

Algoma Sanitary District #1 Consumer Confidence Report—2005



Winner of the 2005 Engineering Excellence State Finalist Award from the American Council of Engineering

Mission Statement

Mission Statement

To provide safe drinking municipal water and sewer services to the residents served by the Sanitary District.

Vision

We strive to be the lowest cost, highest quality provider of municipal water and sewer services in the Fox Valley.

Strategies

Build infrastructure for the long term cost benefit instead of the short-term benefit.

Provide uninterrupted service 24 hours a day seven days a week.

To have accurate quick emergency response.

Keep customer base well informed.

Quickly address new issues as they arise with long-term solutions.

Build redundancies into the system.

Minimize steps to obtain and maintain service.

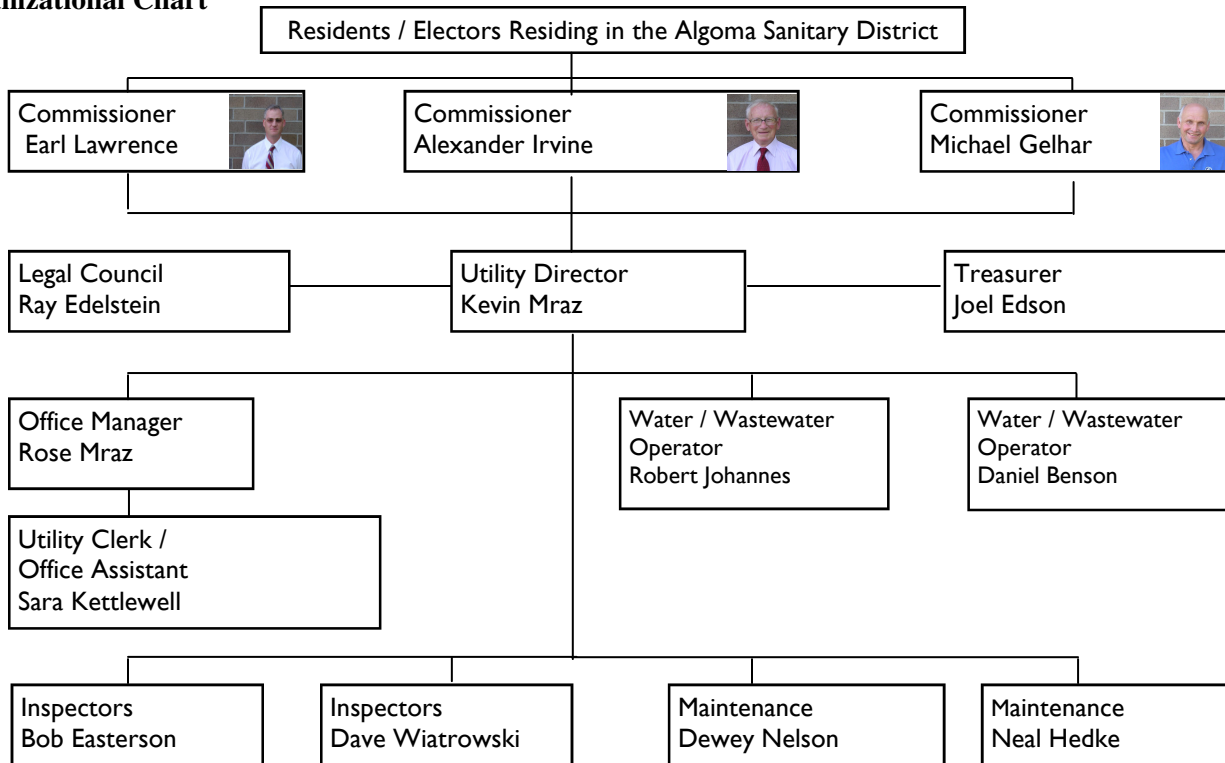
Core values

Quality: Extremely high levels of quality maintenance and materials through the system.

Customers: Consistent high level of customer service to the residents and developers.

Staff: Recruit and maintain employees with consistent positive “can do” attitude and reward them for superior performance.

