LOUISIANA DRINKING WATER PROTECTION PROGRAM

2017 newsletter

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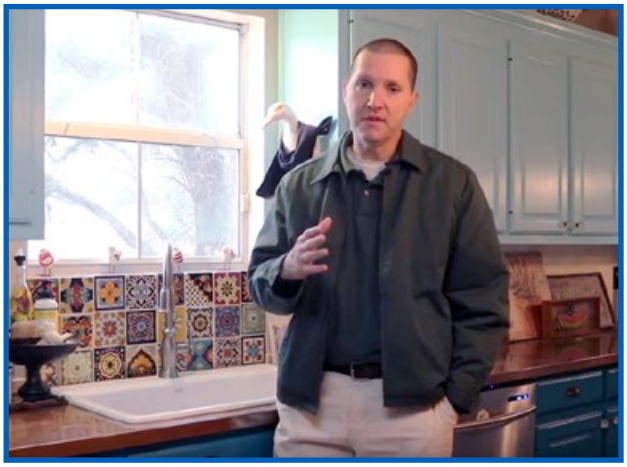
AFTER THE FLUSH: LDEQ VIDEO EXPLAINS THE IMPORTANCE OF MAINTAINING YOUR SEWAGE TREATMENT SYSTEM

Geologists from LDEQ's Aquifer Evaluation and Protection Unit headed out to the town of Central, Louisiana, in late December to film a video at a residence on how to maintain sewage treatment systems that serve a residence, business, or any other property that is not connected to a community sewage system. The video is part of LDEQ's YouTube video series, which spotlights a variety of environmentally-based topics that relate to the department's mission.

LDEQ Geologist Jesse Means narrated the video, which was filmed and produced by the LDEQ communications team. "The purpose of the video is to give business owners and citizens some insight as to the basic workings of treatment systems while conveying the importance of inspections and maintenance," Means said.



LDEQ Geologist Jesse Means discusses how sewage treatment systems can become clogged through the disposal of cooking grease and other substances into the kitchen sink.

Quick tips on maintaining your sewage system

- Don't discard cooking oil, grease, paints or other substances down the drain or kitchen sink.
- Ensure that power is always supplied to the aerator for aerated treatment systems. It's also important to clean the aerator's filter periodically.
- Unless you have been trained to do so, you should have a professional inspect your system periodically (every 6 months is a guideline).
- Systems should be pumped out at least every 3 to 5 years depending on loading.
- Observe the system for problems such as slow draining toilets or drains, plumbing backups, sewage odors, gurgling sounds or wet spots in the yard. If you notice any of this, get your system inspected.
- Avoid septic tank additives that claim to improve performance – there's no substitute for periodic pumping and a professional inspection.

Standing at a kitchen sink, Means described what not to put into sewage systems and what owners can do to keep them in good working condition. He then went outside to discuss the two most common types of systems found in Louisiana: aerated treatment units and conventional septic systems.

Continued on page 2

Aerated treatment units use air to promote the growth of microbes (or bacteria) which feed on the organic matter in the wastewater. Wastewater (from toilets and drains) flows into a tank – typically underground – that has chambers inside. The first chamber skims and settles the solids out, then the wastewater flows to a second chamber where air is pumped into it which allows the bacteria to break down waste products further. The wastewater then flows into another chamber for the solids to settle out again and return to the aeration chamber for additional treatment.

Some aerated systems also have a chamber for disinfection which most commonly uses chlorine to disinfect the wastewater. If your system uses chlorine, it is important to be sure the proper amount of chlorine is in the disinfection chamber. Once it goes through the treatment unit, most systems discharge wastewater directly into a ditch or water way.

The other type is a conventional septic system. With septic systems, wastewater first flows into an underground septic tank where the solids are separated out and then to a subsurface drain field. From the drain field, the wastewater percolates into the soil. This system also uses biological processes to break down the organic material.

"Proper maintenance will ensure that the system is working and it will alleviate the cost for repair or replacement," Means said. Untreated sewage causes conditions that are harmful to the environment and to human health.

