169.5 | 181.4 | 170.1 | 169.6 | 162.6 | 2,054.9 |
| Manning | 111.7 | 135.4 | 170.4 | 100.8 | 136.4 | 177.6 | 336.3 | 303.9 | 145.4 | 107.5 | 119.4 | 111.8 | 1,956.6 |
| Medora | 328.9 | 259.9 | 240.6 | 574.1 | 1,034.9 | 2,756.6 | 3,323.8 | 3,767.7 | 1,890.1 | 802.0 | 519.5 | 325.7 | 15,823.8 |

*Per 1,000 Gallons*

| User | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | User Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Missouri Basin | 551.8 | 327.6 | 396.1 | 593.4 | 251.9 | 362.7 | 421.6 | 509.3 | 297.1 | 397.6 | 859.6 | 152.0 | 5,120.7 |
| Mott | 2,014.9 | 1,632.5 | 1,612.4 | 2,030.0 | 2,011.9 | 2,550.7 | 2,184.4 | 2,587.7 | 1,871.3 | 2,011.7 | 2,050.7 | 1,769.6 | 24,327.8 |
| Mott Grain | | | | 30.2 | 231.7 | 265.7 | 210.3 | 60.1 | 165.8 | 63.7 | 16.3 | 0.9 | 1,044.7 |
| New England | 1,573.3 | 1,237.4 | 1,133.8 | 1,554.0 | 1,961.5 | 2,345.2 | 2,494.7 | 2,610.0 | 1,482.7 | 1,601.2 | 1,825.0 | 3,249.8 | 23,068.6 |
| New Hradec | 94.9 | 84.7 | 90.4 | 109.3 | 103.5 | 144.9 | 153.0 | 116.6 | 84.8 | 85.0 | 96.1 | 81.9 | 1,245.1 |
| New Leipzig | 601.2 | 390.7 | 389.9 | 483.7 | 542.7 | 608.1 | 741.0 | 819.0 | 486.1 | 537.1 | 447.6 | 404.3 | 6,451.4 |
| PCRWS* | 7,098.3 | 5,380.9 | 6,145.3 | 6,085.5 | 6,389.1 | 7,743.6 | 10,722.3 | 10,420.1 | 6,898.9 | 6,420.3 | 6,284.1 | 5,173.1 | 84,761.5 |
| PLC** | 102.0 | 120.2 | 67.8 | 119.0 | 134.0 | 95.0 | 91.0 | 179.0 | 101.0 | 138.4 | 78.8 | 144.0 | 1,370.2 |
| Reeder | 348.4 | 381.5 | 293.3 | 396.4 | 412.1 | 484.2 | 617.7 | 638.7 | 412.8 | 345.7 | 337.3 | 309.7 | 5,022.8 |
| Regent | 638.5 | 441.9 | 436.2 | 648.2 | 715.1 | 820.6 | 642.8 | 794.5 | 653.6 | 550.2 | 1,099.4 | 1,297.3 | 8,738.3 |
| Richardton | 1,372.4 | 1,094.4 | 1,079.6 | 1,282.0 | 1,213.0 | 1,523.6 | 2,013.1 | 2,165.8 | 1,378.5 | 1,363.1 | 1,322.5 | 1,157.7 | 16,965.7 |
| Sacred Heart | 72.0 | 68.0 | 69.0 | 87.0 | 73.0 | 75.0 | 70.0 | 96.0 | 80.0 | 67.0 | 53.0 | 51.0 | 861.0 |
| Scranton | 864.2 | 645.4 | 646.6 | 964.8 | 1,321.4 | 1,601.8 | 1,590.8 | 1,604.4 | 1,093.6 | 1,052.0 | 820.9 | 676.7 | 12,882.6 |
| Sentinel Butte | 159.9 | 148.3 | 177.5 | 136.5 | 129.4 | 132.1 | 203.9 | 221.0 | 127.0 | 151.5 | 139.8 | 141.2 | 1,868.1 |
| South Heart | 674.5 | 535.5 | 542.8 | 640.5 | 688.0 | 1,069.4 | 1,522.0 | 1,831.2 | 1,004.1 | 796.8 | 704.7 | 563.2 | 10,572.7 |
| Steffes | 99.5 | 109.8 | 106.8 | 84.9 | 74.5 | 184.4 | 119.2 | 115.8 | 137.4 | 127.6 | 216.9 | 201.4 | 1,578.2 |
| Taylor | 355.0 | 233.0 | 233.0 | 310.0 | 311.0 | 310.0 | 537.0 | 632.0 | 410.0 | 306.0 | 329.0 | 318.0 | 4,284.0 |
| WMCG*** | 53.0 | 11.0 | 14.0 | 18.0 | 80.0 | 217.0 | 328.0 | 401.0 | 260.0 | 26.0 | 17.0 | 17.0 | 1,439.0 |
| ***Monthly Total*** | ***86,716.3*** | ***68,350.0*** | ***69,340.6*** | ***83,326.7*** | ***85,205.0*** | ***111,630.1*** | ***151,651.3*** | ***157,930.0*** | ***101,006.4*** | ***86,342.2*** | ***84,300.2*** | ***71,341.7*** | ***1,157,140.5*** |