Organizational Chart



Picture of Staff and Commissioners: Back Row L to R : Dewey Nelson, Joel Edson, Neal Hedke, Bob Easterson, Earl Lawrence, Dan Benson, & Dave Wiatrowski—Front Row L to R: Sara Kettlewell, Alexander Irvine, Rose Mraz, Bob Johannes, & Kevin Mraz. Michael Gelhar not present.

Algoma Sanitary District #1
1220 Oakwood Circle
Oshkosh, WI 54904

Phone: (920) 426-0335
Fax (920) 426-1181

E-mail: talgsd@charterinternet.com
Future Website: Algomasd.com

Office Hours
Monday through Friday
8:30 to 11:30 a.m. & 12:30 to 4:30 p.m.

Tours and Water Tasting

We have water available to taste test during our normal business hours at the District Office.

If you desire to have a tour through your water treatment facility please stop in the office or call us at 426-0335 to set up a tour date.

Construction—2005

Construction schedules for 2005 are posted at:

Algoma Sanitary District.
Algoma Town Hall, 15 N. Oakwood Rd.
Kolb's Garage, 2652 Omro Rd.
Service Oil Company, 2531 Omro Rd.

District President's Message



Greetings fellow Sanitary District customers. I say fellow, because like you the Commissioners that oversee this utility are required to be, and elected from, residents of the District's service area. I think this is important as your Commissioners pay the same taxes and fees and have to follow the same policies and ordinances as those we serve; this relationship ensures that we are directly connected to the wants and needs of our community.

The District has gone through a great amount of growth, both in size and service provided, over the last two years. We have constructed an award winning water system on schedule and on budget, increased staff from part time only to a full time staff of five, upgraded our sewer service facilities and have kept the same fees and taxes for the District throughout this period. The assets of the District have increased over 70% while during the same time period operating expenses increased by less than 30%. The success of all this activity goes to the many volunteers, staff and engineers that have helped the District through this period. I also thank all the volunteers who gave of your time and talent to assist the District through this

time of great change.

I would like to put into perspective for all of you the size of the area we serve. Many do not realize that the "Algoma" Sanitary District actually provides services to one City (Oshkosh), and two Towns (Algoma and Omro). The District provides over 73,000 gallons of treated municipal water each day and removes from your residences and businesses over 750,000 gallons of sewerage each day. The expectations of all our customers, regardless of where they live, is that we do our job 24 hours a day 7 days a week without them knowing or thinking about what we do. As you will read we are working hard to ensure that all your expectations are met.

Finally, this bulletin represents our first yearly report on the condition of your water system as required by the Wisconsin DNR. The information required to be published is on page 4 & 5 of this newsletter. It is full of important information on the water we provide and how we manage OUR system. Thank you for taking the time to read this information and I hope you will learn and benefit from the information we are providing in this report.

Best Regards,
Earl Lawrence

Utility Director's Message



Hello, I will tell you a little background of what the District has done over the past two years and what is planned for the future.

Reflecting back, the previous two years have been filled with an enormous amount of growth for the District. We have constructed two water treatment facilities and a 400,000 gallon water tower. The water tower can hold water capacity for 1900 homes. Also installed was over 14 miles of water main pipe with 1023 residential service valves and 174 fire hydrants to provide fire protection in the Town of Algoma.

During this time of growth, we have had numerous meetings to supply information to all residents with questions and concerns. Through these meetings I have had the privilege of meeting so many residents of which I must say every time I meet a new resident it is a pleasure whether I am able to provide a service to you or just answer your questions. I have enjoyed all your acquaintances through which makes the District so special. It gives me great pleasure to know how involved the public is and that your pride and commitment is equal to mine for this community as this input allows us to develop the best water system possible for you. Again, my goals from our District staff is to provide the best water quality and services to your properties 24/7 as displayed in the mission statement we developed for the District.

The District is committed to water quality, as this is the most important concern for all of us, and I am very pleased to report to you that we have zero (0) contaminants above State and Federal Standards. The Arsenic level is zero (0) and the Iron level is zero (0).

