

## What does the future hold for the City of Fort Dodge?

### Water Quantity and Quality:

Currently 45 cities and Universities in Iowa must conform to Storm Water permits for water quality. In the near future Fort Dodge will also be under this directive from the Iowa Department of Natural Resources to monitor our storm water facilities throughout the city for all hazardous materials and water quality. This mandate will address the management of our storm water system in the same nature that our Storm Water Utility ordinance will. Our strides in the advancement of this current ordinance will prepare the city for these future rules and regulations that will not be optional.

### Special Note:

*If you are considering property development or enhancement in a commercial or industrial property a Site Plan is required, which will in turn address all of the storm water drainage concerns. The site plan ordinance is administered by the Business Affairs and Community Growth Department.*

## What you can do to help:

Storm water is everybody's concern and we encourage you to help.

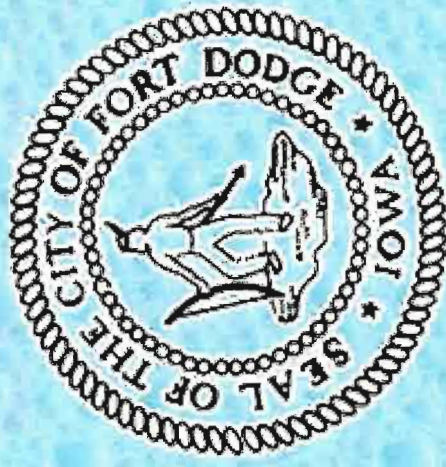
Take the following steps to decrease storm water runoff quantity after development is complete.

- Limit the amount of impervious surface on your property.
- Where possible, direct runoff from impervious areas to vegetated areas.
- Allow thick vegetation or "buffer strips" to slow down runoff and increase ground infiltration.
- Shovel snow onto grass and landscaped areas.
- Aerate your lawn.
- Drain roof gutters away from the foundation and onto grass or landscaping.
- Gather and dispose of litter and debris from driveways instead of hosing debris into gutter and/or storm drain.

### Additional Questions, Please Contact:

The Engineering Department  
819 1<sup>st</sup> Avenue South,  
Fort Dodge, Iowa  
or call 515-576-3601

or email to [engineering@fortdodgeiowa.org](mailto:engineering@fortdodgeiowa.org)



## FORT DODGE, IOWA

### Storm Water Utility Management

**What is storm water?**

**What is a Storm Water Utility?**

**What does the future hold?**

**What can I do to help?**

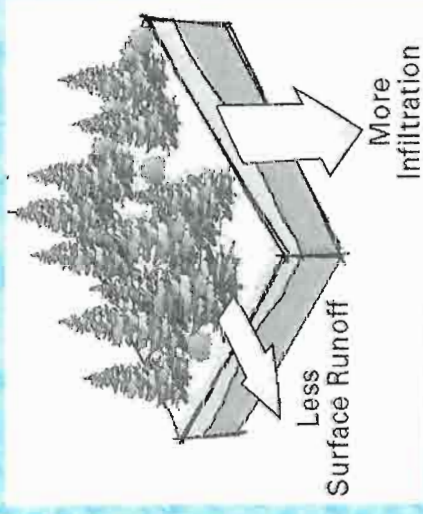
## Storm water is what? And comes from where?

Development of land creates impervious areas such as roads, roof tops, parking areas and sidewalks that prevents rainfall or snowmelt from soaking into the soil, thus causing storm water runoff. This runoff can exceed the capacity of the existing natural drainage areas. As a result, manmade collection devices (storm sewer, curb and gutter and ditches) consolidate the excess moisture. The storm water runoff is then discharged to downstream waters such as creeks, rivers and lakes.

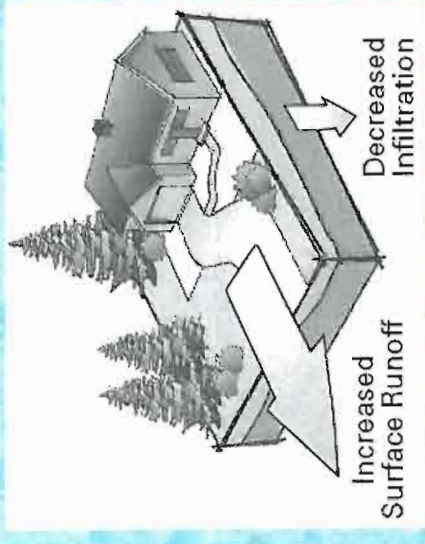
## How does an impervious area affect water quantity?

An impervious area such as a building, concrete, asphalt and compacted gravel creates a barrier to water to prevent it from soaking into the soil. This process reduces the amount of subsurface moisture or groundwater and increases the downstream surface water flow. Velocity is also increased and can lead to additional issues such as erosion.

## Before Development



## After Development



## Storm Water Utility

Like many cities in Iowa, Fort Dodge has a storm water system of curb and gutter, pipe, ditches, ravines, creeks and rivers that transports storm water runoff. This is similar to the water and sanitary infrastructure that serves your home or business. This storm water infrastructure must be constructed and maintained to manage storm water volume throughout the entire city.

The city has developed and implemented a storm water utility to fund our storm water runoff system. The purpose of the utility is to provide improved storm water management services within the city through the use of a dedicated funding source.

To establish the utility a unit of measure was determined, by randomly selecting 50 homes in Fort Dodge and calculating the mean value of impervious area on these lots. This area was determined to be 2,533 square feet, thus being 1 ERU (equivalent residential unit). The impervious area for each property in Fort Dodge was determined and then divided by 2,533 square feet to determine the number of ERU's for any given property. Every property will have at least a minimum of 1ERU, which would reflect the typical residential home in the city. All other properties will have multiple ERU's. A fee will be attached to the owners' monthly utility bill, and calculated according to the number of ERU's at \$3.00 per ERU.