***Beulah Interim Potable Water Contract***

| User | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | User Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zap | 674.5 | 527.0 | 556.0 | 661.7 | 561.3 | 636.2 | 780.0 | 799.4 | 547.7 | 592.1 | 488.2 | 418.5 | 7,242.6 |
| ***Monthly Total*** | ***674.5*** | ***527.0*** | ***556.0*** | ***661.7*** | ***561.3*** | ***636.2*** | ***780.0*** | ***799.4*** | ***547.7*** | ***592.1*** | ***488.2*** | ***418.5*** | ***7,242.6*** |
| ***Grand Total*** | ***87390.8*** | ***68,877.0*** | ***69,896.6*** | ***83,988.4*** | ***85,766.3*** | ***112,266.3*** | ***152,431.3*** | ***158,729.4*** | ***101,554.1*** | ***86,934.3*** | ***84,788.4*** | ***71,760.2*** | ***1,164,383.1*** |

***Per 1,000 Gallons***

*PCRWS - Perkins County Rural Water System **PLC - Prairie Learining Center ***WMCG - West Medora Campground

# Rates 2007

The water rate for rural customers in 2007 consisted of a minimum payment of $39.45 per month included 2,000 gallons of water. The rate for water use in excess of the 2,000 gallons was $3.65 per thousand gallons. On July 1, 2002, SWA implemented a volume discount for rural customers, reducing water rates from $3.65 to $2.65 on usage over 10,000 gallons. Also, customers with pasture taps received a rate reduction, from $3.65 to $2.65 on water usage in excess of 60,000 gallons, billed annually.

***Rural Customers Under 10,000 Gallons***

| | |
|---|---|
| Treatment | $0.60 |
| Transmission Operations and Maintenance | $1.05 |
| Transmission Replacement | $0.35 |
| Transmission Reserve | $0.09 |
| Distribution Operation and Maintenance | $1.31 |
| Distribution Replacement | $0.10 |
| Distribution Reserve | $0.15 |
| ***Total*** | ***$3.65*** |

***Rural Customers Over 10,000 Gallons***

| | |
|---|---|
| Treatment | $0.60 |
| Transmission Operation and Maintenance | $0.72 |
| Transmission Replacement | $0.35 |
| Transmission Reserve | $0.00 |
| Distribution Operation and Maintenance | $0.88 |
| Distribution Replacement | $0.10 |
| ***Total*** | ***$2.65*** |

The standard rural minimum fee ($39.45) is broken into three separate components: meter fee, capital repayment and operations and maintenance (O&M). The capital repayment ($29.90) 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 O&M fund, covering capital and routine operations and maintenance costs. The final portion of the monthly minimum ($4.55) is for the O&M fund to cover fixed costs.

The 2007 rate for demand flow contract customers was $4.05 per 1,000 gallons of potable water.

***Demand Flow Contract Customers***

| | |
|---|---|
| Treatment | $0.60 |
| Transmission Operation and Maintenance | $1.05 |
| Transmission Replacement and Extraordinary Maintenance | $0.35 |
| Capital Repayment | $0.98 |
| Demand Charge | $0.98 |
| Transmission Reserve | $0.09 |
| ***Total*** | ***$4.05*** |

# Rates 2007 continued

The 2007 rate for constant flow contract customers was $3.07 per 1,000 gallons of potable water.

