



Small farmers on Rota, Tinian, Saipan, and across the Marianas are important to the economy and health of our people. They grow vegetables and fruits, such as tapioca, ginger, sweet potatoes, taro, yams, hot peppers, eggplant, okra, and tomatoes, and produce tasty meats from cattle, pigs, chickens, and other animals. These farmers are carrying on a proud tradition of feeding the people and caring for the land.

Our farmers are also focusing on protecting water quality. Erosion and manure runoff can pollute our streams and coastal waters with harmful bacteria and mud. Sediment and manure runoff also wastes valuable resources needed for gardens and orchards. Controlling this polluted runoff is not difficult—it just requires some attention to how your land is managed.



Let's Stop Polluted Runoff!

Manure, sediment from erosion, and polluted runoff from fertilizer, pesticides, septic systems, and waste sites ends up in our streams and beach waters. Follow the steps in this guide — and on the web sites below — to make sure rain runoff is clean. Together, we can preserve the health of our land and waters by adopting simple, effective practices that protect our environment and support our local agriculture.

Resources

<https://becq.gov.mp/livestock-BMPs>

<https://www.deq.gov.mp/water-quality-surveillance-non-point-source.html>

https://www.deq.gov.mp/assets/www-forms/deq_earthmoving_and_wastewater.pdf

<https://www.deq.gov.mp/wastewater-earthmoving-erosion-control.html>

https://www.deq.gov.mp/assets/www-forms/cnmi_esc_field_guide_lowres.pdf

<https://www.nrcs.usda.gov/state-offices/pacific-islands-area/saipan-service-center>

If you would like help implementing these practices, please contact the Division of Environmental Quality at (670) 664-8500.



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Mariana Livestock Growers

**Feeding Our People,
Keeping Our Waters Clean**



**Here's
How They
Do It!**

Caring for our land, feeding our people, and keeping our waters clean begins with you!

To protect our ocean, streams, wetlands, and drinking water from muddy manure runoff, here are some easy steps to follow:

- 1 Use rock, logs, coconut husks, erosion blankets, or plant cuttings to **stop erosion**. We don't want to increase the amount of soil in the muddy runoff!
- 2 Put animals and pens at least **30–60 feet away** from ditches, streams, wetlands, and wells. This helps filter the runoff and soak it into the ground before it can be carried downstream.
- 3 Direct clean uphill rain runoff **away from animal pens** and other areas with manure. This will help to reduce the amount of manure runoff.
- 4 Use ditches and berms to guide manure runoff from pens **away from streams**. Keep bacteria and mud out of our waters!
- 5 Keep animals **under a roof** to reduce manure runoff when it rains. This will greatly reduce the amount of manure runoff that needs to be controlled.
- 6 Guide muddy and manure runoff to **areas with thick grass** and other vegetation. Pushing the manure runoff into grassy areas helps to filter it and soak it into the soil.
- 7 Use manure to **fertilize vegetable gardens** and fruit trees. The manure has valuable nutrients that help plants grow (including algae, which is why we want to keep it away from the water).
- 8 Keep **trash and litter off the ground** and out of our streams. Our families and island friends deserve a clean, trash-free environment—on the land, and in the water.

