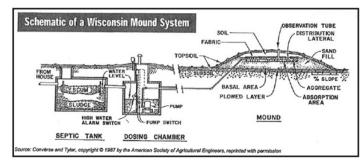


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PLANNING & DEVELOPMENT NEWSLETTER: VOLUME 3, ISSUE 1

THE SUCCESS OF MOUND SYSTEMS IN KENOSHA COUNTY

The existence of mound septic systems in Kenosha County has spanned nearly four decades. It is safe to say they are a viable method of treating domestic wastewater in southeastern Wisconsin. Mound systems consist of three main components: a septic tank, a pump or dose chamber and a mound dispersal cell.



The septic tank is like any other tank used to settle out solids and allow gray water effluent to flow out and discharge into the pump chamber. The septic tank may be equipped with a specialized baffle filter that prevents the suspended solids in wastewater from passing out of the tank. Most recent septic tank designs include two chambers in them to slow down peak flows and improve settling capabilities in the tank.

WINTER 2013

Pump chambers house the effluent pump that "doses" the mound dispersal cell with a pre-calculated volume of wastewater. Float switches turn the pump on and off and also have a high water alarm float which alerts the homeowner of a pump malfunction or failure. Extra capacity is provided in this tank to allow a homeowner continued use of water in the home while a pump repair or replacement can be performed by a plumber.

The mound dispersal cell is the absorption field of the system. It utilizes a manufactured washed sand fil placed on the existing soil surface to act as a filter medium that will promote the development of aerobic bacteria and a further decomposition of solids, bacteria and pathogens. Effluent is distributed via PVC pipes under low pressure, placed in a bed of washed stone to support the piping network. Final treatment of the wastewater occurs in the native soil and eventually the treated water is returned to a permanent ground water table.

Mound systems have worked exceptionally well in our clay based soils in Kenosha County. The Wisconsin Administrative Code amendment made in 2000 allowing mound design criteria to be used to fit the soil conditions found in the field and not a specific minimum depth to seasonal soil saturation had a dramatic effect on the use of the mound system throughout the County. Mounds can easily be designed to overcome soil conditions and some drainage classes of soil and remain a viable method for treating and recycling wastewater.

Mounds, like any other septic system, can and will eventually fail. Suspended solids in the wastewater are the nemesis of all septic systems. Eventually these particles, many of them being carbon based, will be trapped in the sand filter medium and alter the permeability of the sand. Eventually the wastewater discharge volume exceeds the infiltration capabilities of the now altered sand medium and anaerobic decomposition begins to take place in the sand. This condition results in slimes produced in the process that accelerate the clogging of the sand and eventually causes the system to surface or back up.

One of the real advantages of having a mound system is that the mound dispersal cell can be reconstructed once it has failed. Typically the sand medium is clogged with carbon and organic matter so it needs to be replaced. The mound is dismantled from the top down to the clogged sand. The clogged material is removed and new manufactured sand is placed back in to the existing system elevation. A new stone bed is installed with a distribution pipe network covered with a top dress of stone and filter fabric and covered with a foot of soil. The system is ready to be put back into operation.

Certainly, like all septic systems, they have their limitations and can get overloaded if improperly sized. Chemicals, commercial waste, disinfectants, and cleaners can kill the bacterial activity that is so important in a septic tank during anaerobic decomposition. Proper care and maintenance is very important to insure a long life for your mound system.

