

Healthy Yards → Clean Streams

Downspout Disconnection Tips for Homeowners

If your house has roof gutters and downspouts, you might be able to easily reduce the impact of your roof runoff on the downstream waters in your watershed.

Problems:

1. If your downspouts discharge onto pavement that slopes toward the street or adjacent drainage channel, it could be carrying pollutants to the downstream water in your watershed. Bird droppings, leaves, and other dirt accumulate on the roof and in the roof gutter. When it rains, these pollutants are flushed out to the street drainage system or drainage channel, carrying harmful nutrients and sediment to the stream or coastal waters where the storm drain system ends.
2. If your downspouts are connected to subsurface drain pipes, the problem is similar to situation 1, above. The difference is that instead of flowing along a paved surface to a street inlet or to a drainage channel, the subsurface drainage pipes carry roof runoff pollutants directly into the drainage system and from there to a stream or coastal waters.



Solutions:

1. Disconnect, if necessary, and redirect your downspout(s) to a discharge location where the water can soak into the ground and reduce irrigation demands. The longest and flattest route over vegetated ground to the street is generally the best, as the water will have more time to soak into the ground. Grass is an excellent filter for runoff from roofs and other impermeable areas. Other vegetation that forms a ground cover, as well as mulched areas beneath trees, can also effectively filter out pollutants.
2. If discharge to a vegetated area is not feasible, direct the discharge to a graveled area. Be sure to maintain at least 2 inches of gravel in such areas to reduce the potential for soil erosion underneath the gravel. Deeper gravel beds are better than shallower ones.
3. If neither a vegetated area nor a graveled area is available at a convenient location for redirecting the downspout, consider installation of a rain barrel to collect the roof runoff for later irrigation use.

Precautions:

1. Do not allow downspout discharge to flow toward the building, as this could result in damage to the building and/or its foundation. Direct discharge from downspouts around the side of the building or to another location where the discharge will not flow toward the building. For houses with post and beam construction, uphill downspouts may be piped beneath the building for discharge on the downhill side.
2. Provide a splash block to prevent erosion where a downspout discharges to the ground. If the area around the splash block is steep and/or has sparse ground cover, be sure to stabilize the area with gravel, mulch, or other means to adequately prevent soil erosion.

NOTE: If all of your downspouts discharge to vegetated or stable, permeable areas, CONGRATULATIONS — your downspouts are already preventing pollution, excess runoff, and contributing to a healthy yard!



For more Information call the City's Environmental Concern Line at 768-3300 or visit us online at www.cleanwaterhonolulu.com.