To date, we have 248 homes using the Municipal Water System, and currently about 3% of those homeowners have

decided to permit their well for outside hose faucets. This summer we will install approximately 10 miles of pipe and 525 services

It is also in the spirit of Safe drinking water that we supply water to the neighboring Town of Omro. We are providing water service for them as they also are in the Arsenic Advisory Area and this adds an economic benefit to our water system. This is also, in part, to help reduce the impact future developments may have on the water table our residents use for private wells. This allows the shallower existing wells to stabilize by reducing the current impact of numerous wells being drilled to the same water table, the District draws water from the Lake Superior aquifer.

The District's water system has done an exceptional job staying below budget for the water treatment facilities and water tower projects. With this statement, and as more water users hook up to the water system, it will allow us to maintain the same water rates to the water users.

The District's sewer system is an efficient utility provider and has had the same price locked in for the sewer users with an annual sewer rate of \$180.00 per single residential home since 1998.

As with any leading organization, it is required to look into the future and anticipate the needs long before infrastructure is required. Our continual foresight and proactive commitment to you will help assist the District in staying financially sound and always with the safest drinking water available in adequate supply. Not to mention the best tasting. Being your Utility Director, I will also strive to maintain a strong public informational force while implementing the water and sewer system growth to protect the health and welfare of our community.

Sincerely,
Kevin Mraz

The following two pages are provided from the DNR and required to be part of our Consumer Confidence Report:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural

livestock operations and wildlife.

- Inorganic contaminants, such as salts and metals, which can be naturally- occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Footnote: On October 31, 2001, EPA announced the adoption of 10 ppb as the new Arsenic standard in drinking water. This new standard is 5 times lower than the previous MCL of 50 ppb and will be enforced starting January 2006.

Source of Water		
Source id	Source	Depth (in feet)
1	Groundwater	336 (cased depth) 673 (total depth)

Number of Contaminants Required to be Tested

This table displays the number of contaminants that were required to be tested in the last five years. The CCR may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	# of Contaminants
Disinfection Byproducts	1
Inorganic Contaminants	4
Microbiological Contaminants	1
Radioactive Contaminants	1
Unregulated Contaminants	4
Volatile Organic Contaminants	21

Inorganic Contaminants (Results for our District)

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2004)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	.862	.862		NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	1.0 (average)	.3- 1.3		NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	11.8	11.8		NO	Corrosion of household plumbing systems; Erosion of natural deposits
ARSENIC (ppb)	.05	N/A	0	0-0		NO	Erosion of natural deposits; Runoff from orchards; "Runoff from glass and electronics production wastes

Radioactive Contaminants (Results for our District)

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2004)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	11.7 (average)	10.0- 15.0		NO	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY (pCi/l)	n/a	n/a	7.1 (average)	6.9- 7.2		NO	Decay of natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l.
RADIUM, (226 + 228) (pCi/l)	5	0	3.2 (average)	1.1- 4.3		NO	Erosion of natural deposits

Unregulated Contaminants (Results for our District)

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2004)	Violation	Typical Source of Contaminant
BROMODICHLOROMETHANE (ppb)	n/a	n/a	.75 (average)	nd- 1.50		NO	n/a
CHLOROFORM (ppb)	n/a	n/a	2.02 (average)	.24- 3.80		NO	n/a
DIBROMOCHLOROMETHANE (ppb)	n/a	n/a	.50 (average)	nd- 1.00		NO	n/a

Volatile Organic Contaminants (Results for our District)

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2004)	Violation	Typical Source of Contaminant
TTHM (ppb)	80	0	3.3 (average)	.2- 6.3		NO	By-product of drinking water chlorination

Definition of Terms

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MFL	million fibers per liter
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Water Rates

The Wisconsin Public Service Commission (as required by State Statutes) has established the regulated water rates for the District's Water Utility. Rates are billed quarterly to those **homes who decide to hook up** to the Municipal Water System. Your bill is made up of a base rate, a Fire Protection Fee and a rate for water used.

