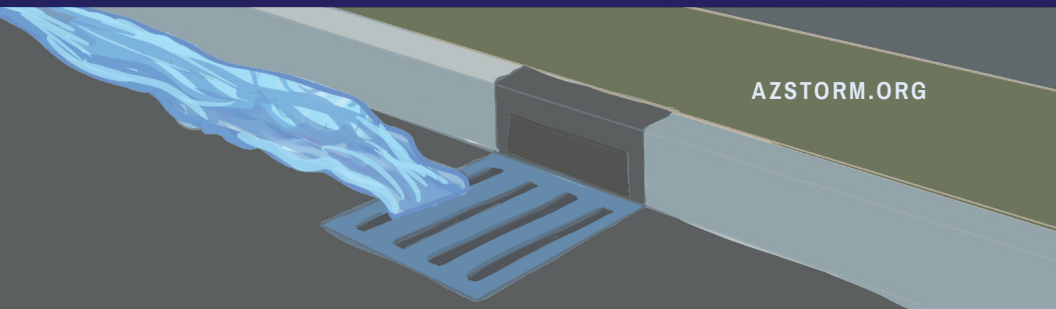
STORM

TOWN OF PARADISE VALLEY
INCORPORATED MAY 1961

BEST MANAGEMENT PRACTICES

GUIDEBOOK



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STORM Best Management Practices Guidebook

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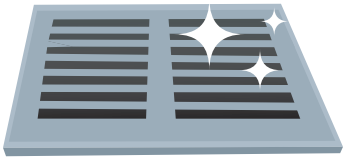

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Welcome to the STORM Best Management Practices Guidebook!

Stormwater Outreach for Regional Municipalities, known as **STORM**, is a regional organization promoting stormwater quality education within the greater Phoenix metropolitan area. **Best Management Practices (BMPs)** are a collection of management solutions to prevent stormwater pollution.

This guidebook is designed to help homeowners, tenants, homeowners associations, landscapers, construction companies, and other members of the Phoenix metro area community make informed decisions to help prevent stormwater pollution. Read on to learn more about stormwater and why it's important to keep

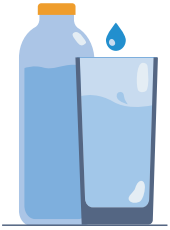
only rain in the storm drain!

Regulations may differ between municipalities, and the amount of rainfall and intensity of storms can vary between locations, so consult with your local authorities or stormwater professionals for additional regulations and information.

What is Stormwater?

Stormwater is water that runs off the land after it rains (or when snow melts in the mountains). Some of this water sinks into the ground, but much of it flows across lawns, sidewalks, streets, and parking lots through the storm drain system, directly to retention/infiltration basins, city parks, community lakes, canals, washes, and rivers, without any treatment. Stormwater is a part of our **watershed**, an area of land that drains water as it flows downhill to a central location.

Stormwater Pollution



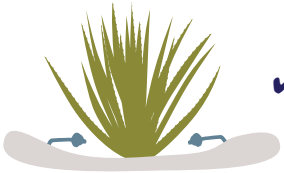
Although the Phoenix metropolitan area only receives seven to nine inches of rainfall a year on average, stormwater quality is a serious concern. **Stormwater pollution** is the nation's greatest threat to clean water.

Stormwater runoff can pick up dirt, debris, chemicals, trash, pet waste, oil, grease, and other automotive fluids, as well as other pollutants. Polluted stormwater can affect the environmental health of our watershed, with implications for everyday human uses such as drinking, cooking, and washing, as well as for agriculture, industry, nature, and recreation. It can even affect our groundwater.

Lawn, Garden, & Pool

Help reduce stormwater pollution by implementing the following guidelines for your lawn, garden, and pool care.

Keep **WATER ON SITE** when watering plants or after it rains.

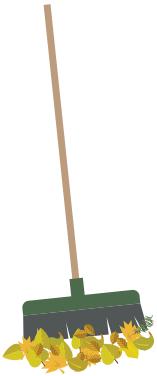


- ✔ Use drip irrigation and direct sprinklers onto plants, not sidewalks or streets.
- ✔ Construct rainwater harvesting features like berms and swales.
- ✔ Select native plants to minimize water use and don't overwater.