***Constant Flow Contract Customers***

| | |
|---|---|
| Treatment | $0.60 |
| Transmission Operation and Maintenance | $1.05 |
| Transmission Replacement and Extraordinary Maintenance | $0.35 |
| Capital Repayment | $0.98 |
| Transmission Reserve | $0.09 |
| ***Total*** | ***$3.07*** |

The raw water contract rate was $2.49 per 1,000 gallons of water. Raw water customers do not pay for the cost of treatment.

# Rates 2008

## Rural Rates

The water rates for 2008 are remaining the same. The monthly minimum is $39.45 and includes 2,000 gallons of water. This also includes capital repayment ($30.49), meter fee ($5.00), and operations and maintenance ($3.96). The capital repayment amount is tied to the Consumer Price Index and adjusted annually by the ND State Water Commission. Capital repayment was increased by $0.59. Southwest Water Authority has agreed to absorb the increase, thus stabilizing rates.

The rural customer rate per 1,000 gallons is $3.65 up to 10,000 gallons and over 10,000 gallons is $2.65. Country Club Estates near Beulah and several rural customers, do not receive the volume discount of $2.65, until we can provide service to Oliver, Mercer and North Dunn Phase.

## Contract Customers

The demand contract customer rate is $4.05 per 1,000 gallons of potable water. The contract customer rate is $3.07 per 1,000 gallons of potable water. The raw water contract rate is $2.49 per 1,000 gallons of water. Capital repayment was increased by $0.02 for both demand and contract customers. Demand charge was also increased by $0.02. Southwest Water has agreed to absorb the increase, thus stabilizing rates for contract customers.

# Water Service Contracts

| User | Billed+ | O&M++ | Treatment | Reserve | Replacement | Cap. Repayment | Demand | Total |
|---|---|---|---|---|---|---|---|---|
| Assumption Abbey | 1,534.50 | $1,611.26 | $920.70 | $138.12 | $537.11 | $1,503.81 | $1,503.81 | $6,214.81 |
| Baker Boy | 1,870.80 | $1,964.28 | $1,122.48 | $168.37 | $654.79 | $1,833.38 | | $5,743.30 |
| Beach | 43,978.40 | $46,177.34 | $26,387.04 | $3,958.06 | $15,392.46 | $43,098.85 | | $135,013.75 |
| Belfield | 31,132.80 | $32,689.46 | $18,679.68 | $2,801.97 | $10,896.50 | $30,510.15 | | $95,577.76 |
| Billings County | 821.80 | $862.89 | $493.08 | $73.96 | $287.63 | $805.36 | | $2,522.92 |
| Carson | 9,110.90 | $9,566.48 | $5,466.54 | $819.97 | $3,188.85 | $8,928.69 | | $27,970.53 |
| Dickinson | 678,322.90 | $712,239.07 | $406,993.74 | $61,049.07 | $237,413.04 | $664,756.44 | | $2,082,451.36 |
| Dickinson Research | 1,159.74 | $1,217.76 | $695.84 | $104.38 | $405.91 | $1,136.55 | $1,136.54 | $4,696.98 |
| Dodge | 3,467.00 | $3,640.35 | $2,080.20 | $312.03 | $1,213.45 | $3,397.66 | | $10,643.69 |
| Dunn Center | 2,978.90 | $3,127.89 | $1,787.34 | $268.10 | $1,042.66 | $2,919.34 | | $9,145.33 |
| Elgin | 21,618.30 | $22,699.24 | $12,970.98 | $1,945.65 | $7,566.43 | $21,185.94 | | $66,368.24 |
| Gladstone | 5,245.20 | $5,507.48 | $3,147.12 | $472.07 | $1,835.84 | $5,140.29 | | $16,102.80 |
| Glen Ullin | 24,433.80 | $25,655.53 | $14,660.28 | $2,199.06 | $8,551.87 | $23,945.12 | | $75,011.86 |
| Golden Valley | 4,896.20 | $5,141.05 | $2,937.72 | $440.66 | $1,713.71 | $4,798.27 | | $15,031.41 |
| Golva | 2,645.30 | $2,777.60 | $1,587.18 | $238.08 | $925.89 | $2,592.39 | $2,592.39 | $10,713.53 |
| Halliday | 9,102.00 | $9,557.12 | $5,461.20 | $819.18 | $3,185.72 | $8,919.96 | | $27,943.18 |
| Hebron | 21,312.90 | $22,378.57 | $12,787.74 | $1,918.17 | $7,459.54 | $20,886.64 | | $65,430.66 |
| Hettinger | 61,885.40 | $64,979.71 | $37,131.24 | $5,569.70 | $21,659.93 | $60,647.70 | | $189,988.28 |
| Home on the Range | 1,200.00 | $1,260.00 | $720.00 | $108.00 | $420.00 | $1,176.00 | $1,176.00 | $4,860.00 |
| Karsky Dairy | 2,054.90 | $2,157.56 | $1,232.94 | $184.94 | $719.24 | $2,013.80 | | $6,308.48 |
| Manning | 1,956.60 | $2,054.45 | $1,173.96 | $176.11 | $684.83 | $1,917.45 | $1,917.45 | $7,924.25 |
| Medora | 15,823.80 | $16,615.03 | $9,494.28 | $1,424.13 | $5,538.37 | $15,507.33 | | $48,579.14 |
| Missouri Basin | 5,120.70 | $5,376.71 | $3,072.42 | $460.86 | $1,792.25 | $5,018.29 | | $15,720.53 |
| Mott | 24,327.80 | $25,544.23 | $14,596.68 | $2,189.50 | $8,514.77 | $23,841.25 | | $74,686.43 |
| Mott Grain | 1,200.00 | $1,259.94 | $720.00 | $108.00 | $420.02 | $1,176.00 | | $3,683.96 |
| New England | 21,780.50 | $22,869.55 | $13,068.30 | $1,960.25 | $7,623.20 | $21,344.90 | | $66,866.20 |
| New Hradec | 1,245.10 | $1,307.39 | $747.06 | $112.06 | $435.82 | $1,220.19 | $1,220.19 | $5,042.71 |
| New Leipzig | 6,451.40 | $6,774.01 | $3,870.84 | $580.62 | $2,258.03 | $6,322.39 | | $19,805.89 |
| PCRWS* | 84,761.50 | $88,999.63 | $50,856.90 | $7,628.55 | $29,666.58 | $0.00 | | $177,151.66 |
| PLC** | 1,370.20 | $1,438.71 | $822.13 | $123.32 | $479.57 | $1,342.80 | | $4,206.53 |

