



COMMON POLLUTANTS

Animal

- Animal waste (feces/manure and urine)
- Bacteria, parasites, and viruses (campylobacter, E. coli, leptospira, salmonella, cryptosporidium, giardia)
- Bedding
- Chemicals
- Dirt and sediment
- Hair, fur, and hoof waste
- Nutrients (nitrogen, phosphorous, and potassium)
- Wastewater
- Trash and litter



TIP: Keep your animals healthy by picking up waste before each storm and whenever you are out and about.

Be sure to always:

- Understand on-site drainage
- Identify all on-site storm drain inlets and catch basins or nearest off-site drain location
- Ensure all on-site storm drain inlets are labeled
- Routinely inspect and clean on-site storm drain inlets or catch basins
- Construct or repair trails, arenas, roads, parking areas, ditches, and culverts to drain water but not sediment

TIP: Nutrients from manure make great fertilizer when applied correctly, but please do not apply manure before or during a rainstorm or in large quantities.

Why? Because large quantities of nutrients can actually be harmful to aquatic life, and manure contains bacteria that can present health and safety hazards to both aquatic life and human health. Stormwater can carry these potential pollutants to local waterways or worse, contaminate groundwater wells used for drinking water!



ABOUT THIS GUIDE

Most animal owners do not realize their habits and actions may affect our local streams, creeks, lakes, rivers, or the ocean. This guide provides information about how to reduce impacts to stormwater associated with caring for and handling horses and other farm animals. Pollutants from animal handling operations can be picked up while watering or when it rains and then be transported to the nearest storm drain inlet and into our waterways. You can help reduce water pollution year-round by implementing the BMPs in this guide.



ANIMAL CARE AND HANDLING FACILITIES BMPs

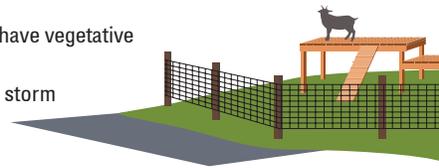
MINIMIZING TOXIC CHEMICAL USE

- Consider less toxic grooming practices by choosing eco-friendly products and equipment that reduce the amount of product and water needed.
- Store all chemicals, cleaning products, grooming products, etc. indoors or outdoors in a waterproof vessel.
- Use Integrated Pest Management (IPM) or less toxic methods for insect and weed control.

Did you know? Even cleaning products labeled “non-toxic” and “biodegradable” are not safe. “Non-toxic” means the product is not toxic to the user. “Biodegradable” means the product will eventually break down. These products are still harmful to wildlife and the environment.

ANIMAL PENS/STRUCTURES/ENCLOSURES

- Where possible, animal pens/structures/enclosures (such as corrals, stalls, paddocks and/or barns) should be placed a minimum of 50 feet or more away from the edge of a waterway.
- Separate animal enclosures and manure storage areas from waterways with vegetative buffers or pasture.
- Allow for proper drainage and control of runoff to prevent stagnant, standing water and any flow of contaminated water off-site and into surface or subsurface water.
- If possible, situate barns, corrals, and other high-use areas so that rain or irrigation will carry stormwater runoff away from the nearest waterway. Do not site facilities or pasture on land where the slope is 30% or more.
- Install gutters and downspouts to divert stormwater runoff away from animal keeping areas and into vegetated areas where it can soak into the ground or into rain barrels or cisterns for use.
- Avoid water trough overflow and repair leaking or broken pipes, which can cause erosion and/or off-site discharge.
- Regularly sweep and clean animal keeping areas to collect and properly dispose of animal waste, uneaten food, and other potential stormwater pollutants.
- If animals are kept in unpaved and uncovered areas, the ground should either have vegetative cover or some other type of ground cover such as mulch.
- Do not hose down areas that may contain potential stormwater pollutants into storm drains or to a nearby waterway.



BEDDING

- Remove soiled bedding and manure at least 3 times per week from stalls, paddocks, corrals, and/or barns for proper off-site disposal.
- Consider using rubber mats in stalls to provide the same amount of cushioning with less bedding, which can help to reduce the amount of soiled bedding produced, thereby reducing potential sources of bacteria.

FOR ADDITIONAL INFORMATION CONTACT OUR PARTNERING AGENCIES



City of Buellton
www.CityofBuellton.com
Public Works
Department
805.688.5177
swmp@cityofbuellton.com

City of Carpinteria
www.carpinteria.ca.us
Public Works
Department
805.880.3415
stormwater@ci.carpinteria.ca.us

City of Goleta
www.CityofGoleta.org
Public Works
Department
805.961.7500
stormwater@cityofgoleta.org

City of Lompoc
www.CityofLompoc.com
Community Development
Department
805.875.8275
stormwater@ci.lompoc.ca.us

City of Santa Barbara
www.sbcreeks.com
Creeks
Division
805.897.2658
creeks@santabarbara.gov

City of Solvang
www.CityofSolvang.com
Public Works
Department
805.688.5575
stormwater@cityofsolvang.com

Santa Barbara County
www.SBProjectCleanWater.org
Project
Clean Water
805.568.3440
cleanwater@countysantabarbara.org

WANT TO KNOW MORE?