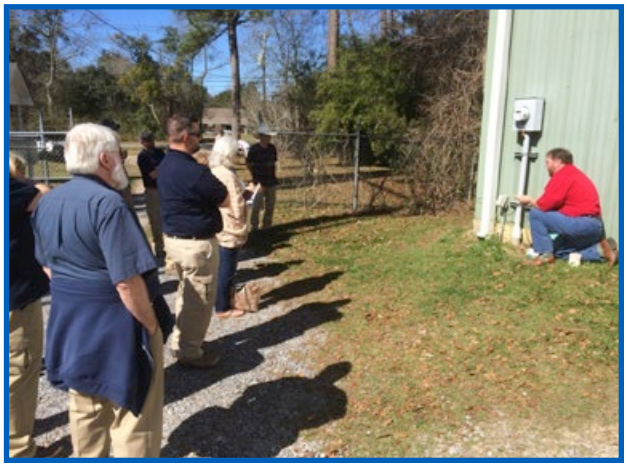
At the sewage discharge pipe for the residence's treatment system, Means stressed the importance of maintaining your system and how it can directly affect a waterway if improperly treated sewage discharges into it. Discharging improperly treated sewage causes conditions that are harmful to human health and the environment.

For more information and tips on how to maintain your system, visit the LDEQ website at: ***www.deq.louisiana.gov***.

See the video on LDEQ's YouTube channel: ***https://www.youtube.com/channel/UCP0mXFCk7gdZRpyAJYxDIRw***.

ONSITE SEWAGE TREATMENT SYSTEM MAINTENANCE CLASS OFFERED TO ST. TAMMANY PARISH RESIDENTS

A sewage treatment system maintenance class was offered at no cost to homeowners in St. Tammany Parish. Funding for the class was provided by the EPA Training and Technical Assistance for On-Site/ Decentralized Wastewater Systems to Improve Water Quality Training Program, through the Louisiana Rural Water Association (LRWA). The class was coordinated by LDEQ, LWRA, the Louisiana Department of Health (LDH), and the St. Tammany Parish Government to educate local citizens on how to maintain their home sewage treatment systems. Three classes were conducted February 7-9, 2017 which covered the health and environmental impacts of improperly treated sewage, explained the various types of sewage treatment systems, their regulation, and proper maintenance. Field demonstrations were also conducted on February 9th where attendees were shown the parts of an actual onsite sewage treatment system and instructed on its maintenance.



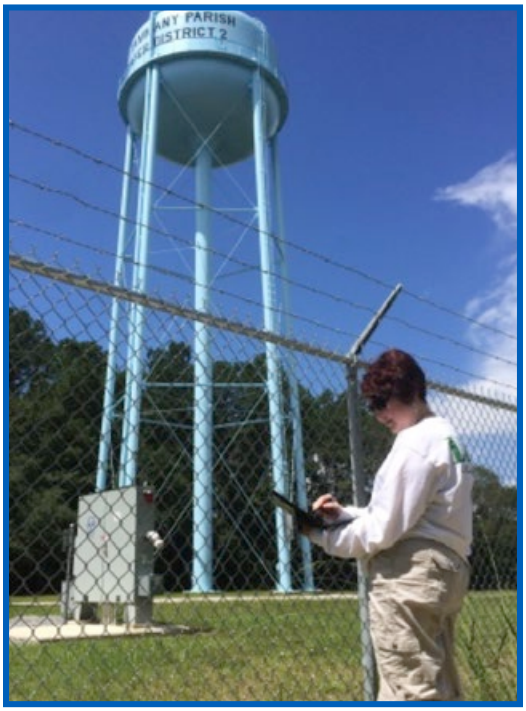
Ken Terry, LRWA Wastewater Technician, explains the operation of an onsite wastewater treatment system.

Properly maintained and operated sewage systems:

- Save homeowners money
- Help protect public health
- Return clean water to the environment
- Help protect wildlife and waterfowl habitat
- Help protect recreational waters

DRINKING WATER PROTECTION PROGRAMS 2016 - 2017

St. Tammany Parish. St. Tammany Parish has 104 active community public water supply systems, all using groundwater as their source. St. Tammany Parish is growing rapidly and many new wells have been drilled. In addition, there were many changes to existing source water assessments as a result of growth and impacts from Hurricanes Katrina and Isaac. Locations of new wells were determined by GPS and source water assessments were conducted. A community meeting was held on December 1, 2016 in Mandeville to educate the public on drinking water protection. A second community meeting was held in Slidell on January 12, 2017. DWP staff completed visits to owners and operators of businesses identified as significant potential sources of contamination (SPSOCs) in the parish to distribute educational material. A total of 372 businesses were visited. In addition to the large number of SPSOCs that were visited, 1,011 "not-visitable" SPSOCs (such as above ground tanks in fields, sewer lift stations, etc.) were field verified to update the source water assessments. St. Tammany Parish now has 1,383 SPSOCs identified within source water protection areas. A total of 211 new SPSOC's and 23 new wells were GPS'd. Eighteen new source water assessments were completed and all existing assessments were updated. The Town of Abita Springs, the Town of Madisonville, and the City of Slidell adopted a groundwater protection ordinance to prevent new SPSOCs from locating in close proximity to their water wells.