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PLANNING & DEVELOPMENT CALENDAR 2013

IANUARY

| / a | 17 | Zoning Board of Adjustments Hearing Room A, 6 pm | |
|--------------------------------|----------|---|--|
| fill bic es he nd | FEBRUARY | | |
| | 6 | Landscape & Grounds Maintenance Short Course Begins (<i>see page 4</i>) | |
| | 7 | Zoning Board of Adjustments Hearing Room A, 6 pm | |
| sin oil tic ne ng | 13 | Planning, Development & Extension Education Committee Public Hearing Room, 6 pm | |
| | 21 | Zoning Board of Adjustments Hearing Room A, 6 pm | |
| | MARCH | | |
| be ter bic bic hat | 7 | Zoning Board of Adjustments Hearing Room A, 6 pm | |
| | 9 | Spring into Gardening—Central High School (see <u>http://</u> | |

Planning, Development & 13 Extension Education Committee Public Hearing Room, 6 pm

kenosha.uwex.edu for details)

- 2 1 Zoning Board of Adjustments Hearing Room A, 6 pm
 - Unless otherwise indicated, all events are at the Kenosha County Center (19600 75th Street, Bristol)

THE DIFFERENCE BETWEEEN THE CURRENT ZONING MAP AND THE COMPREHENSIVE LAND USE PLAN MAP

Current Zoning Map:

The current zoning classification of a property is displayed on the official Kenosha County Zoning Map. This map is a graphic depiction of the boundaries for which a certain set of standards or regulations have been adopted by a governmental entity, in this case Kenosha County. The zoning map typically provides predictability for the residents and development community as to what type of land uses may be expected and allowed within each zoning district. Land is divided into zoning districts from the zoning code which describes the intent and regulations of each particular zone category (i.e. residential, business, public, conservancy, etc...). A typical zoning district will set forth regulations for permitted land uses, building height, density, setbacks, minimum lot sizes, etc. A list of all the zoning district classifications within Kenosha County is available at the following website: http://www.kenoshacounty.org/index.aspx?nid=767

Comprehensive Land Use Plan Map:

In 1999, the Wisconsin Legislature enacted a comprehensive planning law, which is set forth in Section 66.1001 of the Wisconsin Statutes. The requirements supplement earlier provisions in the Statutes for the preparation and implementation of municipal master plans. The law includes a "consistency" requirement, whereby zoning, subdivision, and official mapping ordinance actions by towns, villages, and cities must be consistent with the comprehensive plan adopted by the respective town board, village board, or common council.

To help guide decisions on land use, infrastructure development and natural resource preservation, Kenosha County and ten of its local government units worked together to prepare a multijurisdictional comprehensive plan. The result was a comprehensive plan report adopted by the Kenosha County Board of Supervisors on April 20, 2010, entitled, *A Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035.*

Because Kenosha County holds zoning jurisdiction within the unincorporated areas of the county, zoning and subdivision ordinance actions within unincorporated areas must be consistent with this adopted comprehensive plan.

A local governmental unit's land use actions must be consistent with its adopted comprehensive plan. Actions are defined as:

- Municipal incorporations, consolidations & detachments
- Annexations
- Cooperative boundary agreements
- Official mapping
- Local subdivision regulation
- Extraterritorial plat review

- Zoning ordinances (enacted or amended)
- Transportation facility economic assistance & development matching grants
- Agricultural preservation plans

For more information about the Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035, please visit the following web link:

http://www.kenoshacounty.org/index.aspx?nid=776

Both the official Zoning Map and the Multi-Jurisdictional Comprehensive Plan Map for Kenosha County can be viewed by visiting the Kenosha County Planning & Development office or the online interactive mapping application available at the following web link:

http://wi-kenoshacounty.civicplus.com/index.aspx?nid=673

Typical Scenario:

Let's say that Joe Citizen owns a 40-acre property that is currently zoned "A-1 Agricultural Preservation District" on the official Kenosha County Zoning Map. The property contains one singlefamily dwelling unit and several accessory buildings (permitted). The A-1 district requires that parcels maintain a minimum of 35acres in area. Therefore, Joe's property is deemed a legal conforming lot.

If Joe Citizen or another party (developer) wishes to subdivide the land at a density higher than what the current A-1 zoning designation can allow (35-acres) then the property must be rezoned to the appropriate zoning district classification in order to accommodate the desired development density. This is where the Comprehensive Land Use Plan Map comes in.

