Bioretention Cells Help Manage, Filter and Drain Storm Water

For travelers along two recently reconstructed Ames streets, the property between the sidewalk and the curb may look different. Some new street projects have included green infrastructure through the construction of bioretention cells. Bioretention cells, commonly called biocells, are landscaped depressions that capture storm water runoff from impervious surfaces such as parking lots and streets.

Above ground, biocells may appear as a flower garden with plants native to Iowa. Below ground, a biocell has modified soils designed to function as a natural filter, removing pollutants from storm water runoff and allowing water to naturally infiltrate back into the ground. A subdrain is incorporated into the design to ensure adequate drainage occurs during heavy rain events and prevents water from becoming stagnant at the bottom. Once established, native plants are aesthetically pleasing and require little watering, fertilizing, and mowing. Native plants help attract butterflies and song birds. The plants will take two to three years to become fully established and showy. The first year, native plants grow extensively below ground to establish deep roots. The City of Ames will maintain the biocells.

The City of Ames completed two street improvement projects and incorporated green infrastructure by installing biocells in the public right of way on 24th Street (between Hoover and Hayes avenues) and Ridgewood Avenue (between 9th and 13th streets). Not only do they improve storm water quality, biocells function as a traffic calming measure by reducing vehicle speeds and increasing pedestrian safety by reducing the cross distance.

National Night Out Planned for Aug. 2

The Ames Police Department invites residents to celebrate community crime prevention efforts. National Night Out is a community-building campaign designed to strengthen neighborhood spirit and police-community partnerships. The event will be held from 5 to 8 p.m. on Tuesday, Aug. 2 at Bandshell Park, Sixth Street and Duff Avenue.

Games from the Street ‘N’ Greet Block Party Trailer, tours of a police car, fire truck, and ambulance, and much more will be featured. The event is a great place to share crime prevention success stories, discuss different ways of implementing safety programs in your neighborhood, or just join in the fun.
Safety of Ames Water Remains Top Priority for Water Utility

Ames water is not only great tasting, it’s also constantly monitored for safety. The purpose of the Ames Water Utility is to protect public health by providing safe drinking water, and professionals in the Water and Pollution Control (W&PC) Department take that commitment very seriously. While events in Flint, Mich., have targeted public concern on the possibility of lead in municipal water, W&PC Director John Dunn explains that Ames customers can rely on the water utility to pay attention to the safety of their water. “The quality of the drinking water in Ames bears no resemblance to what happened in Flint,” Dunn said. “There is no lead in the source water used in Ames. Also, there is no lead in the water as it leaves the Ames Water Treatment Plant.”

The City of Ames intentionally and specifically controls its water chemistry in order to limit the possibility of lead leaching into the water from plumbing in a customer’s home or business. To protect themselves, water customers must understand whether or not they have lead components in their private water service line. Simply having lead in the service line does not automatically mean there are dangerous levels of lead in the water. As long as the water utility maintains appropriate water chemistry, the potential for lead in drinking water is very low. The City of Ames has created a map of properties where record keeping suggests lead components may be part of the private water service line. To check specific property status, go to: www.CityOfAmes.org/leadmap.

Additionally, the City’s website has pages devoted to information and resources related to lead: www.CityOfAmes.org/lead. Customers can also contact the Ames Water Plant at 515.239.5150 during office hours (8 a.m. to 5 p.m., Monday to Friday).
Ceiling Fans May Help Reduce High Summer Utility Bills

Ceiling fans allow you to turn up your thermostat a few degrees and still feel comfortable. We spend $.15 a day running a fan, but we save $.60 a day turning our thermostat up. Using a fan together with a thermostat turned up can reduce air conditioning bills by as much as 40%. However, if you don’t turn up the thermostat, the fan will add cost.

Fans cool people, not rooms. Ceiling fans improve comfort at a given room temperature by creating a wind chill effect on the skin. But because the furniture and the thermostat are already at roughly the same temperature as room air, they can’t “feel” the wind chill. To save energy, switch the fan off when you leave the room.