The Cities of Buellton, Carpinteria, Goleta, Lompoc, Santa Barbara, and Solvang, and the County of Santa Barbara have extensive Stormwater Management Programs, with an even greater selection of information and useful tools to help YOU protect our environment.

Take advantage of the following FREE services:

- Download or print BMP materials

Be sure to always check:

- Local wastewater authority's discharge requirements
- Drought restrictions
- Local Planning Department to determine if composting is allowed within the zone district and if a Minor Conditional Use Permit is required
- Central Coast Regional Water Quality Control Board requirements
- County of Santa Barbara Environmental Health Service (EHS) Composting Permit Notification/Requirements: ≤ 100 cubic yards (cy) and ≤ 750 square feet (ft²) is excluded from EHS permit

For the location of FREE local household hazardous waste or e-waste collection events, visit your city's Solid Waste webpage, your waste hauler's website, OR **Less is More** at: <http://lessismore.org>.

To find Santa Barbara County's Safe Medicine Disposal Kiosk Drop-Off Locations, visit Santa Barbara County's **Safe Drug Disposal** webpage <https://www.countyofsb.org/phd/ehs/safe-drug-disposal.sbc> or the Santa Barbara County's **Safe Medicine Disposal** webpage <https://www.sbsheriff.org/operation-cabinet/>

ONLY RAIN DOWN THE STORM DRAIN

COMPOSTING

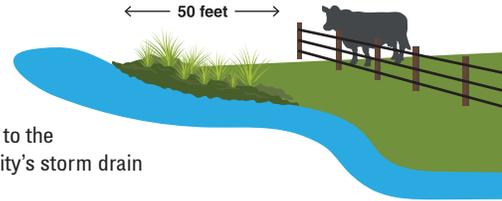
- Commercial composting of animal manure is considered agricultural material composting; however, it may be composted at a green material or vegetative food material composting facility and may require a notification, registration or full permit depending upon volume of material on-site at one time. Composting dog, cat and pig manure is not recommended due to the types of bacteria they harbor.
- Store manure in a composter or in a designated composting stall in a covered area or in an area that cannot discharge runoff. Composting piles should be 5 to 7 feet square on the bottom rising 3 to 4 feet high.
- Compost piles should be in a well-drained site on level ground, where drainage can be contained and controlled. Ideally, the pile should be near a water hose or spigot for maintaining compost pile moisture levels.
- Cover composting piles with a tarp, if stored outside. To secure tarp, staple or nail a board across the front of the tarp to make it easier to pull the tarp forward and backward to add or remove material.



Did you know? A manure pile with less bedding will compost faster and is more likely to compost completely. In the summer, a well-managed manure pile can be composted in 1-2 months and 3-6 months in the winter.

GRAZING AND PASTURE

- Maintain a buffer of natural vegetation between pastures/grazing land and creek/river corridors. The wider the better!
- Protect the grazing area with vegetative cover to prevent soil erosion, and also by rotating animals. Maximize vegetation cover by seeding and minimizing tilling. Consider planting cover crops that are beneficial for the soil (e.g., legumes), as well as your animals.
- Keep animals away from wet fields when possible.
- During heavy rainfall, consider indoor feeding.



WASTEWATER

- Discharge all wash water (from stall wash-down, bathing horse, etc.) to the sanitary sewer or to vegetated areas. Discharges of wash water to a city's storm drain system or into a nearby waterway is prohibited.

WASTE MANAGEMENT

- Dispose of non-toxic packaging or waste products such as hair, fur and hooves from grooming and styling activities in the trash and/or recycling containers.
- Place soiled bedding and manure in a sturdy, leak-proof container, such as a covered plastic garbage can, a fly-tight wooden or concrete storage shed, a composter, or a pit/trench lined with an impermeable layer, ideally stored in a covered area until transported for off-site disposal or composting.
- Close or cover waste collection containers when not actively being used in order to protect from contact with stormwater, waste dispersal by wind, and vectors (e.g., flies and rodents).
- Never dump or disk animal droppings onto banks or directly into a waterway.
- Dispose of unwanted chemicals via your local household hazardous waste collection event and/or drop-off unused medications at a Safe Medicine Disposal Kiosk located at a participating retail pharmacy or sheriff's department.



Did you know? If you are located in Santa Ynez Valley, Waste Management and MarBorg Industries will provide collection containers for horse manure and bedding and will collect it for recycling/disposal. For more information, please contact Waste Management at 805.242.7936 or Marborg Industries at 805.963.1852.



City of Buellton
www.CityofBuellton.com



City of Carpinteria
www.carpinteria.ca.us



City of Goleta
www.CityofGoleta.com



City of Lompoc
www.CityofLompoc.com



City of Santa Barbara
www.sbcreeks.com



City of Solvang
www.CityofSolvang.com



Santa Barbara County
www.SBProjectCleanWater.org