# What is an Impervious Surface?

An impervious surface is any surface that covers the soil and repels or prevents water from filtrating into the soil. The most commonly constructed impervious surfaces are rooftops, sidewalks, roads, highly compacted soil and parking lots.



### Did you know?

- Impervious surfaces cause untreated storm water and irrigation water to run directly into the storm drains that lead to the rivers.
- Water that drains over impervious surfaces carry pollutants such as litter, pet waste, vehicle fluid, soil, fertilizers, and pesticides to rivers and streams.
- One acres of parking lot produces 15 times more run off than one acres of meadow.
- Permeable surfaces actually help improve water quality by filtering out sediment and other pollutants and helps replenish the water table.
- The temperature of traditional pavement in the summer can reach over 120°F
- Nationwide, pavement covers 50-70 percent of most urban areas.

#### What can you do?

- Direct storm water from the driveways into vegetative strips.
- Install detention basins in large areas to store water, filter out sediment, and recharge the ground water.
- Disconnect your down spouts, redirect water to green areas, or save water in a rain barrel.
- Limit discharge by not over watering your landscape or "watering" sidewalks and patios.

#### Consider Alternative Surfaces

- · Permeable pavement or cement\*
- White Line Wall Stone
- · widely spaced wood decking
- stamped concrete paving blocks
- interlocking pavers
- gravel, brick, river rock, lava rock, cobblestone, slate crushed brick.

\*If you choose to install pervious surfaces over a large area consider the soil conditions and type, infiltration rate, depth to bedrock, and water table. Contact the Weber County Engineering Department for more information.

Also alternative underlayment and filler such as:

- · rice stone
- course stone dust
- stone dust

These surfaces compared to traditional asphalt and concrete allow more water to filtrate in to the soil, recharges ground water, improves water quality and in some cases eliminates the need for detention basins.

#### Something to think about

Lawn areas are actually less efficient than landscaped areas of shrubs, trees, and ground covers in recharging the ground water.

#### The Benefits of Pervious Surfaces

#### **Financial Benefits**

- Reduces the volume of water that enters the storm drain system and decreases the amount of revenue needed to maintain these systems.
- Decreases the cost and need for the development and installation of new systems.

#### Benefits to Water Quality and Environment.

- Improves water quality in rivers, streams, and the water table.
- Decreases the amount of chemical contaminants that pollute water habitats.
- Reduces stream and river velocity which lessens the severity of channel down cutting erosion.
- Reduces the amount of soil, sand, silt, and clay that enters the waterways and harms habitats.
- Helps keep recreation areas safe from pollutants that can be dangerous to humans.



For additional information on Storm Water Protection refer to the following brochures:

**Erosion Control** 

Fresh Concrete and Mortar Application

Household and Vehicle Maintenance

**Impervious Surfaces** 

Landscaping, Gardening, and

Yard Maintenance

Paint and Household Hazardous Waste

Pet Waste Water Quality

Utah and its Water, Why Conserve

Water Conservation Outside the Home

Xeriscaping



For more information about the Weber County Storm water quality management program and additional pamphlets, contact:

Weber County Storm Water Management Dr. George S. Burbidge 444-24th St. Ogden, UT 84401 Office (801)399-8677 Fax (801)625-3699

www.co.weber.ut.us/stormwater.

Brochure created by Salt Lake County Engineering Division modified by Weber County Storm Water Management Division

## **Spill Response**

Dial 911 -or-State Of Utah Environmental Response (801) 536-4123

Local Pollution Control Agencies:

Utah Division of Water Quality (801) 538-6146

Environmental Health Division of the Weber/Morgan Health Department (801)591-7168



1-800-458-0145

Used Oil Recyclers (for DIYers in Weber County)

Weber County Transfer Station
Auto Zone Stores
Checker Auto Parts Stores
NAPA Auto Parts Stores
Pep Boys Stores
Little Tire & Lube
Jiffy Lube

The preceding list is not all encompassing nor does it constitute an endorsement by Weber County of any particular company

## **Impervious Surfaces**



RECOMMENDED METHODS FOR STORM WATER PROTECTION