LDEQ Geologist Mary Gentry collects a GPS location on a new water well for St. Tammany W.D. #2.

Winn Parish. There are 13 active community public water systems in Winn Parish. A community meeting was held on April 13th at the Winn Parish Library. Attendees learned where their water comes from, why it is important to protect it and how they can protect it and also volunteered to educate facilities/businesses that are considered to be SPSOCs near public water wells. LDEQ provided volunteers with packets containing the location of the SPSOCs, material to distribute to personnel at each SPSOC, and instructions on conducting these educational visits. Volunteers were also instructed on how to report changes to SPSOC information to LDEQ. At a committee meeting on May 11th a general orientation was held which highlighted work that the committee can perform to protect water supplies. A presentation on back flow prevention was also given by Susan Robbins of the Louisiana Rural Water Association. The June 8th meeting was devoted to further education on back flow prevention, with a presentation by the Louisiana Department of Health on their requirements and a review of a template backflow prevention plan. A total of 109 SPSOCs (visitable and non-visitable) were verified and 37 educational visits were completed. Eight new wells were GPS'd.

Shanna Mason

AQUIFER EVALUATION AND PROTECTION UNIT WELCOMES A NEW TEAM MEMBER

Shanna Mason, geologist, joined the LDEQ Aquifer Evaluation and Protection Unit in October 2016. She was raised in Austin, Texas, before moving to Lafayette. She graduated from the University of Louisiana at Lafayette with a Bachelor of Arts in political science with a minor in geology and a Master of Science in geology. Her thesis research focused on characterizing the natural fracture system of the Eagle Ford Shale.

Previously, Shanna worked in finance and at the U.S. Senate. She is a member of the Southwest Louisiana Geophysical Society, American Institute of Professional Geologists, Association of Women Geoscientists, and the Lafayette Geological society. She was recently elected to the Board of Directors of the Baton Rouge Geological Society.

DID YOU know?

Household leaks can waste more than 1 trillion gallons annually nationwide. That's equal to the annual household water use of more than 11 million homes.

Source: U.S. EPA

DRINKING WATER PROTECTION TEAM REACHES A MILESTONE IN PROTECTION EFFORTS

LDEQ's Drinking Water Protection Team reached a milestone recently. As part of their protection efforts, the team introduces a model ordinance to local governing bodies that have public water wells within their jurisdiction. This past fall they reached 100 ordinances passed by both parish and municipal governments. Once the ordinance is passed, the listed businesses cannot be located within 1,000 feet of a public water supply. "The ordinance is designed to keep any new potential sources of contamination from locating near one of these wells. This will drastically curtail the introduction of chemicals near those public water wells," LDEQ Geologist Jesse Means said.

The ordinance also contains a grandfather clause which allows existing facilities to continue operating, including guidance on enforcement of the ordinance and penalties for noncompliance. In Louisiana, the only regulation that specifies setbacks from public water wells is the State Sanitary Code, which addresses sewage treatment systems and landfills. "By passage of this ordinance, local governments are taking a big step toward protection of their water supply and giving themselves a say as to what can and cannot be put next to their water wells," Means said.

TOWN OF ABITA SPRINGS WINS LOUISIANA RURAL WATER ASSOCIATION AWARD

The Town of Abita Springs received highest honors this year at Louisiana Rural Water Association's Annual Awards Banquet when they were named the Source Water Protection System of the Year. The awards were presented on July 19, 2017 at LRWA's 31st Annual Training and Technical Conference held in Lake Charles, Louisiana.

LRWA is a nonprofit organization established to aid small water and wastewater systems through training and on-site technical assistance. The LRWA Awards Program was established to recognize the outstanding efforts of Rural Water and Wastewater Systems and their personnel.