Remember, the consistency requirement requires that any rezoning action made by the zoning authority be in-step with the future land use designation shown for the property on the adopted Comprehensive Land Use Plan Map. Therefore, if the property is shown on the adopted Comprehensive Land Use Plan Map as "Farmland Preservation" (A-1 Agricultural Preservation District), that means the property can only be developed under the zoning requirements of the A-1 Agricultural Preservation District. Because the property does not have enough land area to create a second conforming A-1 lot, the property cannot be further subdivided.

If the property is shown on the adopted Comprehensive Land Use Plan Map to be developed at a density other than A-1 Agricultural Preservation District then the zoning authority can move into discussions to rezone and subdivide the property at the density displayed on the Comprehensive Land Use Plan Map.

COMMUNITY SUPPORTED AGRICULTURE

While food is a necessity for human life, many people don't stop and think about the process that is necessary to produce agricultural products. In the U.S., food travels an average of 1,300 miles from the farm until it arrives on a grocery shelf.

In the 1960's, farmers in Japan and Germany became concerned abut food safety issues, the loss of agricultural lands and the limited understanding of farming by the general public. In response to their concerns, farmer cooperatives or partnerships were founded where consumers were given the opportunity to share in the responsibility of the production of food with the farmer. In Japan this is called *seikatsu*, or "food with the farmer's face on it." This same idea has been adopted

the United States, and is known as *Community Supported Agriculture.*

Community Supported Agriculture (CSA) functions in a manner in which consumers become members of the farm and make an economic commitment to the production of food. Members help to cover the operating budget costs for the season by purchasing shares. A commitment is also made by the members throughout the season to take on the risks and costs associated with growing food. This is extremely different from conventional agriculture where all of the risks such as weather, pests and a changing marketplace are the sole responsibility of the farmer.

COMMUNITY SUPPORTED AGRICULTURE (cont.)

While all CSA systems are unique, in return for becoming a shareholder in the farm, members receive weekly boxes of food during the harvest season, which typically include vegetables and may include fruit, flowers, meat, honey, eggs, herbs and dairy products. Shares are generally designed to provide a week's supply of farm products for a family of four. Costs for a CSA share are dependent on a variety of factors including products made available in the basket. In some cases, members may have the opportunity of paying less for the cost of a share if the member volunteers to help on the farm every week. The farm may also offer the service of providing other farm products for sale, which could be purchased for an additional cost.

Community Supported Agriculture is relatively new to the United States as the first CSA farms were started in the mid-1980s and are an excellent way for consumers to be involved in the production of the food that they eat.

SILVER LAKE ICEHOUSE TRAIL

The newly completed Silver Lake lcehouse Trail is only about 3/4 of a mile long, but it is one of the most scenic trails in southeast Wisconsin. The trail passes through a forest of oak, walnut, cherry and maple trees along the shores of Silver Lake on an elevated railroad grade.



WDNR Stewardship grants and a Cooperative Trail Agreement with the WDNR turned the project into reality. The trail connects the Village of Silver Lake with Silver Lake County Park, offering hikers and bikers the opportunity to travel the circumference of the lake and link up to future bike trails. Two



bridges were required to bridge over cuts in the grade that were made to allow fish to pass into a backwater marsh for spawning.

The new trail provides a scenic and safe place to hike and bike. It also provides easy access for fishing on the north shore of the lake and a route for residents to visit Silver Lake Park. This trail completes the last link to be able to travel completely around Silver Lake (about 5 miles) and will also connect with future bike trails planned in the Town of Salem.

Why call it the Icehouse Trail?



Silver Lake Park was once the site of Consumers Ice Company Ice House, which shipped their harvested ice as freight on the rail line. The new trail is built on the old railway bed. The KD Rail Line started in 1853 as passenger



service between Kenosha and Rockford, Illinois, hauling ice and milk as well. Built as the Kenosha, Rockford and Rock Island Railroad, it was renamed the Kenosha Division (KD) Line when purchased by Chicago & North Western . At the peak of its service, it ran 12 daily trains that

provided passenger service to tourist areas and resorts in Western Kenosha County and terminated in Rockford, Illinois.

