

THE CLEANER BLACKSTONE BUSINESS PROGRAM

LOCATION, LOCATION, LOCATION

If your business is located anywhere on the map of the Blackstone River Watershed on the next page, then what happens at your site affects the water quality of the Blackstone River. "How does that work?" you might ask, and "Why does that matter to me?"

How can my business have any effect on water quality?

That stormdrain in your parking lot or in the streets nearby leads directly to the nearest waterway. When it rains or snow melts, the runoff picks up any and all substances and materials on your paved or landscaped areas, and washes them into the stormwater system. The runoff flows, untreated, to the nearest brook or stream, pond or lake. Here in the Blackstone River Valley, all of these waterways empty into the Blackstone and then to Narragansett Bay in Rhode Island. Pollutants from your operation can harm drinking water supplies and aquatic life.

Why does this matter to me?

As a business owner, you are an important part of the community and are in a position to lead by example. You can reduce negative impacts on our waterways by making sure that you are using best practices for stormwater management.

In this packet is a Quicklist for you to check six areas of operation:

- Ø Parking lots/paved areas;
- Ø Outdoor washing;
- Ø Shipping/receiving/loading docks;
- Ø Solid waste containers (dumpsters/compactors);
- Ø Pesticide application;
- Ø Waste oil disposal and spills.

Also included are six Business Best Management Practices for stormwater site management to help you improve operations in these six areas, as well as a Sample Emergency Spill Response Procedure. The Blackstone River Coalition is grateful to the Charles River Watershed Association, and has adapted its fact sheets and quicklist.

When you can circle "Yes" for all items on the Quicklist, you will have achieved the status of a **Cleaner Blackstone Business**. You will also be helping reach the goal of a fishable/swimmable Blackstone River by 2015.

Thank you for joining the Campaign!

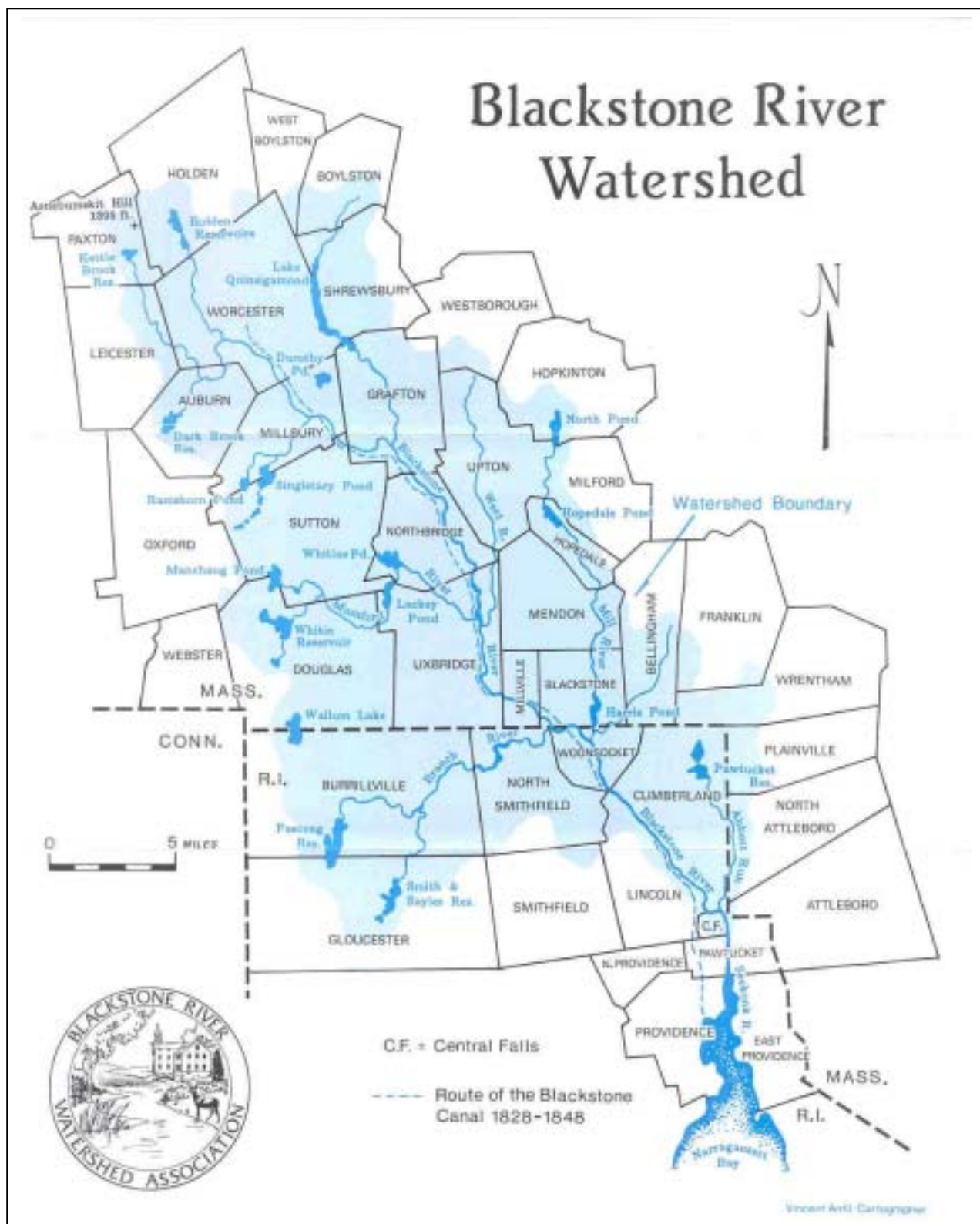
For more information about the Blackstone River Coalition and the Campaign for a Fishable/Swimmable Blackstone River by 2015, please visit www.zaptheblackstone.org

