

The PipeLine

City of Englewood

Utilities Department Newsletter

Spring 2010

Maintaining an aging infrastructure

Aging infrastructure, including water and sewer mains, are a growing concern for municipalities across the country. Colorado's drinking water and wastewater systems are aging – some systems in the Denver metro area are more than 100 years old.

Englewood's original water and sewer mains were installed in the 1930s, or even earlier in some parts of town. The Englewood Allen Water Treatment Plant was originally constructed in 1951 and a new pretreatment facility was built in 2000.

Englewood's Utilities Department works to be proactive in maintaining the water mains and facilities. Strategies are in place for extending the service life of existing infrastructure by performing regular maintenance and repairs. For instance: all of Englewood's water storage facilities are cleaned and



The East Reservoir at Englewood's Allen Plant provides scenery, but is also part of the treatment process.

inspected every three years; all water plant equipment has an aggressive preventive maintenance schedule; if possible, water and sewer mains are flushed once a year; and water mains are evaluated and replaced according to the highest need.

These maintenance strategies must go hand-in-hand with planning for new technologies to meet increasingly stringent water treatment regulations. Utilities

staff works to keep abreast of new technologies and treatment approaches that will help move Englewood's water system into the future.

Englewood Water and Sewer Board

- A. Gray Clark, Chair
- Robert Cassidy, Vice Chair
- Tom Burns
- Chuck Habenicht
- Jim Higday
- Clyde Wiggins
- Bob McCaslin, City Council Liaison
- Linda Olson, City Council Liaison
- Jim Woodward, City Council Liaison

The Englewood Water and Sewer Board is a volunteer citizen board that offers recommendations to City Council on water and sewer issues. The board meets the second Tuesday of each month at 5 pm. Meetings are held on the third floor of the Englewood Civic Center (1000 Englewood Parkway). Meetings are open to the public and interested residents are invited to attend.

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City of Englewood Utilities Department

1000 Englewood Parkway
Englewood, CO 80110
303-762-2635
www.engagewoodgov.org

Pick the payment method that works best for you

Englewood's Utilities Department offers a variety of ways for you to pay your bill:

■ **Online or Over the Phone using Credit Cards, Debit Cards, or Electronic Checks:**

Englewood offers Internet and telephone-based payment services. Our online payment website is www.Englewoodutilities.org. Follow the prompts to pay your bill using a credit card, debit card, or an electronic check. The same service is available by calling 303-783-6930. We accept Visa, Master Card, and Discover. Please have your customer number and account number handy (see illustration below). They

are located in the upper left hand corner of your bill. You can make partial payments by writing over the amount due.

■ **In Person:** We take all forms of payment at the Cashier's window on the third floor of the Englewood Civic Center (1000 Englewood Parkway). Please bring the return portion of your bill with you.

■ **By Mail:** Write out a check and mail it in with the return portion of you bill. Please allow 7-10 days for it to be posted to your account and allow enough time before the due

date to avoid late fees or turn-off notices.

■ **Drop Boxes:** There are two payment drop boxes at the Englewood Civic Center – one on the south side by the door to the lower parking lot, and the other is on the north side on the circular drive near the library entrance.

■ **Through your Bank's Check-writing Services:** Check your bank's website for details. You can authorize the bank to issue a check on your behalf if you provide the account and amount.

REMEMBER: Payments must be received and posted to your account to avoid late fees and turn off notices. Don't wait until the last minute to pay.

CITY OF ENGLEWOOD		
ENGLEWOOD CIVIC CENTER 1000 Englewood Pkwy, Englewood, CO 80110		
ACCOUNT NUMBER	BILLING DATE	DUE DATE
00010101 12345678910	12/25/10	1/25/11



Englewood's City Ditch was built in the 1860s to provide irrigation water to Denver. This is how the City Ditch appears today near East Layton Avenue and South Mariposa Drive.

Water Saving Tips

The Utilities Department offers the following suggestions on ways to save water:

- Do not water impervious areas such as parking lots, alleys, sidewalks, and driveways.
- Repair leaking irrigation fixtures and hoses.
- Hand water steep slopes or other hard-to-water places.
- Let your lawn tell you when it needs water. Look for a bluish color and grass that doesn't spring back when stepped on.
- Do not water during high winds.
- Water before 10 am or after 6 pm, not during the heat of the day.