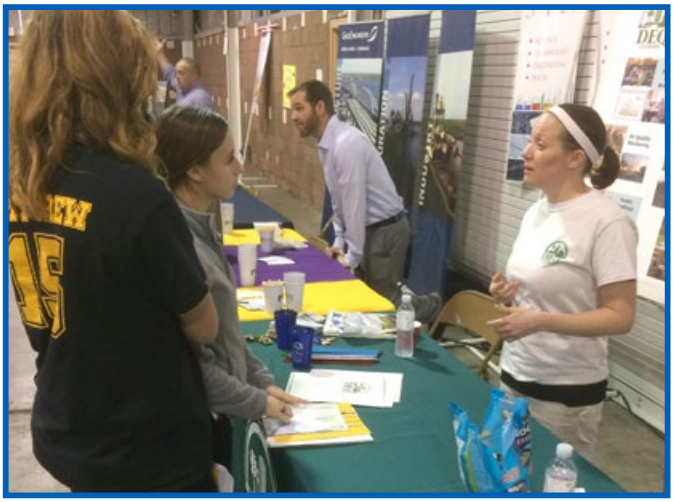
The Town of Abita Springs completed all elements of State Drinking Water Protection program including all elements of a working source water protection plan. Abita Springs Mayor, Greg Lemmons, was very instrumental in adoption of an ordinance to permit and inspect individual sewer treatment systems within the town's jurisdiction. The Town council also adopted the ground water protection ordinance. Other source water protection activities include the Annual Abita Springs Water Festival celebrating water, culture, and heritage.

Mayor Greg Lemmons, accepting award on behalf of the Town of Abita Springs from Rusty Reeves, LRWA.

COMMUNITY OUTREACH ACTIVITIES

LDEQ Geologist Jesse Means explains how water wells work to students at Bains Lower Elementary School in St. Francisville.

LDEQ Geologists Mary Gentry and Shanna Mason work the LDEQ exhibit at the Louisiana Conference on Water Supply, Sewerage, and Industrial Waste in Baton Rouge.



LDEQ Geologist Shanna Mason discusses environmental work with students at the Ascension Parish Career Fair in Gonzales.

LDEQ Geologists Jesse Means and Mary Gentry give a permeability demonstration to show students how water flows through aquifers at the Wetland Watchers Celebration in Norco.

ASK THE DWPP TEAM

Question: Why does my water sometimes look cloudy?


Massachusetts Water Resources Authority

Answer: Cloudy water is caused by tiny air bubbles similar to the gas bubbles in soda and beer. It is most noticeable in water taken directly from the tap. After a short time the bubbles rise to the top and go into the air above; the water clears up. This cloudiness occurs more often in the winter when the water temperature is cold because the solubility of air in water increases as water temperature decreases. Cold water holds more air than warm water. Pressure also plays a role. Water in the pipes is pressurized to a degree and water under pressure holds more air than water that is not pressurized. Once the water comes out of your tap it is no longer under pressure and the air comes out of solution as bubbles (similar to a carbonated soft drink). The best thing to do is let the water sit in an open container until the bubbles naturally disappear. It is completely harmless.

Question: Is it okay to use hot tap water for drinking and cooking?

Answer: Not from the tap, unless you're certain your plumbing does not contain lead. Hot water is far more likely to leach lead from pipes. Lead solder was banned in the U.S. in 1986, but older plumbing may still contain lead-soldered joints. Brass plumbing parts may also contain lead. The longer the water stands in the pipe the more it is likely to dissolve lead. It's especially important not to use hot tap water to mix baby food or formula, since lead is especially dangerous for infants and children. Let the cold water run for a minute to flush out standing water if the faucet hasn't been run for a while. Boiling hot tap water will concentrate lead so heat only cold water. In addition, hot water is also more likely to contain rust from your water heater and pipes.

LDEQ WEBSITE GETS A MAKEOVER

The LDEQ website got a makeover this year. The new design gives users easy access to information on air, land, and water resources. It also offers quick links to report environmental incidents or search for records in the electronic document management system (EDMS). Users can also view a series of new educational videos on environmental topics. The new website is not compatible with the Internet Explorer browser but can be viewed using Google Chrome or Mozilla Firefox. You may find answers to many of your questions at ***www.deq.louisiana.gov*** but if not here are some contacts who will have an answer for you.

Questions? Environmental Concerns?

Need help but you're not sure who to call? DEQ's Customer Service Center is here for you. We specialize in answering tough questions and finding the right contact person for you. Please contact us between 8:00 a.m. - 4:30 p.m., Monday through Friday.
225-219-5337
866-896-5337 - toll free
_DEQ-CustomerServiceCenter@la.gov

To report environmental concerns:

In the event of an environmental emergency, citizens are encouraged to first contact their local authorities – police, sheriff, fire department, etc. Citizens and the regulated community can also contact the Single Point of Contact (SPOC) hotline. SPOC concerns include spills, releases, odors, fish kills, open burning, waste tires, and any other types of environmental incidents. Citizens can report the incident online at ***www.deq.louisiana.gov***. Click on Report an Environmental Incident at the top right corner of the homepage.