1. The base rate for a ¾" meter	\$27.00 per quarter
2. Fire Protection Fee.....	\$21.75 per quarter
3. Water rate per 1,000 gallons of water used is \$2.70. An average 3 person household uses approximately 17,000 gallons of water per quarter for a total of	<u>\$45.90 per quarter</u>
Estimated quarterly bill	<u>\$94.65 per quarter</u>

Voluntary Water System—How to Hook Up

The steps necessary to hook up to the Municipal Water System after the service valve is installed to your property line are as follows:

- Hire a contractor for installing a pipe from the service valve to your house and a plumber to install the water meter. Be sure your contractor installs the correct size service pipe for you.
- The District requires your plumber to supply water calculations for your house. The connection permit is \$40.00—one time fee. The District requires your plumber to pick up your water meter.

- Your plumber will be responsible to verify no cross connections exist between your residential well and the Municipal Water System.
- The District requires 24 hour notice to inspect both the exterior hookup and the interior connection. After inspection, the District will turn on the water valve.
- The meters are remotely read that requires nothing to be attached to the outside of your house. The Water Operators only need to drive past your house to read the meter.

Note: Only after you decide to connect your building to the Municipal Water System and use the municipal water, you shall permit your well or abandon your well. The District only requires one of the choices listed below after you start using municipal water.

Well Operation Permit

If/after you are using the Municipal Water System, you decide to keep your well, you must obtain a well operation permit from the District. Requirements for a well operation permit are:

- You are required to have two safe bacteriological samples taken two weeks apart within 2 months of permitting. The permit costs \$40.00. The permit is good for 5 years and at that time needs to be renewed.
- Your well and pump installation meet or are upgraded to meet the requirements of Chapter NR 812, Wis. Adm. Code.
- There shall not be cross-connections between the residential well pump installation and the Municipal Water System. Your plumber must isolate the two water systems. Your well may be used for outside hose bibs, toilets, and/or other fixtures as long as it is separated from the Municipal Water System.

OR

Well Abandonment

If you decide to abandon your well, the District has an \$800.00 credit toward well abandonment. This will be available for 1 year after the Municipal Water System is available to you.

All wells shall be abandoned according to the procedures and method of Chapter NR 812 Wis. Adm. Code.

A copy of the abandonment report form, supplied by the Department of Natural Resources, shall be submitted by the well owner to the Sanitary District and the Department of Natural Resources within ten days of the completion of the well abandonment. After the District receives your Well Abandonment Form, we will do the following:

If your assessment is paid in full, the District will issue you a check for \$800.00. If you are paying your assessment over the 20 year plan, the District will credit your assessment \$800.00.