The Blackstone River Coalition

The Cleaner Blackstone Business Program



Blackstone River Watershed



BUSINESS BEST MANAGEMENT PRACTICES

Stormwater BMP #1: Parking lots/Paved Areas

Stormwater BMP #2: Outdoor Washing

Stormwater BMP #3: Shipping/Receiving/Loading Docks

Stormwater BMP #4: Solid Waste Containers –
(Dumpsters/Compactors)

Stormwater BMP #5: Pesticide Application

Stormwater BMP #6: Waste Oil: Disposal and Spills

Sample Emergency Response Procedures

Stormwater Site Management Quicklist



BUSINESS BEST MANAGEMENT PRACTICES

STORMWATER BMP #1 - Parking Lots/Paved Areas

Parking lots and other paved areas are typically designed so that stormwater flows to catch basins and storm drains that ultimately drain to the Blackstone River. For this reason, activities conducted and materials stored on these areas should be managed with care to ensure that pollutant materials (e.g. oils, paints, refuse, excess sand/sediment, etc.) do not reach the storm drain.

To minimize stormwater pollution from parking lots and paved areas, you can do the following:

- ⌘ Maintain and inspect vehicles regularly to be sure they are not leaking fluids.
- ⌘ Use drip pans or other containment when adding fluids to vehicles.
- ⌘ Recycle or dispose of waste fluids properly - NEVER dump in catch basins or storm drains.
- ⌘ Wash vehicles at off-site commercial washer.
- ⌘ Keep trash receptacles on site for the storage of refuse.
- ⌘ Dry sweep the areas around storm drains, and dispose of the waste as trash rather than hosing the debris down the storm drain.
- ⌘ Do not dump, or allow contractors to dump, anything onto sidewalks, streets or parking lots.
- ⌘ Clean-out storm drains and catch basins regularly to keep clear of refuse and excessive build-up of leaves and sediments.
- ⌘ Maintain oil/water separators so that they are always functioning properly.
- ⌘ Keep storm grates clean, especially in winter.
- ⌘ Minimize sand or salt usage during the winter months - use alternatives such as calcium chloride. If these materials are stored outdoors, cover them to prevent runoff contamination.