For more ideas on ways to conserve water inside and outside the home, visit the following websites: www.wateruseitwisely.com or www.ext.colostate.edu/menu_water.html.

Water hardness Is it a problem?

Spots on glasses and silverware? Whites dingy? Shampoo doesn't lather like you expect? The likely culprit is hard water. Hard water is the most common water quality problem and occurs in more than 85% of the United States water systems. While this water condition can cause white chalky deposits on plumbing, tubs, sinks, laundry, dishes, and glasses it is safe for drinking, cooking, and bathing.

Hard water conditions occur when raw water sources pick up excess minerals after flowing through soil and rock. Englewood's water hardness depends on flow releases from Chatfield Reservoir, Bear Creek, and City Ditch as well as precipitation from rain and snow. The water in Englewood's system tends to be harder in winter than in summer.

The most common method to treat hard water is with a water softener, which uses sodium ions to replace the hardness ions. This method of water softening is very effective but does increase the sodium content in the water. Softened water can be harmful in some medical conditions, aquariums, or house plants.

The PipeLine newsletter is published each spring by the City of Englewood's Utilities Department. *The PipeLine* provides the Annual Drinking Water Consumer Confidence Report and offers information on water and wastewater issues and projects. This newsletter is available in alternative format upon request.

If you have comments, suggestions, or questions, please call the Utilities Department at 303-762-2635.

Additional information about Englewood's water treatment operations is available on our Web site: www.engagewoodgov.org.

Why doesn't Englewood offer rebates?

Englewood's Utilities Department receives frequent inquiries about why Englewood doesn't offer rebates for high-efficiency low-flow appliances like Denver Water does.

The primary reason we don't offer rebates is because a refund program would have to come out of water revenues, which could necessitate an increase in water rates.

Through water rights going back to 1859, Englewood's senior water rights ensure enough to meet present and future demands. We even have enough surplus to lease water to Highlands Ranch, which helps keep Englewood's rates competitive.

We are also fortunate to have residents in Englewood who are dedicated to conserving water. Even when we have experienced drought-like conditions and other water utilities instituted mandated restrictions, our usage rates showed that our customers didn't use any more water than customers in other areas that had mandatory water-usage restrictions.

Another factor with low-flow appliances is that higher flows are necessary to work properly with Englewood's aging sewer system.

Englewood Utilities Department

Englewood Civic Center, Third Floor
1000 Englewood Parkway, Englewood, CO 80110
303-762-2635 • www.engagewoodgov.org

Online Payments: www.engagewoodutilities.org

Emergencies:

Daytime: 303-762-2635 • After Hours: 303-762-2650

Locating underground utilities Call 811 before you dig!

Any time you plan construction or excavation and the earth will be removed, excavated, backfilled, plowed, scraped, or graded, you or your contractor are required by State law to notify the Utility Notification Center of Colorado (UNCC). Locating the utility lines before you start work will help ensure that you avoid them when you are digging or excavating.

Dial 811 so the UNCC can locate all utility lines in the area to be excavated. The utilities will be marked on the ground with spray paint or colored flags. Green paint is used for storm sewers and sewers, blue for water lines, orange for electric lines, and yellow for gas lines.

(Utility notification regulations are covered by Title 9, Section 1, Article 1.5 of the Colorado Revised Statutes.)

City of Englewood Utilities Department

2010 Drinking Water Consumer Confidence Report for Calendar Year 2009

Public Water System ID# CO0103045

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water.

The City of Englewood's drinking water meets or surpasses all federal and state drinking water standards. No violations of any kind occurred during 2009.

General Information About Drinking Water

All 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 the water poses a health risk. 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 system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants, call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

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, that 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants** that 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, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of

certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Englewood's Water Sources

Source	Water Type
South Platte River	Surface Water
City Ditch	Surface Water
McBroom Ditch/ Bear Creek	Surface Water
McLellan Reservoir	Surface Water

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting www.cdph.state.co.us/wq/sw/swaphom.html, by visiting the City of Englewood's website at www.engagewoodgov.org, or by contacting Bill McCormick at 303-762-2635.