Beyond 2005

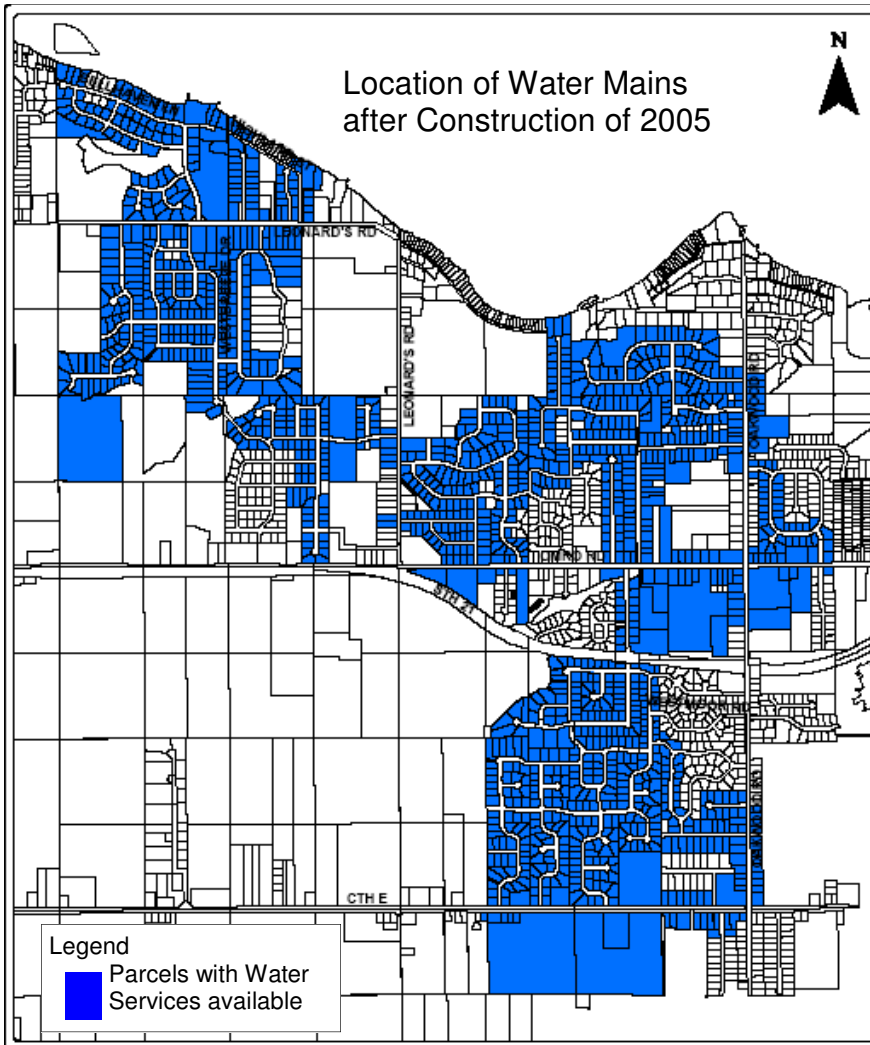
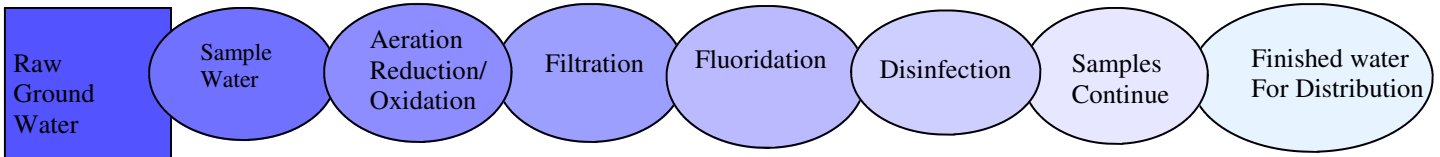
The water system has undertaken two large phases of construction that include 24 miles of water main. The District has based Phase I and II construction on responses to surveys. The District now has numerous areas in the town that are within close proximity to a water main that may be easily extended in the years to come to service the homes that request water mains to be installed.

If you want water available to your property you may ask the District to survey your area. We will act on those requests by residents to survey specific areas of our Town to determine

if the need or desire is great enough to install future water mains.

The District will also review petitions from neighborhoods requesting the installation of water mains. These petitions will be available at the District office and need to be signed by all affected parcel owners. The petitions can be passed door to door within each neighborhood requesting water mains. Petitions have been successful in bringing water mains into localized areas as it shows upfront which properties desire to have the Municipal Water System available at their property line.

Water Treatment Flow Chart



This is the Chlorine and Fluoride Room



The District adds fluoride to increase the naturally occurring fluoride of 0.40 PPM up to a level of 1.1 PPM to meet the dental hygienist recommended level.