Consider the following in present and future designs of your site:

- ⌘ Direct gutters and down spouts drainage to grassy or gravel areas to return stormwater to ground naturally.
- ⌘ Divert runoff from pavement to grassy areas to allow seepage into ground
- ⌘ Minimize paved areas - use porous materials when possible.
- ⌘ Increase grassed areas (i.e. between parking lanes, etc.).



BUSINESS BEST MANAGEMENT PRACTICES

STORMWATER BMP #2 - Outdoor Washing

Outdoor washing operations, such as machine or equipment washing or hosing paved areas, result in the generation of wash water that can contain or pickup pollutants. These pollutants can be carried to the Blackstone River via the storm drains. This dirty wash water should be discharged into the sanitary sewer system, not the stormwater system.

To minimize stormwater pollution from outdoor washing activities, you can do the following:

- ⌘ Wash equipment indoors whenever possible.
- ⌘ Use environmentally safe cleaning solutions if outdoor washing is unavoidable.
- ⌘ Never dump buckets of dirty water into storm drains and catch basins.

Some alternatives for washing large equipment, such as trucks, shopping carts, steel racks, etc., that must be washed outside are:

⌘ **Using a Commercial Car/Truck Wash:**

Have vehicles washed off-site at a commercial or industrial truck wash facility. Ensure that this washing facility discharges its washwater into the sanitary sewer system and not into the stormwater system.

⌘ **Using an On-site Washing Service:**

Use a truck washing service that provides the customer with vehicle washing service at the facility site. Ensure that the service company uses a portable system to collect the dirty washwater. This type of service could also be used to wash other large equipment. The service company must collect the washwater and transport it by vacuum truck to a permitted facility.

⌘ **Washing on grassy surfaces:**

Wash equipment and vehicles on a grass or other pervious surface, such as gravel or dirt, using environmentally safe cleaning solutions. In this case, the runoff drains into the ground and does not go directly into the storm sewer system, or ultimately the Blackstone River.



BUSINESS BEST MANAGEMENT PRACTICES

STORMWATER BMP #3 - Shipping/Receiving/Loading Docks

Material handling areas, such as loading docks, are areas where new and old materials are stored for receiving and shipping. These areas typically contain storm drains to collect stormwater, which if not properly managed can result in stormwater pollution.

To minimize the impact of potential stormwater pollution from these areas, you can do the following:

Shelter:

Where possible, ensure loading dock area is sheltered from rain. The loading dock/shipping and receiving area should be sheltered from rain and/or snow by a roof. An overhead cover will prevent materials stored in the receiving area from washing into the local storm sewer during periods of precipitation. Further, if the roof can be surfaced with a non-metallic material, this would decrease the likelihood of introducing heavy metals into the storm drains.

Drains:

Identify locations of stormdrains and develop means to cover or block them if a spill occurs. Drains are typically installed at the base of inclined loading areas. If these drains are connected with local stormdrains, spills during materials transfer have an immediate path to the Blackstone River. Further, during periods of precipitation, fluid leaking from vehicles, such as oil, fuels, antifreeze, and brake and transmission fluids, are directly washed into the drain and ultimately to the Blackstone River. Best management of these drains involves the use of drain blockers during deliveries or the installation of a manual valve within the drain that can be opened or closed in the event of an unexpected release. Receiving areas should also be equipped with spill response kits sufficient for the variety of materials to be handled.

Debris:

Maintain the area so that it is clean and free of debris. The receiving area should be regularly swept clear of debris. The debris should be collected and deposited in a trash container; sweeping of the debris into the parking area, or hosing the receiving area will deliver the debris into area storm drains, and ultimately into the Blackstone River.



BUSINESS BEST MANAGEMENT PRACTICES

STORMWATER BMP #4 -

Solid Waste Containers (Dumpsters/Compactors)

Solid waste containers, such as dumpster and compactors, are typically located in outdoor locations where precipitation can pick up pollutants. Mismanaged solid waste containers will ultimately result in significant stormwater pollution. As a general rule, facility managers and waste contractors should work together to keep solid waste containers clean, in good repair, and functioning as designed.