| User | Billed+ | O&M++ | Treatment | Reserve | Replacement | Cap. Repayment | Demand | Total |
|---|---|---|---|---|---|---|---|---|
| Reeder | 4,968.80 | $5,217.28 | $2,981.28 | $447.20 | $1,739.12 | $4,869.43 | | $15,254.31 |
| Regent | 8,738.30 | $9,175.24 | $5,242.98 | $786.46 | $3,058.43 | $8,216.91 | | $26,480.02 |
| Richardton | 16,965.70 | $17,814.01 | $10,179.42 | $1,526.92 | $5,938.02 | $15,767.64 | | $51,226.01 |
| Sacred Heart | 861.00 | $904.05 | $516.60 | $77.49 | $301.35 | $843.78 | $843.78 | $3,487.05 |
| Scranton | 12,882.60 | $13,526.74 | $7,729.56 | $1,159.43 | $4,508.92 | $12,624.94 | | $39,549.59 |
| Sentinel Butte | 1,868.10 | $1,961.54 | $1,120.86 | $168.15 | $653.87 | $1,830.73 | | $5,735.15 |
| South Heart | 10,572.70 | $11,101.36 | $6,343.62 | $951.56 | $3,700.47 | $10,361.25 | | $32,458.26 |
| Steffes | 1,578.20 | $1,657.10 | $946.91 | $142.04 | $552.37 | $1,546.64 | | $4,845.06 |
| Taylor | 4,284.00 | $4,498.20 | $2,570.40 | $385.56 | $1,499.40 | $4,198.32 | | $13,151.88 |
| WMCG*** | 1,439.00 | $1,510.95 | $863.40 | $129.51 | $503.65 | $1,410.22 | $1,410.22 | $5,827.95 |
| ***Totals*** | ***1,156,967.74*** | ***$1,214,816.76*** | ***$694,180.64*** | ***$ 104,127.26*** | ***$404,939.61*** | ***$ 1,049,556.80*** | ***$11,800.38*** | ***$ 3,479,421.45*** |