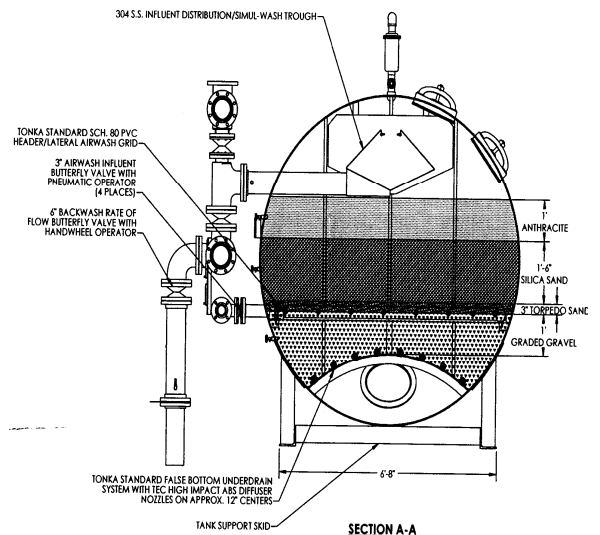
Filtering System for Water



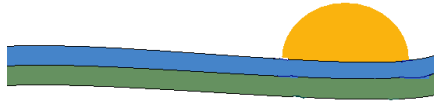
This is the 40 horsepower motor that pumps 400 GPM of water to the 144' tall water tower.



This is the iron filter that removes iron from the groundwater. Every two weeks, operators backwash this filter. We use reduction and oxidation filtration to remove iron.



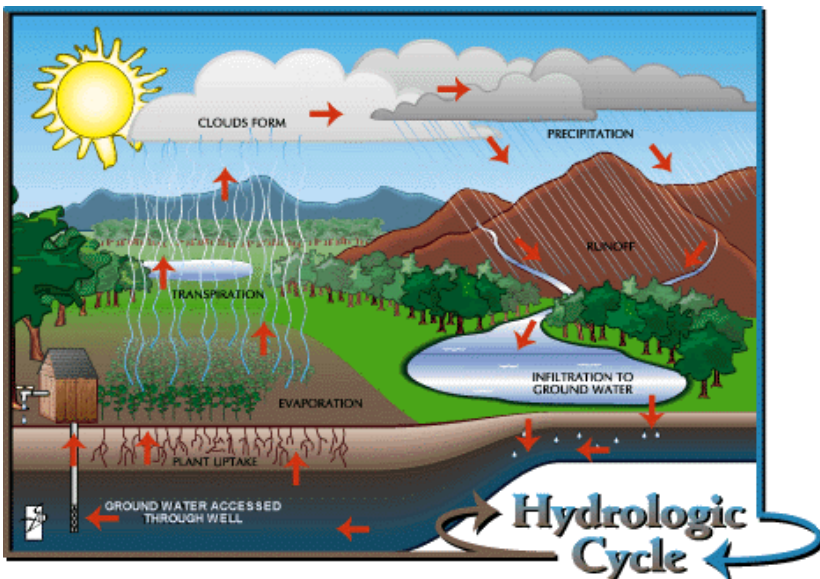
This shows the inside profile of the iron removal filter tank



Municipal Water System Overview

The District maintains, within the Town of Algoma, a water system that currently consists of one well (673 feet deep), one water treatment facility, one 400,000 gallon water tower and 14 miles of water main. Current construction will add an additional well (655 feet deep), an additional water treatment facility and another 10 miles of water main. At completion of construction this year the District will have 1,548 service valves installed. In addition the District can supply water to the Town of Omro Sanitary District for up to an additional 240 customers, and through a contractual agreement provides maintenance and administrative support for the water system in the Town of Omro. Although the District provides water to other municipalities we do not currently receive water from other municipalities. Page 7 of this report shows pictures with descriptions of well pump number one, the iron filter and the fluoride room.

As a resident of the Algoma Sanitary District, you are receiving this newsletter to inform you of the status of the Municipal Water System.



Where your water comes from

The Algoma Sanitary District has 2 deep water wells drawing water from the Lake Superior Aquifer and does not obtain water from other municipalities. Water quality is affected by the Hydrologic Cycle which is defined here.

Infiltration is the entry of water into the soil surface. Infiltration constitutes the sole source of water to sustain the growth of vegetation and it helps to sustain the ground water supply to wells, springs and streams. The rate of infiltration is influenced by the physical characteristics of the soil, soil cover (i.e. plants), water content of the soil, soil temperature and rainfall intensity. The quality of ground

water is affected by infiltration.

Runoff is the movement of water, usually from precipitation, across the earth's surface towards stream channels, lakes, oceans, depressions or low points in the earth's surface. The characteristics that affect the rate of runoff include rainfall duration and intensity as well as the ground's slope, soil type and ground cover.