Potential sources of contamination in our source water area come from: EPA superfund sites; EPA abandoned contaminated sites; EPA hazardous waste generators; EPA chemical inventory storage sites; EPA toxic release inventory sites; permitted wastewater discharge sites; storage tank sites; solid waste sites; existing/abandoned mine sites; other facilities; commercial/industrial/transportation; residential; urban recreational grasses; quarries/strip mines/gravel pits; row crops; fallow ground; small grains; pasture/hay; forests; septic systems; oil and gas wells; and road miles.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It does not mean that the contamination **has or will** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Please contact Bill McCormick at 303-762-2635 to learn more about what you can do to help protect your drinking water sources, if you have any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or find out how to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Please Note: The format of this Consumer Confidence Report is guided by requirements of the Colorado Department of Public Health and Environment. The information contained in this water quality report is technical in nature, and customers may not be familiar with some of the terms used in the report. If you have questions about the details contained in this report, please call the Englewood Utilities Department at 303-762-2635.

Terms & Abbreviations

The following definitions will help you understand the terms and abbreviations used in this report.

- **AL: Action Level** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.
- **MCL: Maximum Contaminant Level** – The “Maximum Allowed” is 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 “Goal” is 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.
- **MRDL: Maximum Residual Disinfectant Level** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **ppm: Parts per million or Milligrams per liter (mg/L)** – one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **ppb: Parts per billion or Micrograms per liter (ug/L)** – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **RAA: Running Annual Average** – An average of monitoring results for the previous 12 calendar months.
- **TT: Treatment Technique** – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

The City of Englewood routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show all detections found in the period of January 1 to December 31, 2009 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old.

The “Range” column in the tables to the right will show a single value for those contaminants that were sampled only once. Violations, if any, are reported in the next section of this report.

Microbiological	Result	MCL	MCLG	Typical Source
Coliform, Total (TCR)*	Positive Samples: November (2 out of 612)	MCL: Systems that collect 40 or more samples per month - No more than 5% positive monthly samples.	0	Naturally present in the environment
Coliform, E. Coli	The following months had positive samples: None	MCL: A routine sample and a repeat sample are total Coliform Positive, and One is also Fecal Positive/E. Coli Positive	0	Human and animal fecal waste
Giardia	Cysts/L Average Monthly Sampling	5.7		Human and animal fecal waste

* Englewood takes 50 TCR samples per month

Inorganics	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Barium	2/11/2009	0.046	0.046	ppm	2	2	Discharge of drilling wastes; Discharge from metal refiners; Erosion of natural deposits
Fluoride	2/11/2009	0.61	0.61	ppm	4.0	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	2/11/2009	1.2	1.2	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits.
Nitrate-Nitrite	2/11/2009	1.2	1.2	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits.
Nitrate (As N)	2/11/2009	1.9	1.9	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits.
Selenium	2/11/2009	3.1	3.1	ppb	50	50	Discharge from petroleum & metal refineries and mines; Erosion of natural deposits.

Turbidity	Sample Date	Level Found	TT Requirement	Typical Source
Turbidity	Monitored Continuously	Highest single measurement: 0.335 NTU on 4/21/2009	Maximum 1.0 NTU for any single measurement	Soil Runoff
	Month: Monitored Continuously	Lowest monthly percentage of samples meeting TT requirement for our technology: TT Requirement met 100% of the time	In any month, at least 95% of samples must be less than 0.3 NTU	

Disinfection By-Products	Date	Average	Range	Highest RAA	Unit	MCL	MCLG	Typical Source
Total Trihalomethanes (TTHM)	2009	29.89	25.2 - 36.1	34.81	ppb	Total 80.000	N/A	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5)	2009	15.05	12.8 - 15.9	15.05	ppb	60.000	N/A	By-product of drinking water disinfection

Disinfection By-Products	Year	Compliance Descript	Requirement	Typical Source
Control of disinfection by-product precursors	2009	We used treatment to remove the required amount of natural organic material and/or we demonstrated compliance with alternative criteria.	TT	Natural organic material that is present in the environment

Total Organic Carbon (TOC)	Date	Average for Year	MCL	MCLG	Typical Source
Source TOC	2009	3.9	TT	N/A	Naturally present in the environment
Finished TOC	2009	2.48	TT	N/A	Naturally present in the environment
Total Alkalinity (source)	2009	113	No MCL Established	No MCL Established	Naturally present in the environment