To minimize stormwater pollution resulting from the mismanagement of solid waste containers, you can do the following:

Protect storm drains when locating the container:

Many solid waste containers are stored in outdoor areas that are adjacent (or immediately above) storm drains. Refuse, waste contaminated rainwater or hydraulic oil that spills from compactors can reach these storm drains and ultimately discharge into the Blackstone River. Try to locate solid waste containers away from storm drains. If this is not possible, maintain adequate spill equipment on-site to mitigate spills and releases.

Maintain good housekeeping in and around solid waste containers:

Solid waste containers must be kept reasonably clean, both inside and out. Refuse that collects outside the container can contribute to stormwater contamination during a rainfall.

Keep the lid (cover) secured at all times:

Solid waste containers must be kept closed tightly (preferably locked) when not in use. Containers not kept secure and closed tightly after each use become exposed to rainfall resulting in stormwater contamination.

Avoid overfilling the container:

Overfilling results in refuse being exposed to rainfall. Overfilling also makes it difficult for a waste contractor to safely and effectively dispose of the container which increases the likelihood that spills of refuse will occur.

Manage waste fats, oils and grease properly:

Environmental laws regulating stormwater discharge prohibit the discharge of fats, oils and grease to storm drains. The discharge of fats, oils and grease can lead to sewer backup and environmental pollution. Fats, oils and grease should be collected separately and not disposed into solid waste containers.

Minimize spillage/leakage from the solid waste container:

Many larger solid waste containers (especially compactors) utilize a hydraulic fluid pump system. Failure of hydraulic hoses or pumps can lead to the releases to the environment. Ensure that the solid waste contractor regularly inspects and replaces

faulty pumps or hoses to minimize the potential of releases and spills. It is recommended that an appropriate spill response kit be maintained and accessible in the event of a release from the solid waste container.

Report and repair structural damage to the solid waste container:

It is usually just a matter of time before any given container becomes damaged or fails. The lid may become bent and not close securely, the corners may be broken allowing waste materials to leak from the container, hydraulic hoses may split and leak, or welded components may come loose allowing pests to enter. Coordinate efforts with your waste contractor to ensure a speedy repair or replacement of your unit if damaged.

Ensure that only appropriate solid wastes are added to the solid waste container:

State and local regulations prohibit the disposal of certain wastes (e.g. hazardous chemicals such as oil-based paints, pesticides, oil, paint thinners-other solvents, etc.) in solid waste containers. These wastes require special handling and cannot be placed in solid waste containers. Contact a local hazardous waste contractor for assistance.



BUSINESS BEST MANAGEMENT PRACTICES

STORMWATER BMP #5 - Pesticide Application

If not properly applied, pesticides, herbicides, insecticides and rodenticides, may end up as pollutants in stormwater.

To minimize stormwater pollution from the mismanagement of pesticide applications, you can do the following:

- ⚡ **Determine** how much and what type of pesticides are applied in your operation (including pest control as well as landscape operations).
- ⚡ **Track** pesticide applications by maintaining a pesticide application record.
- ⚡ **Reschedule** pesticide applications to avoid unnecessary runoff if it is precipitating, about to precipitate, or is excessively windy.
- ⚡ **Cover** storm drains during the application of pesticides to reduce the impact of potential runoff.
- ⚡ **Minimize** preventive chemical applications and reduce unnecessary treatments and to prevent environmental releases. The widespread use of dormant oils and herbicides on shrubs and trees should only be used in response to the existence of actual or anticipated pest outbreaks.
- ⚡ **Do not chemically treat** rodent burrows located along the banks of rivers and streams. Trapping rodents and removing food sources is preferred.
- ⚡ **Do not apply** termiticides near a well, stream or other water source. A preferred method of control is to use wooden stakes impregnated with toxicants as baits for termites, which reduces the amount of chemicals used.



BUSINESS BEST MANAGEMENT PRACTICES

STORMWATER BMP #6 - Waste Oil Disposal & Spills

Oil is used in many different applications including in vehicles, equipment, and cooking. Waste oil must be properly collected and managed to ensure that it does not negatively impact the surrounding environment.