***Total From Raw Water Contracts***

| User | Billed+ | O&M++ | Treatment | Reserve | Replacement | Cap. Repayment | Demand | Total |
|---|---|---|---|---|---|---|---|---|
| Abbey | 128.20 | $134.62 | | $14.10 | $44.88 | $125.64 | | $319.24 |
| Jurgens Farm | 983.00 | $1,032.15 | | $108.13 | $344.05 | $963.34 | | $2,447.67 |
| Lorenz Farm | 113.60 | $119.29 | | $12.51 | $39.78 | $111.33 | | $282.91 |
| David Perhus 1 | 62.30 | $65.42 | | $6.86 | $21.81 | $61.06 | | $155.15 |
| David Perhus 2 | 100.90 | $105.95 | | $11.10 | $35.32 | $98.88 | | $251.25 |
| Red Trail Energy | 200,000.00 | $210,000.00 | | $22,000.00 | $70,000.00 | $196,000.00 | | $498,000.00 |
| Sacred Heart | 500.00 | $525.00 | | $55.00 | $175.00 | $490.00 | | $1,245.00 |
| Taylor Nursery | 1,266.60 | $1,329.96 | | $139.33 | $443.34 | $1,241.26 | | $3,153.89 |
| ***Totals*** | ***203,154.60*** | ***$213,312.39*** | | ***$22,347.03*** | ***$71,104.18*** | ***$199,091.51*** | | ***$505,855.11*** |

***Total Beulah Interim Service Contract***

| User | Billed+ | O&M++ | Treatment | Reserve | Replacement | Cap. Repayment | Demand | Total |
|---|---|---|---|---|---|---|---|---|
| Zap | 7,192.60 | $10,716.99 | | $1,078.92 | $3,236.70 | $7,048.76 | | $22,081.37 |
| ***Totals*** | ***7,192.60*** | ***$10,716.99*** | | ***$1,078.92*** | ***$3,236.70*** | ***$7,048.76*** | | ***$22,081.37*** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ***Grand Totals*** | ***1,367,314.94*** | ***$1,438,846.14*** | ***$694,180.64*** | ***$127,553.21*** | ***$479,280.49*** | ***$1,255,697.07*** | ***$11,800.38*** | ***$4,007,357.93*** |
| + Per thousand gallons billed ++ Operations and Maintenance | | | | | | | | |

*PCRWS - Perkins County Rural Water System **PLC - Prairie Learining Center ***WMCG - West Medora Campground

# Rate History

| ***Contract Water Rate*** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | ***1992*** | ***1993*** | ***1994*** | ***1995*** | ***1996*** | ***1997*** | ***1998*** | ***1999*** | ***2000*** |
| O&M | $0.80 | $0.50 | $0.60 | $0.67 | $0.81 | $0.85 | $0.83 | $0.88 | $0.91 |
| Treatment | $0.56 | $0.64 | $0.69 | $0.65 | $0.55 | $0.55 | $0.52 | $0.56 | $0.53 |
| REM | $0.30 | $0.30 | $0.30 | $0.30 | $0.30 | $0.30 | $0.30 | $0.35 | $0.35 |
| Capital Repayment | $0.62 | $0.68 | $0.70 | $0.72 | $0.74 | $0.76 | $0.78 | $0.79 | $0.80 |
| Reserve Fund | | | | | | | | $0.05 | $0.15 |
| ***Total****** | ***$2.28*** | ***$2.12*** | ***$2.29*** | ***$2.34*** | ***$2.40*** | ***$2.46*** | ***$2.43*** | ***$2.63*** | ***$2.74*** |
| | | | | | | | | | |
| | ***2001*** | ***2002*** | ***2003*** | ***2004*** | ***2005*** | ***2006*** | ***2007*** | ***2008*** | |
| O&M | $1.05 | $1.05 | $1.05 | $1.05 | $1.05 | $1.05 | $1.05 | $1.05 | |
| Treatment | $0.53 | $0.53 | $0.53 | $0.55 | $0.55 | $0.55 | $0.60 | $0.60 | |
| REM | $0.35 | $0.35 | $0.35 | $0.35 | $0.35 | $0.35 | $0.35 | $0.35 | |
| Capital Repayment | $0.83 | $0.85 | $0.87 | $0.89 | $0.91 | $0.94 | $0.98 | $1.00 | |
| Reserve Fund | $0.20 | $0.20 | $0.18 | $0.14 | $0.12 | $0.09 | $0.09 | $0.07 | |
| ***Total****** | ***$2.96*** | ***$2.98*** | ***$2.98*** | ***$2.98*** | ***$2.98*** | ***$2.98*** | ***$3.07*** | ***$3.07*** | |

***Total Contract Rates: Rates shown are for constant flow service.
Demand flow customers pay double the capital repayment portion of the water rate.