TOC Removal	Average Removal	Range of Removal	RAA	Required RAA	Typical Source
Total Organic Carbon (TOC)	1.57	147 - 1.57	1.57	1.0	Naturally present in the environment

Synthetic Organic Contaminants Including Pesticides and Herbicides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
2, 4-D	9/22/2009	0.16	0.16	ppb	70	70	Runoff from herbicide used on row crops

Secondary Contaminants/Other Monitoring ¹	Collection Dates	Highest Value	Range	Unit	Secondary Standard
Sodium	2/21/2009	57	57	MG/L	10000
Solids, Total Dissolved (TDS)	Bi-weekly	642	181 - 642	MG/L	500

Microscopic Particulate Analysis	
Source Water	Amorphous debris, diatoms, pollen, arthropods
Finished Water	Amorphous debris, diatoms, pollen, arthropods

No violations occurred in 2009.

¹ Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. The EPA recommends these standards but does not require water systems to comply.

Health Information About Water Quality

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Englewood is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize

exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at www.epa.gov/safewater/lead.

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms (4.0 oocysts/L) in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and

abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water."

There are no additional health effects notices.

The City of Englewood's Water and Sewer Board meets at 5 pm the second Tuesday of each month at the Englewood Civic Center. Please feel free to attend these meetings.

Interesting health facts

from www.allaboutwater.org

- Drinking water can help you maintain a healthy body weight by increasing metabolism and regulating appetite.
- Drinking water leads to increased energy levels. The most common cause of daytime fatigue is actually mild dehydration.
- Drinking water leads to greater health by flushing out wastes and bacteria that can cause disease.
- Drinking adequate amounts of water can decrease the risk of certain types of cancer.
- Drinking water can prevent and alleviate headaches.
- Water naturally moisturizes skin and ensures proper cellular formation underneath layers of skin to give it a healthy appearance.

Water supply outlook above average

Englewood's water supply outlook for the coming irrigation season looks positive. Thanks to the spring snowstorms, the South Platte River Basin snowpack and reservoir storage are slightly above average.

Couple that with our senior water rights and the yield we expect from our trans-mountain diversions, and we

should have more than enough water to meet this summer's demands.

We do not anticipate any mandatory watering restrictions this summer.

We do not anticipate any mandatory watering restrictions this summer, but even so, we do encourage our customers to conserve water, both inside and outside the home. See page two

for helpful water-saving tips or visit www.wateruseitwisely.com.

Moving?

Don't forget to notify the Utilities Department!

To transfer service, request a final bill, or change the name on an account, contact the Utilities Department at 303-762-2635. If you are buying or selling a home, the title company processing the sale should submit this request by fax to 303-783-6894. The request must include the buyer's name, the property address, and the date of closing.



Contractors who use water from Englewood's fire hydrants are required to display a permit approved by the City of Englewood.

Permits required for fire hydrant use

In order to maintain the safety and integrity of Englewood's fire hydrants, the hydrants cannot be used by any individual or company without pre-authorization and a permit from the Utilities Department. This helps ensure that the hydrants are in good working order for the City's firefighters, street cleaners, and water system crews.

Typical permit applicants may include landscapers, asphalt companies, or demolition contractors. All permit-holders must pay a \$600 refundable damage deposit and must provide their own tools. The permittees must also pay for the water they use. Once

approved, the contractor must display the permit on the hydrant. A Utilities Department Technician will perform pre-use and post-use inspections on the hydrant to ensure that no damage was done.

To help stop unauthorized use of hydrants, the Utilities Department offers a hydrant permit bounty program. If you see someone using a hydrant without a permit clearly displayed, you may receive a \$100 reward if you are willing to remain on site as a witness until a Code Enforcement Officer arrives. To report a violation, call the Utilities Department at 303-762-2635.

Metered v. flat rates: What's the difference?

When the City of Englewood obtained its own water rights and separated from Denver, all water and sewer accounts were flat rate. Later, Englewood required all new and commercial accounts to be metered. Homes purchased before 1987 are required to be placed on a meter when the title of the property changes hands. When a title change does occur, the buyer or seller must have a meter installed within 90 days of closing.

Existing flat rates are not based on the number of people living in the house but rather, on the number of rooms, water-using appliances, and the size of the lot. Flat rate charges increase at the same time that there are rate increases for metered accounts. In most cases going from flat-rate to meter saves money,

but once an account is metered, it cannot revert back to flat rate. Because metered accounts are based on consumption, savings will vary, especially during summer irrigation months when periods of high water usage are possible.

