



**PROTECT
OUR WATER**
MĀLAMA I KA WAI
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION



PROTECT OUR WATER:

HDOT PERMIT HOLDERS GUIDE TO
UNDERSTANDING STORM WATER

What is storm water runoff?

When it rains, water is absorbed into the ground, adding to O'ahu's water supply. Storm water runoff occurs when it rains so much or so fast that the ground cannot absorb it all (like a kitchen sponge that is filled to capacity) and excess rainwater then flows over the surface of the ground until it finds its way to the ocean through streams and the storm drain system.

Why is storm water runoff a problem?

Storm water runoff itself does not usually harm the environment. However, driveways, sidewalks, streets, roofs and other impervious surfaces increase the amount and intensity of storm water runoff by not allowing water to soak into the ground. The increased storm water runoff has the potential to create flooding or erosion problems. In addition, impervious surfaces associated with urban areas tend to accumulate pollutants faster than undeveloped areas. Typical urban pollutants include oil, grease, trace metals, sediment, phosphorous, nitrogen and other chemicals. Storm water runoff washes pollutants off impervious surfaces and carries them into our storm drains, streams and the ocean, where they affect water quality. This is why it is important to use Best Management Practices (BMPs).

What is a Best Management Practice (BMP)?

A Best Management Practice, or BMP, is a procedure or device used to prevent or reduce storm water pollution. A BMP can be used alone, but usually a combination of devices and procedures are used.

What is a Temporary Construction BMP?

A temporary or construction BMP is used to prevent, divert, filter, or treat storm water runoff within a construction site from entering nearby streams or storm drains. These BMPs are used during construction and are removed or stopped after construction is completed. HDOT has developed a Construction BMP Field Manual that can help you select BMPs that will work for your construction site.

PROTECT OUR WATER: WHAT CAN I DO?



DID YOU KNOW?

Storm drains pour storm water into the ocean without passing it through filters or cleaning it. The ocean may be polluted after significant rainfall.

What is a Permanent BMP?

Unlike temporary construction BMPs, permanent BMPs are designed, constructed and maintained to function for the entire life of a project. Permanent BMPs are typically designed to slow down and reduce pollutants contained in storm water runoff. Permanent BMPs are required for new development and re-development projects that create 1 acre or more of new, permanent impervious surfaces (e.g., paved areas)*. HDOT has developed a Permanent BMP Manual that can help you select BMPs that will work for your project site.

Are there resources that I can use to help ensure that I meet permit guidelines?

HDOT has developed two manuals that can help you select BMPs for your project during and after construction. The Construction BMP Field Manual and the Permanent BMP Manual are each available from HDOT. For more information, please contact HDOT at **483-7290** or visit our Web site at **stormwaterhawaii.com**.

*Exemptions for permanent BMPs include:

- Projects that return area to pre-development runoff conditions
- Utility projects (e.g., pipelines, conduits, traffic sign/signal projects)
- Contract projects that are not contiguous or involve several locations (e.g., intersection improvements at various locations)
- Contract projects that do not discharge runoff into any waters of the United States.



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