***Rural Monthly Minimum:*** These prices include 2,000 gallons of water from 1997 to 2008.

| ***1992*** | ***1993*** | ***1994*** | ***1995*** | ***1996*** | ***1997*** | ***1998*** | ***1999*** | ***2000*** |
|---|---|---|---|---|---|---|---|---|
| $25.00 | $25.00 | $25.00 | $26.95 | $28.00 | $33.90 | $33.90 | $35.10 | $35.80 |
| | | | | | | | | |
| ***2001*** | ***2002*** | ***2003*** | ***2004*** | ***2005*** | ***2006*** | ***2007*** | ***2008*** | |
| $37.55 | $38.25 | $38.25 | $38.25 | $38.25 | $38.25 | $39.45 | $39.45 | |

| ***Rural Water Rate*** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ***1992*** | ***1993*** | ***1994*** | ***1995*** | ***1996*** | ***1997*** | ***1998*** | ***1999*** | ***2000*** |
| $2.50 | $2.50 | $2.50 | $2.50 | $2.55 | $2.55 | $2.59 | $3.05 | $3.15 |
| | | | | | | | | |
| ***2001*** | ***2002*** | ***2003*** | ***2004*** | ***2005*** | ***2006*** | ***2007*** | ***2008*** | |
| $3.60 | $3.60 | $3.60 | $3.60 | $3.60 | $3.60 | $3.65 | $3.65 | |

***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*** |
|---|---|---|---|---|---|---|---|---|
| 655,640 | 523,308 | 612,163 | 697,411 | 806,175 | 826,590 | 908,168 | 823,340 | 1,001,669 |
| | | | | | | | | |
| ***2001*** | ***2002*** | ***2003*** | ***2004*** | ***2005*** | ***2006*** | ***2007*** | | |
| 1,030,755 | 1,066,537 | 1,119,869 | 1,113,088 | 1,133,512 | 1,388,361 | 1,366,208 | | |

From July, 2002, to December, 2006, rural usage greater than 10,000 gallons per month was billed at $2.60 per thousand gallons. Beginning January, 2007, rural usage greater than 10,000 gallons per month will be billed at $2.65 per thousand gallons.

# Rural Water Usage History

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 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** |
| | | | | | | | | | | | | | |
| ***Morton County Rural Water Usage History*** | | | | | | | | | | | | | |
| 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** |
| | | | | | | | | | | | | | |
| ***Beulah Interim Service Rural Water Usage History*** | | | | | | | | | | | | | |
| 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** |
| | | | | | | | | | | | | | |
| ***2007 Total*** | ***12,867,600*** | ***11,771,000*** | ***11,329,700*** | ***12,448,400*** | ***14,496,100*** | ***16,721,800*** | ***18,379,400*** | ***25,051,500*** | ***17,648,100*** | ***32,752,500*** | ***14,819,100*** | ***13,439,000*** | ***201,724,200*** |

# 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 Southwest Pipeline Project. 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 monthly minimum payment. This money is paid monthly to the ND State Water Commission or the bond bank. Below is a chart showing the payment history of capital repayment by water users throughout the system:

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

| | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|
| 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 |
| ***Total*** | ***$857,913.22*** | ***$915,791.37*** | ***$1,025,997.24*** | ***$1,159,228.23*** | ***$1,307,862.93*** |

| | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|
| Contract | $800,159.52 | $861,015.31 | $846,041.48 | $897,289.69 |
| Rural | $630,004.66 | $718,768.94 | $774,667.77 | $809,668.64 |
| ***Total*** | ***$1,430,164.18*** | ***$1,579,784.25*** | ***$1,620,709.25*** | ***$1,706,958.33*** |

| | 2006 | 2007 | Total |
|---|---|---|---|
| Contract | $1,067,345.59 | $1,237,329.24 | $10,266,278.20 |
| Rural | $881,134.67 | $1,063,680.25 | $7,547,303.70 |
| ***Total*** | ***$1,948,480.26*** | ***$2,301,009.49*** | ***$17,813,581.90*** |

Both the Capital Repayment and Replacement & Extraordinary Maintenance rates are set annually by the ND State Water Commission.