Customers can figure how many thousands of gallons of water they are being charged for per month on their flat rate account by taking the dollar amount under “water cycle bill” on their bill, dividing by 3, then dividing that amount by \$3.11. The average household uses 2,000 gallons of water per person, per month during the winter months. Loads of laundry per week, pets, the amount of time spent at home, and other factors will cause water usage to vary greatly from home to home.

If residents decide they would like to convert to a meter, the process involves an initial appointment and inspection of where the water line comes into the house and whether a meter pit exists. Next, the homeowner must purchase a meter and yoke (a saddle that holds the meter). The average meter purchase is approximately \$200 – sometimes more if a meter pit must be installed in the front yard, or less if a meter pit already exists. The Utilities Department will provide detailed instructions on installing the equipment. Handy homeowners can usually install the device themselves, but if a plumber is preferred, the cost must be paid by the homeowner.

For more information on converting to a meter, call the Utilities Department at 303-762-2635.

Prevent stormwater pollution

How you can help keep the South Platte River clean

Stormwater pollution is recognized as a serious environmental concern. Englewood's storm drains connect directly to the South Platte River and consequently, everything that washes into the drains ends up in the river.

Rain and melting snow wash soil, litter, fertilizers, pesticides, yard debris, sediment, oil, grease and other hazardous materials into the storm sewer. The storm sewer empties into Englewood's waterways, which all empty into the South Platte River.

Here are some actions you can take to help keep harmful substances out of the water stream.

Stormwater Pollution Prevention Tips:

- Do not dispose of motor oil, antifreeze, pesticides, paints, solvents, or other materials into the storm drain.
- Clean up the leaves or grass clippings that accumulate on your driveway, sidewalk, or street.
- Recycle your yard waste by composting.
- Dispose of pet wastes by flushing them down the toilet or throwing them in the trash.
- Make sure your garbage can's lid fits tightly. Secure your recyclables so they don't blow away.

- Use organic non-toxic pesticides and fertilizers. Don't over-fertilize.
- Plant groundcover where there is exposed soil to help deter erosion.
- Minimize use of salt on driveways and sidewalks in winter. Try using cat litter or sand instead.
- Store compost piles and firewood piles way from creekbeds and other drainage areas.
- Cut down tall grass and remove debris, deadfall, and tree limbs from drainage areas in your yard.

City of Englewood
Utilities Department
1000 Englewood Parkway
Englewood, CO 80110
www.engagewoodgov.org

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2009 Project Update

2009 was a busy year for the Utilities Department. In addition to the daily operations associated with running a water system, the department completed several important water infrastructure projects that will maintain and improve water quality in Englewood.

Water Main Replacement 3900 and 4000 blocks S. Pearl St.

Two blocks of water mains were replaced in the 3900 and 4000 blocks of South Pearl Street. The 4" unlined cast iron post-World War II water main had been reduced to 2" due to minerals and rust deposits. A new 8" main was installed and 48 ¾" taps and service lines were replaced. 452 feet of ¾" service line was replaced to the curb stops.

Water Main Rehabilitation Union Avenue

The 16" potable water main from the Platte River bridge to Santa Fe on Union Avenue that serves southwest Englewood failed, resulting in numerous main breaks. Heavy truck

traffic going to Waste Management made it impossible to close the road for excavation, so after investigating various solutions, the engineers decided to line the pipe rather than replace it. The lining project on Union Avenue was the first water main to have this process used.

Zuni Tank Rehabilitation

Under a scheduled maintenance plan to extend the life of Englewood's water tanks, the 500,000 gallon Zuni Tank, located at Zuni and Bates was

sandblasted and repainted. All of the interior and 50% of the exterior was rehabbed.

Pump Maintenance

To maintain a continuous and reliable source of water pressure throughout the system, various pumps were replaced at the Union Avenue pump station and the Allen Filter Plant. Crews also replaced a McLellan Reservoir pump that pumps raw water from the reservoir to the City Ditch.



BEFORE – The Zuni Water Tank before repairs and rehabilitation.



AFTER – The Zuni Water Tank after it was sandblasted and repainted inside and out.