Neighborhood Easements

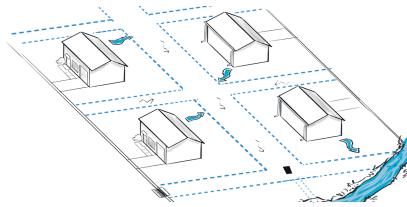
While technically your property, an easement is a portion of land set aside for a specific purpose and recorded, by deed, on your abstract (your property's history of ownership).

There are many types and sizes of easements. The most common easements are associated with utilities and include electric, gas, cable, drinking water, sanitary sewer and stormwater or overland flowage.

Overland flowage easements, or surface water flowage easements, provide a safe path for stormwater runoff to get from your backyard to the closest storm drain or ditch, which carries water away.

It would be cost prohibitive for a community to rely on underground pipes alone. Total reliance on underground pipes can increase downstream flooding, streambank erosion or cause difficulties if storm drain pipe buried in backyards need repair or replacement.

Easements, a vital component in stormwater management, allow the municipality access to your property for repairs and maintenance after construction is complete.



While not always the case, boundaries for overland flowage easements typically mirror drainage swale boundaries, which is the area of your property contoured or graded to expedite the removal of stormwater runoff.

Important to note: It is difficult to identify easements once a property has been developed, however; easements must be kept free of obstructions to maintain efficient drainage of stormwater runoff and prevent neighborhood disputes.

Placement of anything including wood piles, playground equipment and sheds within the easement or constructing fences or bridges within or across the easement is regulated by city code and strictly prohibited. Filling the easement in, redirecting or prohibiting the flow of stormwater through your property is also prohibited.

Iowa Stormwater Education Partnership

Altoona Ames Ankenv Asbury **Bettendorf** Bondurant **Carter Lake** Cedar Falls **Cedar Rapids** Clinton Clive Coralville **Council Bluffs Davenport Des Moines** Eldridge Grimes Hiawatha Iowa City Johnston Marion Muscatine **North Liberty Pleasant Hill** Sergeant Bluff **Sioux City** Solon Storm Lake University of Iowa Urbandale Waterloo Waukee West Branch Windsor Heights



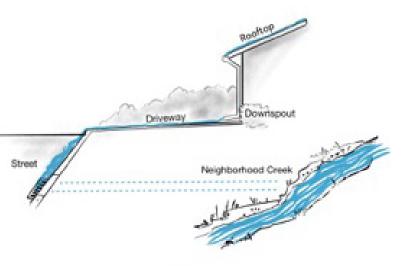
Drainage



In Your Neighborhood



Rain SOAKING INTO the ground.



Rain RUNNING OFF hard surfaces.

assistance to install approved landscaping practices designed to capture and infiltrate stormwater runoff and reduce localized flooding.

If you own property in Waterloo,

share dollars, depending on your

Cost-share programs across the state have

one thing in common: provide financial

you may be eligible for cost-

"watershed address."

Rebuilding soil health may be one of many landcaping practices eligible for cost-share.

Contact city staff at (319) 291-4312 to discuss programs and resources available for managing stormwater in your neighborhood.



Waterloo Spill Reporting Hotlines

8:00 am - 5:00 pm, Monday - Friday (319) 291-4312

After Hours and on Weekends (319) 291-4553

Report Spills On-Line Anytime: Ci.Waterloo.Ia.Us/IllicitDischarge

IowaStormwater.Org

Easements At Work

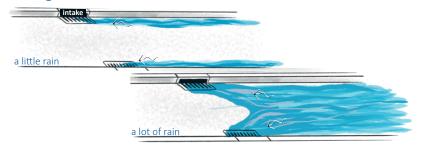


You may see a small stream forming. Depending on how your house was built, the small stream could flow in the front vard, the side of your house. the backyard or even all three.



The once small stream becomes larger and the water moves much faster, which could cause you concern. Be patient, as drainage swale easements are engineered and are functioning properly when runoff drains away within 48 hours.

Same goes for streets...



Most street intakes are sized to drain stormwater runoff generated from almost four inches of rain. Runoff generated from larger storm events may collect in and flood the street. This too will drain when given time, unless intakes are blocked by debris (i.e. litter, leaves or yard waste.) Contact City staff at (319) 291-4553 if you notice neighborhood inlets are blocked.

Rainfall and Soil Dynamics

A little rain is one inch falling over 24 hours. A lot of rain is one inch falling in five minutes. The amount of rain as well as how fast it falls determines if it is soaked up by the landscape or not. A lot of rain may overwhelm your soil's ability to *infiltrate* or *soak it up*.

Rain not soaked up by the landscape or falling on an impervious surface, such as a rooftop or driveway, becomes stormwater runoff. Healthy soil plays a vital role in managing stormwater.

Did you know? One inch of rain falling in five minutes is equivalent to 7.5 inches of rain falling over 24 hours. Both of these rainfalls have a 1 out of a 100 chance (1%) of occurring each year.

> Healthy soil should have 50% pore space

reserved for air and water storage.

When it rains, water

until it is saturated.

Once saturated, rain

When soil is saturated or

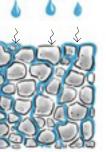
mostly compacted rain

becomes stormwater

runoff.

fills pore space

becomes runoff.



Healthy soil with open pore space is able to infiltrate rain.

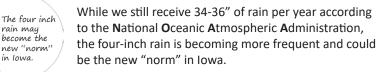
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Water stored in the soil is beneficial as it either percolates deeper into the ground to recharge groundwater, is used by plants or evaporates to begin the water cycle again.

Change in Iowa rainfall



Be aware heavier rainfall events, happening more often, may overwhelm the neighborhood drainage system.

Reducing Stormwater Runoff



The storm drain system, including overland flowage in your easement, can easily be overwhelmed when there is more stormwater runoff than it is sized to handle. This can result in neighborhood flooding.

Neighborhoods and neighbors working together can reduce stormwater runoff. Two simple steps go a long way to keep rain where it falls: redirect downspouts to vegetated areas in your yard and rebuild soil health.

Downspout direction

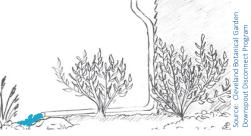
Downspouts pointed to impervious areas. such as driveways or walkways generate a lot of stormwater runoff.

This results in a deluge of runoff reaching the storm sewer system quickly and may cause localized flooding in the street.

Soil health

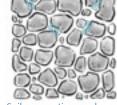
There is nowhere for water to go when soil is compacted.

This results in more runoff and a soggy backyard, which takes a long time to dry out. It may also result in a constant battle to grow vegetation.



Direct downspouts so rooftop runoff is infiltrated into the ground rather than quickly draining into the street and into the nearest storm drain.





Rain running off as it hite this compacted surface.

Soil compaction can be reduced through aeration

Reduce compaction so more rainfall is soaked up where it falls rather than flowing through and possilby overwhelming backyard easements.