A ceiling fan increases comfort in the summer by blowing air downward on room occupants. But that same blowing air can actually feel like a draft in winter, which is why ceiling fan motors should be reversed to pull air upward in winter. By reclaiming hot air trapped on the ceiling, winter heating costs can be lowered by as much as 10%. A good ceiling fan should create enough air movement to keep you comfortable at 82 degrees and 80% relative humidity. Sizing the fan is important. Use the following as a guide:

<table>
<thead>
<tr>
<th>Room Area (square feet)</th>
<th>Minimum Fan Diameter</th>
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<tbody>
<tr>
<td>100</td>
<td>36 inches</td>
</tr>
<tr>
<td>150</td>
<td>42 inches</td>
</tr>
<tr>
<td>225</td>
<td>48 inches</td>
</tr>
<tr>
<td>375</td>
<td>52 inches</td>
</tr>
<tr>
<td>400+</td>
<td>2 fans needed</td>
</tr>
</tbody>
</table>

Source: U. S. Department of Energy and the Florida Solar Energy Center

Weather Radios Provide Warnings

Emergency notification of severe weather is important for our protection. Outdoor warning sirens are intended for those outside, so how do we stay informed of severe weather when inside buildings? Purchasing a weather radio can help. Radios are available at most electronics retailers for as little as $30.

Weather radios are tied to the National Weather Service and coordinated by the National Oceanic and Atmospheric Administration (NOAA). Once the owner activates the radio, he or she will be able to monitor emergency weather events. The system is tested every Wednesday at 11 a.m. and 7 p.m. For more information, visit the National Weather Service online at www.crh.noaa.gov/dmx.

Tree Trimming

- Inform City of Ames Electric Services if you notice any foliage clearance problems near power lines. Call 515.239.5500, or visit the web at www.CityOfAmes.org.
- Electric Services will follow up with residents about their tree clearance concerns.
- Once trimmed, the homeowner has the option to keep or remove any burnable wood. If it is kept, it is cut into pieces 24-inches long with a diameter of 4 inches or more, and stacked.
- All of the trimming, cutting, stacking, and removal is done at no cost to the homeowner.

Iowa One Call Phone Number

Always remember to call before you dig. The Iowa One Call number is even easier to remember. Just dial 811!
Ask the Energy Guy

Q: How much will a new air conditioner save me?

A: Just like about every other energy question out there, the answer is: It depends. Your savings will be affected by the outdoor temperature and humidity, the size and efficiency of your old and new air conditioners, and your thermostat setting. But assuming no major lifestyle changes and average weather, one should be able to get a rough idea of savings.

First, figure out how much you spend on air conditioning. Subtract your April electric bill from each of your July, August, September, and October electric bills. Total them and add 8%. This will give you a rough idea of your cooling costs. Next, estimate air conditioner efficiencies on the old and new air conditioner. Cooling equipment is tested by the Air Conditioning, Heating, and Refrigeration Institute (AHRI) and given a seasonal energy efficiency rating (SEER). This represents the cooling energy output per watt of electricity input. The higher the SEER, the more efficient the air conditioner. Your new air conditioner will have the SEER identified on the unit. If not, ask your installer. Estimating the SEER of the old unit depends on its age. For an air conditioner older than 20 years, the SEER would be about 6. A 10- to 20-year-old air conditioner will have a SEER of around 8. An air conditioner that is newer than 10 years would be around 10.

Let’s say you are replacing a 20-year-old air conditioner, and you estimate the old unit SEER to be 8. Make sure the new system you select has a SEER of 15 in order to qualify for a Smart Energy rebate. The new air conditioner should save you 47%. (8/15 = .53, 100% - 53% = 47% savings).

Going back to your bill analysis, you calculated that you spent about $425 a summer for air conditioning. Taking this times .47 will give you an estimated savings of $200. The new unit will cost about $225 per season to operate. Don’t forget to apply for your Smart Energy high efficiency air conditioner rebate! Find the instructions and the application online at www.CityOfAmes.org/SmartEnergy.