Refrigeration and trucks hauling milk spelled the end of the KD Line when it pulled into Salem, Wisconsin for the last time on May 31, 1939. Portions of the old line's right-of-way can still be seen in Kenosha County and parts of it are trails, one of them connecting Bassett and Twins Lakes in western Kenosha County.

Recreational trails are proven to be a high value investment in terms of property values, community attractiveness, small business prosperity and healthier lifestyles. There is no doubt that this trail will be an asset to Kenosha County.



Staff at the Kenosha County Center would like to welcome Mr. Chris Parisey to the Kenosha County Housing Authority. Chris has taken over as the Program Administrator since John Meland's retirement late last year. He is also a planner with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) in Waukesha. Contact phone and fax numbers for the Housing Authority remain the same.

Current estimates show that there are around 6,000 CSA farms in North America. There are various CSA farms found in southern and southeastern Wisconsin.

To become a member of a CSA, you just need to contact the farm that you would like to become a member of and request their membership information. It is important to request information early as some farms may sell out of memberships before the winter is over.

To find out more about CSA farms that serve Southeast Wisconsin:

The Farm Fresh Atlas of Southeast Wisconsin is one tool: www.farmfreshsewi.com

Local Harvest is another option for finding CSA farms: <u>www.localharvest.org/csa</u>

COUNTY SPOTLIGHT: ACCESSING PLANNING & DEVELOPMENT INFORMATION ON NEW COUNTY WEBSITE



Since the launch of the County's new website, many great tools and features have become available to its users. The Planning and Development staff would like to highlight the key items available online in relation to the department.

From the Kenosha County main page - www.co.kenosha.wi.us users are able to access the County's Interactive Mapping and Notify Me features.

- In Interactive Mapping users have access to maps of Kenosha County showing parcels, topography, roads, water bodies, zoning, districts, aerial photos and much more. This feature could be a useful tool for someone starting the process of obtaining a permit from our department.
- The **Notify Me** feature allows users to subscribe to notifications from various county departments through e-mail or text message. Subscriptions to Planning & Development News as well as Planning, Development & Extension Education Committee Agendas are available here.

From the Planning & Development home page users are able to access tabs for the following areas:

Zoning/Permitting - Provides information about residential, commercial, and temporary use permits, variances and a fee schedule.

F.A.Q.'S: MOUND SYSTEMS

1. I've heard that mound systems are very expensive, costing as much as \$25,000. Is this true?

Mound systems for 3 to 4 bedroom family homes in Kenosha County fall in the average range of \$12,750 to \$15,300 based on costs verified from paid receipts compiled for the Wisconsin Fund Program.

2. Do mound systems work mainly by evaporation of the waste water? Nearly all of the wastewater has to move downward, through the sand medium and into the native soil by gravity. During dry times of the summer months the grass on top of the mound will be greener than the surrounding lawn. That is when there is some uptake of moisture from the wastewater entering the dispersal cell in a mound system and cohesion - adhesion

forces in the soil occur, thus leading to the uptake of moisture and nutrients by the roots of the plants and some evapo-transpiration taking place.

Conservation - Provides information about UW-Extension Shorelands/Wetlands/Ponds, Stormwater Management, County Tree Program, Land & Water Resource Management, Flood Protection, Farmland Preservation and Pest Management.

- Mapping/GIS Provides access to Interactive Mapping, a gallery of free maps available for download and information on purchasing digital and hard copy maps.
- Septic Systems Provides information about permits and procedures, fees, installers, types of septic systems, Wisconsin Fund Grants and wells.
- Land Development Provides information on zoning districts, rezoning, conditional use permits, site plan reviews, subdivision platting, certified survey maps (CSM), stormwater & erosion control and The Comprehensive Plan.
- Housing Provides information regarding housing rehabilitation programs for homeowners as well as rental property owners, Homestead Opportunity Program to assist renters in becoming homeowners, the Fox River flood mitigation program, and the Fair Housing Ordinance.

