

# STORMWATER POLLUTION PREVENTION AWARENESS



# What is Stormwater?

- It is rainfall and snowmelt that did not soak into the ground.
- It forms run-off which flows into storm drains and ends up in rivers, lakes, wetlands.
- Often picks up pollutants as it flows across parking lots, streets, lawns.
- Does NOT flow to treatment plant.



# Pollutants in Stormwater

- Bacteria: from animal waste
- Nutrients (Nitrates, phosphorus): from fertilizers on lawns and agriculture.
- Sediment: from construction sites, agriculture, unpaved roads.
- Oil & grease: from driveways, parking lots.
- Metals: from roads, railways.
- Other chemicals: pesticides, petroleum.



# Why is stormwater pollution a problem?

- It impairs water quality and kills aquatic life.
- *In 2003, an estimated 2 million fish were killed due to low oxygen caused by polluted stormwater runoff in the Neuse River.*



Photo courtesy of University of North Carolina

# Why is stormwater pollution a problem?

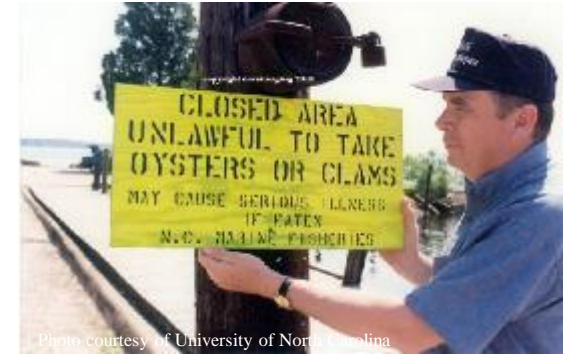
- It increases cost of drinking water treatment.
- *The Rio Grande is a drinking water source. The more pollution enters it through stormwater, the more expensive it is to treat.*





# Why is stormwater pollution a problem?

- It can affect recreation and tourism.
- *Lakes, beaches and rivers may remain closed due to bacteria and other pollution from stormwater.*



# Why is stormwater pollution a problem?

- Causes floods and may lead to property damage and loss of lives.
- Floods can carry household hazardous waste to rivers.



July 26 2013 flood , Bernalillo, NM. Photo courtesy of KOAT.com



July 26, 2013 Flood, Albuquerque, NM. Photo courtesy of Albuquerque Journal

# Preventing Stormwater Pollution – Best Management Practices (BMPs)

- General Rule: only rain can go down the stormwater drain.
- “No dumping. Only Rain in the Drain”





# Preventing Stormwater Pollution - BMPs

- Do not dispose of waste into storm drains, or cross connect with other piping systems.



Photo courtesy of University of North Carolina



Photo courtesy of PACE

# Preventing Stormwater Pollution - BMPs

## Good Housekeeping:

- Store chemicals off the ground and in secondary containment.



Photo courtesy of University of North Carolina



Photo courtesy of University of North Carolina

# Preventing Stormwater Pollution - BMPs

- Clean up chemical spills.
- Dispose of hazardous waste at hazardous waste collection facilities.



# Preventing Stormwater Pollution - BMPs

- Keep storm drains free of litter and debris.
- Do not put grass clippings or leaves into storm drains.
- Sweep up driveways, sidewalks and gutters with a broom; flushing with water washes pollutants into storm drains leading to the river.



Photo courtesy of PACE



# Preventing Stormwater Pollution - BMPs

- Dispose of sweepings and trash in closed trash containers.
- Inspect trash containers for leaks.
- Make sure waste does not leak into storm drain.



Photo courtesy of PACE



Photo courtesy of PACE



# Preventing Stormwater Pollution - BMPs

- Pick up after your pet. Pet waste contains bacteria and nutrients that get carried by stormwater into the river.
- Utilize pet waste stations to properly dispose of pet waste.



# Preventing Stormwater Pollution – BMPs

- Check your car for leaks and recycle your motor oil. Motor oil cannot be washed into storm drains, polluting the river.
- Take your car to a car wash instead of washing it in the driveway.



# Preventing Stormwater Pollution - BMPs

- Use fertilizers, pesticides and herbicides sparingly.
- Follow manufacturer's instructions during application.
- Do not apply fertilizers, pesticides or herbicides immediately before a rain event.
- Runoff can wash these chemicals into the storm drain and pollute rivers.
- Use less toxic detergents, pesticides and solvents, and follow instructions on labels.



Photo courtesy of University of North Carolina

# Preventing Stormwater Pollution - BMPs

- Use low impact development.
- Consider a rain garden to capture runoff.
- Pave fewer surfaces. Pavement prevents rain from soaking into the grounds.



# Preventing Stormwater Pollution - BMPs

- Reduce runoff from construction sites. Install silt fences.
- Soil stockpiles should be covered with tarp.
- Bare areas should be seeded and covered with mulch to prevent erosion.





# UNM STORMWATER POLLUTION PREVENTION AWARENESS



For more information on how you can help, visit:

- [www.srs.unm.edu](http://www.srs.unm.edu)
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