

Buckley AFB Pollutant Challenges



Off road driving onto paved roads tracks mud that must be cleaned up. Such incidents are too frequent and are costing Buckley AFB money to correct.

*Stormwater Awareness
Spring 2015 Edition*

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TRACKING: HOW TO KEEP SEDIMENT OUT OF THE WATERWAYS

You might be asking yourself, how can sediment be a pollutant? Isn't sediment found in nature? Sediment is the loose sand, silt, clay and other soil particles that settle at the bottom of a body of water. Sediment becomes a pollutant when erosion occurs. Erosion occurs naturally, but accelerated erosion from human use of land produces 70% of sediment pollution resulting in \$16 billion in environmental damage annually (1). In fact, the United States Environmental Protection Agency (EPA) lists sediment as the most common pollutant in rivers, streams, lakes and reservoirs.

Accelerated erosion from human activities can cause many problems. Flooding potential increases when sediment clogs storm drains that carry water away from roads and homes. Sediment also clouds water which prevents animals from seeing food and murky water prevents natural vegetation from growing. When too much sediment gets in a stream, it disrupts the natural food chain by destroying the habitat of small stream organisms. The result is massive declines in fish populations (1).

Stormwater runoff is any precipitation that runs off the land and into streams, rivers and lakes. Stormwater runoff is not treated before being discharged into drainage collection systems, called storm sewers, or into natural waters. When pollutants enter a storm sewer drain or drainage ditch they will eventually make their way into streams, rivers, wetlands, etc. One way of protecting our waterways is through the use of Best Management Practices, or BMPs. BMPs, when installed correctly, minimize soil erosion which prevents sedimentation occurring in streams. It is important to remember that BMPs must be maintained to be effective (2).

The most common cause of sediment pollution is from construction activities (1). Using perimeter control BMPs on a construction site helps control sediment from leaving the site. A Vehicle Tracking Control pad (VTC) minimizes the amount of sediment leaving a site by removing it from vehicle tires(2). Mud or dirt that ends up on the pavement needs to be cleaned up as soon as possible by either scraping with shovels and sweeping by hand or by mechanical sweepers that use water, but especially before the next storm event. (cont. next page)



Sediment enters the storm drains and accumulates in our streams where kills off plant and animal life.

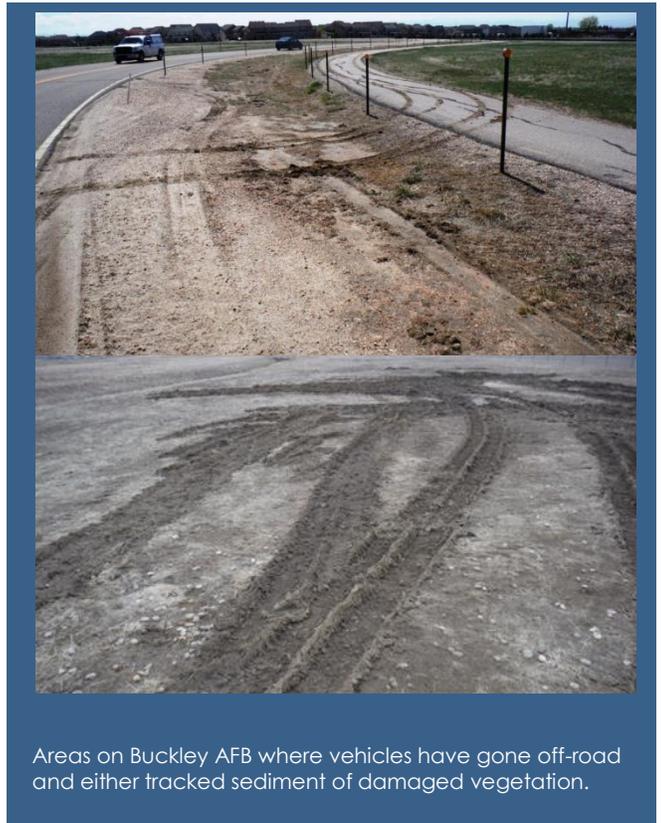
TRACKING: HOW TO KEEP SEDIMENT OUT OF THE WATERWAYS (CONT.)

Off-road vehicles (ORVs) can cause many environmental problems such as soil displacement and compaction, which results in erosion and damages vegetation. It becomes difficult for water to seep into the soil once it is compacted and it is challenging for revegetation to occur. (3)

Polluted stormwater contaminates waterways and harms plants, fish and wildlife. Protecting our watersheds' health preserves and enhances both aquatic and human quality of life. Small watersheds drain to larger watersheds that eventually make their way to the ocean. Keep our waters clean by preventing the discharge of pollutants into the drainage system.

References

- (1) EPA http://cfpub.epa.gov/npstbx/files/ksmo_sediment.pdf
- (2) CDOT <https://www.codot.gov/programs/environmental/water-quality/documents/CDOT%20Pocket%20Guide%20122211.pdf>
- (3) Wildlife Guardians http://www.wildearthguardians.org/site/PageServer?pagena=me=priorities_wild_places_ORV_reform#.VUPk9yFViko



Areas on Buckley AFB where vehicles have gone off-road and either tracked sediment or damaged vegetation.

WHAT'S CAUSING OUR POLLUTION?

Construction

- Contractors disposing of concrete washout in storm drains and drainage ditches.
- Sediment washing into gutters and streets from job sites.

Around the House

- Cleaning brushes or rinsing paint containers into the gutter.
- Residents and landscape companies over-fertilizing lawns or using pesticides and herbicides improperly.
- Car washing in the driveway or street with soaps.
- Pouring mop water outside and down storm drains.

Motor Vehicles

- Vehicles leaking oil and gas onto driveways and streets.
- Spills of oil and fuel during maintenance and refueling.
- Cracked batteries.
- Improper disposal of antifreeze, oil, old tires, and batteries.
- Off-road vehicles tracking mud onto paved streets.

REPORT POLLUTION INCIDENTS/SPILLS

TO
460TH CES WATER QUALITY PROGRAM
at 720-308-4655/6308

OR TO

460TH CES CUSTOMER SERVICE
AT 720-847-9913

OR

E-Mail:

460ces.cevwater@us.af.mil

