Storm Water Pollution Prevention Awareness

Presented by

Office of Environmental, Health, Safety & Risk Management
Storm Water Runoff

- City streets, parking lots, and other impervious surfaces in urban areas generate storm water runoff

- Runoff is carried through ditches, creeks, and storm sewer systems emptying into streams, lakes, and rivers
Storm Water Runoff

University storm water runs to the Red Arroyo and the city’s municipal separate storm sewer system (MS4), where it empties into the Concho River.
Storm Water Conveyance Systems

Campus runoff is carried into detention basins but the majority travels into the city’s MS4
Regulatory Requirements

In accordance with the Clean Water Act, the EPA, and the TCEQ, the university is required to develop and implement a Storm Water Management Program (SWMP)
Storm Water Management Program

• The ASU SWMP is developed, implemented and enforced by the EHSRM office

• The goal of the program is to reduce or eliminate pollutants in U.S. waters

• There are five Minimum Control Measures (MCMs) the University must implement to reduce or eliminate its storm water pollution
Five Minimum Control Measures (MCMs)

MCMs are designed to achieve water quality goals and the following apply to ASU:

- **Public Education, Outreach, and Involvement**
- **Illicit Discharge Detection and Elimination**
- **Construction Site Storm Water Runoff Control**
- **Post-Construction Storm Water Management**
- **Pollution Prevention and Good Housekeeping**
Best Management Practices

• The University is required to develop and implement Best Management Practices (BMPs) for each MCM

• BMPS must be measurable and are designed to reduce storm water pollution to the “maximum extent possible”
Best Management Practices

Public Education, Outreach, and Involvement

In addition to this presentation, information on the following programs is hosted on EHSRM website:

- Earth Day
- Campus Recycling Program
- Pet Waste Management Program
- Storm Drain Marking Program
Best Management Practices

Public Education, Outreach, and Involvement

ASU participates in Earth Day in April by coordinating with the Center for Student Involvement to provide a public venue for disseminating information on conservation and sustainment of our natural resources.
Best Management Practices

Public Education, Outreach, and Involvement

ASU implements a campus recycling program collecting plastic, paper, and cardboard
Best Management Practices

Public Education, Outreach, and Involvement

- The pet waste management program is designed to reduce waste and pollutants in campus storm water
- Pet waste stations are sited along the campus mall
Best Management Practices

*Public Education, Outreach, and Involvement*

The storm drain marking program is designed to remind the campus to reduce waste and pollutants in campus storm water.
Best Management Practices

*Illicit Discharge Detection and Elimination*

- Campus inspections are routinely conducted to detect illicit discharges or illegal dumping.
- Facilities Management inspects and services sanitary sewer lines to prevent discharges into the MS4.
Best Management Practices

Illicit Discharge Detection and Elimination

- Facilities Management and University Police report illicit discharges and illegal dumping to EHSRM
- Illicit discharges and illegal dumping are investigated, documented, and properly mitigated
Best Management Practices

Construction Site Storm Water Runoff Control:
Facilities Planning & Construction coordinates Stormwater Permits for all construction projects and oversees compliance with erosion, sedimentation, and pollution controls.
Best Management Practices

- Stormwater Pollution Prevention Plan (SWPPP) required on construction site
  - It is the law
  - Designed to eliminate pollution from leaving the construction site
- Use of ecologs & silt fencing
- Stone construction entrances/exits
- Grass covered drainage ditches
Bad examples
(used to train Facilities Management Team)
Good examples
(used to train Facilities Management Team)

- Secondary Containment
- Properly Trenched
- Reinforced Filter Fabric
- Anchored
Best Management Practices

Post-Construction Storm Water Management

Facilities Management works with EHSRM to develop and maintain storm water controls
Best Management Practices

*Post-Construction Storm Water Management*

The University operates and maintains a limited conveyance system consisting of subsurface pipes and surface culverts, drains, and inlets.
Best Management Practices

Post-Construction Storm Water Management

Creation of low impact development and native vegetative areas conserves water
Best Management Practices

*Post-Construction Storm Water Management*

Stormwater collection tanks are installed to capture runoff which is used to water campus vegetation.
Best Management Practices

*Pollution Prevention and Good Housekeeping*

- Facilities Management implements pollution prevention measures during daily maintenance.
- The street sweeper program removes leaves and debris, reducing storm water pollution.
Best Management Practices

Pollution Prevention and Good Housekeeping

• The University has developed a hazardous chemical spill plan and prepositioned emergency response kits in select facilities
Best Management Practices

Pollution Prevention and Good Housekeeping

• The University storm sewer system inspection program includes periodic sampling and analysis of storm water runoff
Best Management Practices

Pollution Prevention and Good Housekeeping

- Vehicles should be properly serviced and are NOT authorized to be parked on campus if leaking gas, oil, or anti-freeze, or are inoperative.
How Can We Prevent Stormwater Pollution?

• Outdoor trash containers/dumpsters should **ALWAYS** be closed when not in use
• Do **NOT** pour hazardous wastes down drains
• Do **NOT** place hazardous waste in trash bins or dumpsters
• Do **NOT** store retired equipment or vehicles in outdoor area/parking areas
• Do **NOT** wash parking lot or sidewalks with detergents or cleaning solutions
• Store chemicals (including oil products) indoors only
• Check oil based equipment for leaks prior to use
• In the event of a spill, immediately notify the University Police at 942-2071

Should you have any questions about Stormwater Pollution Prevention
Contact EHSRM at 325-942-2180 or at extensions 6725 or 6275
Everyone is responsible for helping protect the environment and water quality.