# Replacement & Extraordinary Maintenance (REM) Fund

A portion of the water rate charged by Southwest Water Authority (SWA) is for Replacement & Extraordinary Maintenance (REM). It is based on a per thousand gallons of water billed. The REM rate is one of the components of the rate structure that is paid by all customers, both contract and rural.

Originally, the rate was set at $.30 per thousand gallons of water sold, but in 1998 a rate study was completed to determine the fairness and correctness of the rate structure. At that time, it was determined that in order to meet the needs of extraordinary maintenance of the pipeline in the future, the rate for the REM Fund should be increased to $.35 per thousand gallons and has remained this amount since 1999.

# REM Fund Continued

In 1981, the North Dakota Legislature established the Replacement & Extraordinary Maintenance (REM) Fund when the Southwest Pipeline Project (SWPP) was authorized. This fund was set up to create an account to cover costs of an extraordinary nature or to replace parts of the SWPP in the years to come as parts of the system wear out. Disbursements from this account have to meet these criteria and be approved by the ND State Water Commission and SWA Board of Directors.

When SWA took over operations and management of the SWPP from the North Dakota State Water Commission in 1996, SWA established an account to track REM funds separately and to follow the ND Century Code. The table that follows gives a summary of activity of this account.

| | 1991-1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|
| Beginning Balance | | 735,372 | 1,016,563 | 1,315,966 | 1,630,497 |
| Contributions | | | | | |
| Contract | 727,434 | 230,837 | 234,566 | 254,697 | 298,472 |
| Rural | 7,938 | 17,899 | 22,994 | 27,361 | 33,369 |
| Interest | | 22,006 | 56,919 | 83,945 | 98,511 |
| Dividends | | 13,025 | 6,524 | 9,070 | 5,601 |
| Fiduciary Fees | | (2,575) | (4,655) | (6,105) | (7,302) |
| Disbursements | | | (16,945) | (54,438) | (56,275) |
| ***Ending Balance*** | ***735,372*** | ***1,016,563*** | ***1,315,966*** | ***1,630,497*** | ***2,002,873*** |

| | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|
| Beginning Balance | 2,002,873 | 2,314,893 | 2,804,274 | 3,301,016 | 3,835,485 |
| Contributions | | | | | |
| Contract | 329,448 | 320,454 | 333,308 | 346,330 | 335,340 |
| Rural | 43,850 | 44,066 | 53,121 | 62,334 | 67,709 |
| Interest | 121,376 | 127,292 | 160,258 | 150,883 | 188,652 |
| Dividends | 9,137 | 16,575 | 4,016 | 3,985 | 2,279 |
| Fiduciary Fees | (8,602) | (9,552) | (12,177) | (14,190) | (15,845) |
| Disbursements | (174,195) | (18,448) | (41,784) | (14,874) | (193,119) |
| ***Ending Balance*** | ***2,314,893*** | ***2,804,274*** | ***3,301,016*** | ***3,835,485*** | ***4,220,502*** |

| | 2005 | 2006 | 2007 | Total |
|---|---|---|---|---|
| Beginning Balance | 4,220,502 | 4,787,646 | 5,338,238 | |
| Contributions | | | | |
| Contract | 347,808 | 425,777 | 467,831 | 4,652,302 |
| Rural | 64,725 | 82,115 | 90,793 | 618,274 |
| Interest | 198,149 | 202,716 | 258,201 | 1,668,909 |
| Dividends | 5,633 | 8,203 | 8,335 | 92,384 |
| Fiduciary Fees | (17,417) | (19,135) | (21,648) | (139,204) |
| Disbursements | (31,754) | (149,084) | 0 | (750,914) |
| ***Ending Balance*** | ***4,787,646*** | ***5,338,238*** | ***6,141,750*** | ***6,141,750*** |

# Phased Development Plan

Medora-Beach Phase III.....West

Oliver, Mercer, North Dunn Phase.....North

# SWPP Funding Sources

***State Funding (in millions of dollars)***

| | |
|---|---|
| Resources Trust Fund | $ 47.76 |
| Water Development Trust Fund | $ 8.43 |
| Subtotal | $ 56.19 |