To minimize stormwater pollution resulting from the mismanagement of waste oil, you can do the following:

- ⚡ **Never dispose** of used motor oil and other waste oils into storm drains or catch basins.
- ⚡ **Return** waste motor oil to original retailer. In Massachusetts, any retailer that sells motor oil is required to accept up to two gallons per day of waste oil from each customer. Simply drain the used oil into a suitable container and return it to the store that sold it. These MADEP guidelines, titled *How to Comply with the Used Oil Return Law, Guidance for Retailers*, can be obtained by calling 617-292-5898.
- ⚡ **Ensure** that used oil filters are thoroughly drained and waste oil collected for disposal with licensed hauler.
- ⚡ **Block and cover** all catch basins and storm drains to prevent any spilled oil from reaching the Blackstone River. In many cases, the Massachusetts Department of Environmental Protection and/or Environmental Protection Agency require you to notify them of such releases.
- ⚡ **Do not wash away** spilled oil with a hose. Use absorbent material such as sand or kitty litter to absorb the spilled oil. [Refer to the Spill Response Procedure](#) and customize it to suit your operations.



BUSINESS BEST MANAGEMENT PRACTICES SAMPLE EMERGENCY SPILL RESPONSE PROCEDURE

Ask your local Fire Department about regulations in your area.

Employees must immediately notify their supervisor in the event of a chemical release.

The designated person must immediately take the following actions:

1. **Ensure the health and safety** of affected personnel by cordoning off the affected area. Evacuation of the area may be necessary depending on the seriousness of the spill or if requested by a regulatory agency.
2. If practical, **stop the source** of the spill and attempt to contain it using Speedi Dry, kitty litter, and/or the materials in your spill response kit, if you have one available. **IT IS VERY IMPORTANT THAT SPILLS ARE NOT ALLOWED TO ENTER STORM DRAINS OR LEAVE PAVED AREAS.** Do not attempt to wash spills away with water. If you are unsure of health and safety issues involved in the incident, evacuate the area.
3. In most cases, **you are required** to immediately notify authorities using the numbers below. Reminder, this must be done simultaneously with the above two actions. If the material may be flammable, immediately call the local fire department. This is extremely important if flammables may be traveling through storm drains.

AGENCY NUMBERS

Federal National Response Center - (800) 424-8802

Massachusetts Department of Environmental Protection (24-hr) - (888) 304-1133

Local Fire Department - (911)

Call the Massachusetts State Police (508) 820-2121 if other numbers are not responding or special conditions exist.

For each agency, be sure to record the name of the person you contacted and the time that you called. If you are given a reporting number, write it down also. Seek qualified advice about cleaning up the area. A specially licensed company may be needed to remove the materials, clean the area, and properly dispose of all involved materials.



Cleaner Blackstone Business Program: Stormwater Site Management Quicklist

Area of Operation	Yes/No	Needs Attention	Corrective Action Taken
1. Parking Lots and Paved Areas			
a. Is a sweeping schedule being implemented?			
b. Are sand and debris removed?			
c. Are outfalls clear of accumulation?			
d. Are parking areas/perimeter clear of evidence of erosion?			
e. Is the area free of spilled vehicle fluids?			
2. Outside washing/wastewater			
a. Is outside wastewater kept away from storm drains?			
b. Are storm drains clean and free of debris?			
3. Shipping/Receiving/Loading Areas			
a. Are shipping and receiving areas clean and free of debris?			
b. Are materials stored outdoors covered?			
c. Is the area free of spilled vehicle fluids?			
4. Compactor/Dumpster/Waste Management Issues			
a. Are trash receptacles covered and emptied regularly?			
b. Are rendering barrels and dumpsters closed?			
c. Is the area free of leakage from excessive liquid, overflow, or damaged seals?			
d. Is the compactor free of hydraulic fluid seepage and brittle hoses?			
5. Perimeter Areas			
a. Is the perimeter area clear of unlawful dumping?			
b. Are pesticides and herbicides properly applied?			
6. Catch basins and oil/water separators (if equipped)			
a. Are the catch basins free of oil sheens?			
b. Are grates clear of debris and open?			
c. Are the catch basins free of signs of damage or erosion?			