Single Point of Contact (SPOC) Hotline
225-219-3640 (M-F, 8:00 am – 4:30 PM)
To leave a message call 225-342-1234, toll free in LA 1-888-763-5424

LOUISIANA DRINKING WATER PROTECTION PROGRAM

THE DRINKING WATER PROTECTION TEAM SALUTES MUNICIPALITIES AND PARISH GOVERNMENTS WHO HAVE ADOPTED A GROUNDWATER PROTECTION ORDINANCE (AS OF 9/30/2017):

Acadia
Acadia Parish Police Jury
Town of Church Point
City of Crowley
Town of Iota
City of Rayne

Allen
Town of Elizabeth
City of Oakdale

Avoyelles
Avoyelles Parish Police Jury
City of Marksville
Town of Mansura
Town of Moreauville
Town of Simmesport

Beauregard
City of DeRidder
Town of Merryville

Bossier
Bossier Parish Police Jury
Town of Haughton
Town of Plain Dealing

Calcasieu
City of DeQuincy
Town of Vinton
City of Westlake

Caddo
Village of Ida
Village of Rodessa
Town of Vivian

Caldwell
Town of Columbia

Catahoula
Village of Harrisonburg
Town of Jonesville

Concordia
Concordia Parish Police Jury
Town of Clayton
City of Vidalia

East Feliciana
Village of Norwood
Town of Wilson

Evangeline
Village of Pine Prairie

Grant
Town of Pollock

Iberia
Village of Loreauville

Iberville
Town of Maringouin
Village of Rosedale
Town of White Castle

Jefferson Davis
Jeff. Davis Parish Police Jury
City of Jennings
Town of Lake Arthur
Town of Welsh

Lafayette
City of Carencro
Town of Duson
City of Youngsville

LaSalle
Town of Jena
Town of Olla

Lincoln
Lincoln Parish Police Jury
City of Grambling

Livingston
Village of Albany
City of Denham Springs
Village of Killian
Town of Livingston
City of Walker

Morehouse
City of Bastrop
Village of Bonita

Natchitoches
Village of Goldonna

Ouachita
City of West Monroe

Rapides
Village of Cheneyville
Town of Glenmora
Town of Lecompte
Village of McNary
Town of Woodworth

Richland
Town of Mangham
Town of Rayville

St. Landry
St. Landry Parish Council
City of Eunice
Town of Melville
City of Opelousas
Town of Washington

St. Martin
City of Breaux Bridge
Town of Henderson

St. Tammany
Abita Springs
Madisonville
Slidell

Tangipahoa
Tangipahoa Parish Council
Town of Amite
Town of Kentwood
City of Ponchatoula
Village of Tangipahoa
Village of Tickfaw

Tensas
Town of St. Joseph

Vermilion
Vermilion Parish Police Jury
City of Abbeville
Town of Delcambre
Town of Erath
Town of Gueydan
Town of Kaplan
Town of Maurice

Vernon
Vernon Parish Police Jury
Village of Anacoco
Town of Hornbeck
City of Leesville
Town of Rosepine
Village of Simpson

Washington
Town of Angie

Webster
Webster Parish Police Jury
Town of Cullen
City of Minden
Town of Sibley
City of Springhill

West Baton Rouge
Town of Addis

West Feliciana
Town of St. Francisville

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LOUISIANA DRINKING WATER PROTECTION PROGRAM

2017 newsletter

The Drinking Water Protection Team is a part of the Aquifer Evaluation and Protection Unit within the Water Planning and Assessment Division. This Division is under the Office of Environmental Assessment at the Louisiana Department of Environmental Quality. Drinking Water Protection Team members educate the public about the importance of protecting drinking water sources. The team plays a vital role in working with Louisiana communities to establish local drinking water protection programs. The team is available to give presentations on water protection issues to your school or organization. Please call 225-219-3510 for more information.

This newsletter and all previous issues are available online at: http://deq.louisiana.gov/resources/category/drinking-water.

WE LOOK FORWARD TO HELPING YOU PROTECT YOUR COMMUNITY'S DRINKING WATER!

VISIT US AT WWW.DEQ.LOUISIANA.GOV/AEPS

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