The Planning and Development home page can be accessed under the departments tab of the Kenosha County Main Page or at www.kenoshacounty.org/index.aspx?nid=656

3. Are mounds septic systems? Do they have a septic tank that needs maintenance?

Mound systems are a type of septic system that are classified as a single pass sand filter with final discharge to an insitu soil profile. All mounds will have a standard septic tank and a dose or pump chamber containing an effluent pump and float switches. Both tanks need to be serviced by pumping every three years and the entire system must be evaluated by a licensed service provider in that same time frame.

4. How long do mound systems last?

In Kenosha County there are mounds that are still operational that were installed in the 1970's. The oldest known operational system in the County is 38 years old!

For more information on septic systems, please visit: http://www.co.kenosha.wi.us/index.aspx?nid=738

UPCOMING DATES TO NOTE

WISLINE SERIES: LOCAL LAND USE, PLANNING AND ZONING: JANUARY 16, FEBRUARY 20, MARCH 20, APRIL 10 & MAY 15, 2013, 10:30AM - 12:00PM WisLine is a live teleconference series offered by UW-Extension. Topics include GIS for Planning, Zoning and Economic Development, Sand and Non-metallic Mining, Wetland Law and Permitting, Legislation and Case Law and Hearing Zoning Appeals and Variances. Live sessions cost \$20 each or a materials bundle can be ordered for \$28 if you are unable to attend a live session. For location and registration information please visit: http://lgc.uwex.edu PESTICIDE APPLICATOR TRAINING: WEDNESDAY, JANUARY 30, 2013, 9:00AM - 12:00PM WITH TESTING AT 1:00 PM

Private pesticide applicator certification and safety training classes for farmers and their employees who purchase, mix, or apply "Restricted-Use" pesticides. A \$30 registration fee includes training, lunch, book and license. The class will be held at the Kenosha County Center. An additional session will be held in Walworth County on Thursday, February 7, 2013. For more information please visit: http://kenosha.uwex.edu.

LANDSCAPE & GROUNDS MAINTENANCE SHORT COURSE: WEDNESDAYS, FEBRUARY 6, 13, 20 & 27, 2013, 8:30AM - 11:30AM

Join other horticulture professionals in learning up-to-date science-based information to help you increase the economic and environmental sustainability of landscapes you care for and your business. Registration for all four sessions is \$50. Save \$5 per person if 3 or more attend from the same company. The courses will be held at the Kenosha County Center. For more information please visit: http://kenosha.uwex.edu/

KEEPING YOUR HORSE HEALTHY: SATURDAY, FEBRUARY 9, 2013, 8:30AM - 3:00PM

Workshop topics include: A horse's health check up, dentistry, foot care, internal & external parasites, vaccinations & preventing diseases and chiropractic care. Early bird costs are \$30 per adult, \$50 for 2, and \$15 for youth. After February 1st costs are \$40 per adult, \$70 for 2, and \$20 for youth. The workshop will take place at the Kenosha County Center. For registration information please visit: <u>http://kenosha.uwex.edu/</u>



Kenosha County Department of Planning and Development 19600 75th Street, PO Box 520, Bristol, Wisconsin, 53104-0520 Phone: (262) 857-1895 | Fax: (262) 857-1920 http://www.kenoshacounty.org/index.aspx?nid=656

The mission of the Kenosha County Department of Planning and Development is to encourage the use of land, water resources and structures in a planned and orderly manner through technology, Geographical Information Systems (GIS) and its base mapping and various ordinances, which promotes sound planning and land use management, environmental awareness and public participation to protect the overall public health, safety, morals, prosperity, aesthetics, comfort, convenience and general welfare of the citizens of Kenosha County as well as providing professional planning assistance to other departments within Kenosha County government.