# Drainage and Flooding

It's not uncommon for many areas of the City to experience street flooding during heavy rainfall. Normally, the water will drain in a relatively short time, but if there are obstructions and blockages in the drainage systems, more serious flooding may occur.

Residents are encouraged to keep debris out of ditches and pipes. Litter, leaves, lawn clippings and pine needles all contribute to problems with drainage systems. When residents periodically clean the ditches and driveway pipes around their property, stormwater runoff is allowed to drain away from streets, homes and businesses.

# Reporting Contamination and Illicit Discharges

Help us keep Nevada clean! If you observe contamination of our storm drains or waterways, please write down the location, date, time, a description of the suspects and their license plate number and call spill hotline number to report the incident 775-888-7013. http://www.nevadadot.com/StormWater/Illicit\_Discharge\_Reporting.aspx

### Speaker's Bureau

Do you have a Civic League, neighborhood group or other organization that would like to hear more about stormwater in your neighborhood? NDOT has many experts available to speak at your meeting. To book a speaker, please contact a stormwater expert at 775-888-7889.

# Why Save Water?

Besides saving money, water conservation can help prevent pollution. Using less water reduces run-off and leaves more water in streams or lakes, which protects existing ecosystems such as wetlands and water supplies. Reduced water usage may extend the life of existing sewage treatment plants and can eliminate the need for new water supplies which are expensive to locate and build.

# How Much Water Are We Using?

The Average American uses 60 gallons of water a day. That does not include car washing, lawn watering and other outdoor uses. Flushing the toilet, bathing and washing clothes are the largest uses of water in the home.

### Conservation Measures

Check faucets, hoses, and toilets for leaks. Turn off hoses and connecting faucets when not in use. This will also preserve equipment and avoid leaks. Inspect your water pipes periodically for pinhole leaks and leaks in connections. Repair leaks as soon as possible. Don't over fill the bathtub. Take shorter showers. Install water saving toilets and shower heads. Don't let the water run when brushing your teeth or shaving. Keep a bottle of drinking water in the refrigerator so you don't need to run the tap water for cold water.



Stormwater Division



A citizen's guide for the Stormwater Management Program



www.nevadadot.com

#### What is Stormwater?

Stormwater is rainfall or snow melt that runs off surfaces such as roads, compacted ground surfaces and rooftops. As the stormwater runoff moves, it can pick up and carry away natural and man-made pollutants such as fertilizers and animal waste. Eventually, the runoff deposits the pollutants into lakes, rivers, wetlands, coastal waters and even our underground sources of drinking water. This is called non-point source pollution.

## Sewer System vs Storm Water Drain

Sewer systems and storm water drains are two different things. The water that goes down a sink or toilet flows to a wastewater treatment plant where it is treated and filtered. Water that flows down driveways and streets into a gutter is not treated and goes into a storm drain that flows directly to a lake, river or stream.

#### Pollutants Harm our Water

We rely on clean water to drink, to support wildlife, to fill our lakes and creeks and to wash up onto the shores of our beaches. Pollutants can contaminate clean drinking water sources, kill off local wildlife and close rivers, lakes and creeks.



# Common Stormwater Pollutants

There are a variety of contaminants that can easily pollute our stormwater. Rain picks up oil and grit left on the roads; sprinklers wash pesticides, fertilizers and weed killers from our gardens and lawns; washing the car carries detergents, oils and grease from the driveway and into our waterways.

**Motor Oil** - Four quarts of motor oil can create an 8-acre oil slick and contaminate a million gallons of drinking water.

**Antifreeze** - Antifreeze is a toxic pollutant that can kill not only aquatic life but also pets when they drink from contaminated puddles.

**Pesticides** - The use of harmful chemicals on your lawn can be reduced with proper mowing, fertilizing and watering. Apply pesticides only in areas where needed and only in directed amounts.

Animal Waste - Pet and other animal waste is raw sewage that releases bacteria and oxygen-consuming materials into our waterways. Pet owners should always "scoop the poop".

**Soaps and Detergents** - Detergents are pollutants that contain phosphorus which contributes to algae blooms. Algae blooms deplete waterways of oxygen and can cause fish to die.

Yard Debris - Yard waste (grass clippings and leaves) is a pollutant that releases bacteria, oxygen-consuming materials, phosphorus and nitrogen into our waterways. It also clogs storm drains, which contributes to flooding. If necessary, bag yard waste in clear plastic bags and place at the curbside on your regular garbage collection day.



# Preventing Stormwater Pollution

Pollution is a problem but YOU can be the solution! There are many ways you can help prevent stormwater pollution.

- Don't dump waste, including organic material such as leaves and grass clippings, in storm drains.
- Inspect and maintain your car to prevent oil and antifreeze leaks.
- Dispose of household chemicals properly.
- Take motor oil, antifreeze, oil-based paint, paint thinner, varnishes and solvents to a recycling station.
- Use kitty litter to clean up leaks and spills. Never hose spills into the gutter.
- Buy household and garden products that are environmentally safe.
- Do not apply lawn or garden products when rain is forecast.
- Avoid over-fertilizing your lawn by testing your soil first to find out how much of which nutrient it needs.
- "Scoop the poop" by discarding pet waste in the garbage or flushing down the toilet.