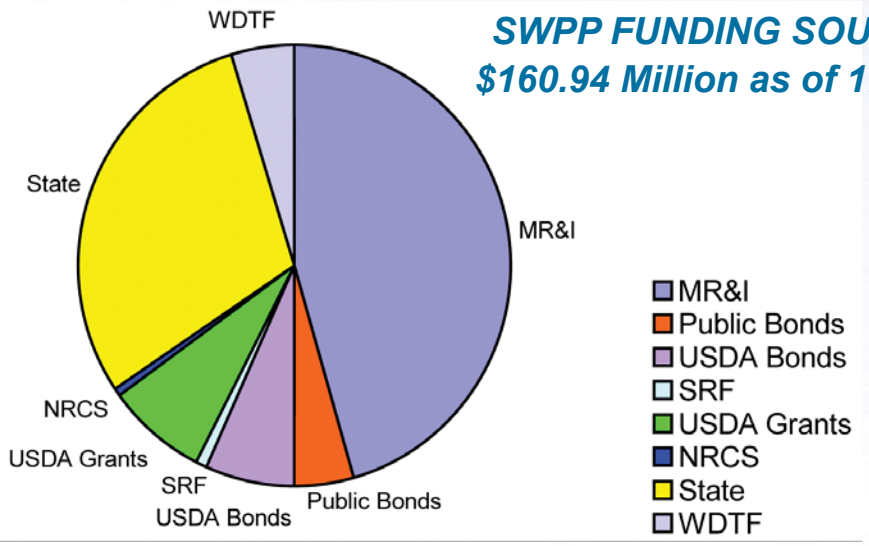
***Grants***

| | |
|---|---|
| Garrison Diversion Conservancy District | |
| Municipal Rural & Industrial Fund | $ 69.70 |
| USDA-Rural Development | $ 12.95 |
| Natural Resources Conservation Service PL566 | $ 0.90 |
| Subtotal | $ 83.55 |

***State Bonds Repaid by Users***

| | |
|---|---|
| Public Revenue Bonds | $ 7.00 |
| USDA-Rural Development | $ 12.70 |
| ND Drinking Water Revolving Loan Fund | $ 1.50 |
| Subtotal | $ 21.20 |

***Total Funding ..... $160.94***



# Electric Power Usage

Southwest Water Authority (SWA) purchases power from the federal government through the Department of Energy (DOE) for the several main transmission pumping facilities throughout the system. These expenses are identified as Western Area Power Association 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 the DOE.

Below are tables illustrating the total power usage (in kilowatt hours):

| Location | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|
| 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 | | | | | 24,331 | 187,528 |
| Bucyrus PS | | | | | 223,039 | 128,217 |
| ***Total*** | ***2,671,026*** | ***3,508,549*** | ***4,324,626*** | ***4,252,523*** | ***5,054,706*** | ***5,245,021*** |

| Location | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|
| Intake PS | 2,573,895 | 2,661,280 | 2,771,644 | 2,930,468 | 2,909,556 | 3,003,794 |
| 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 | 480,550 |
| 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 | | | 29,326 | 59,815 | 53,329 | 60,091 |
| Fryburg PS | | | | | 29,680 | 121,760 |
| Beach PS | | | | | 25,059 | 92,475 |
| ***Total*** | ***6,040,882*** | ***6,557,382*** | ***7,043,780*** | ***7,576,315*** | ***7,536,396*** | ***7,948,383*** |

| Location | 2006 | 2007 |
|---|---|---|
| Intake PS | 3,646,031 | 3,885,118 |
| Richardton PS | 2,220,764 | 2,332,003 |
| Dickinson PS | 1,649,870 | 1,650,689 |
| Dodge PS | 946,905 | 1,046,691 |
| Jung Lake PS | 713,773 | 671,259 |
| Bucyrus PS | 282,261 | 275,195 |
| WTP | 397,147 | 390,070 |
| Burt PS | 113,815 | 107,907 |
| Scranton PS | 73,489 | 75,759 |
| Fryburg PS | 167,147 | 186,280 |
| Beach PS | 119,306 | 128,422 |
| ***Total*** | ***10,330,508*** | ***10,749,393*** |

PS - Pump Station
WTP - Water Treatment Plant


Southwest Water Authority
annual operating report
2007