Keep lawn and garden **PRODUCTS ON SITE.**

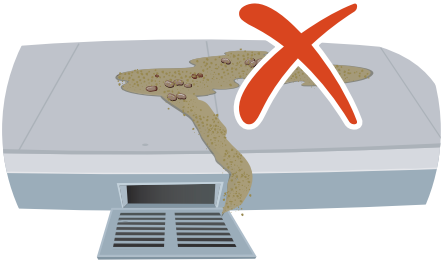
- ✔ Use lawn and garden fertilizers, pesticides, and herbicides sparingly and follow manufacturer's application instructions.
- ✔ Never apply lawn and garden products when rain or wind is in the immediate weather forecast.
- ✔ Clean up spills.

Watch this short video to learn more about using lawn chemicals correctly!
e3learn.org/bmp1



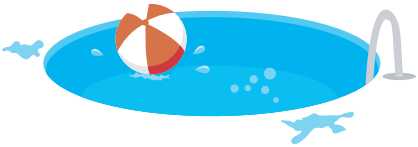
Keep landscaping MATERIALS ON SITE.

- ✔ Sweep up yard waste, like leaves and grass, instead of using a hose or blower out to the street. Dispose of properly in your trash can or compost bin.
- ✔ Prevent loose dirt and gravel from flowing off your property into the street and then into the storm drain.



- ✔ When landscaping and construction materials are delivered, they should be unloaded onto your property, not on the sidewalk or in the street.

Keep POOL WATER ON SITE.

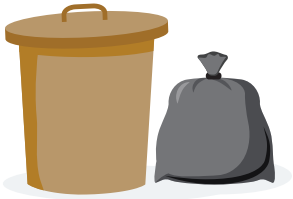


- ✔ Do not backwash or drain your pool into the street. Check municipalities for disposal methods.

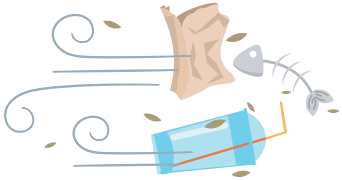
Watch this short video to learn more about proper pool maintenance!
e3learn.org/bmp2

Proper Trash Disposal

Loose trash can pollute stormwater and clog storm drains.

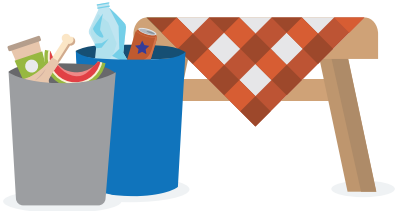


BAG AND TIE your trash, and be sure your trash and recycle bin LIDS ARE CLOSED.



AVOID placing TRASH OUTSIDE OF THE BIN, where it can be washed or blown away.

CLEAN UP after picnics in the park by using nearby trash and recycling bins or taking the waste home with you.



Watch these two short videos to learn more about keeping your home and community litter-free!
e3learn.org/bmp3

Pick Up Pet Waste!

Pet waste can contain bacteria and become a source of stormwater pollution.

PICK UP AFTER YOUR PETS, both in your yard and while on walks.

Dispose of pet waste in a **SEALED PLASTIC BAG** in a trash bin.

PET WASTE IS NOT FERTILIZER!

Watch this short video to learn more about pet waste and stormwater pollution!

e3learn.org/bmp4

Retention Basin Maintenance

Retention basins are shallow depressions designed to have stormwater directed to them when it rains, with the stormwater gradually infiltrating into the soil.

Retention basins should
DRAIN WITHIN 36 HOURS
after rainstorms, to prevent mosquito larvae from hatching.

RETENTION BASINS CAN GET CLOGGED over time, so they need to be regraded. This can include resurfacing and aerating with holes into the ground to allow the water to better drain and infiltrate underground.

STANDARD MAINTENANCE should include mowing the grass, removing litter or debris, and stabilizing eroded banks.

Drywell Maintenance

Drywells reduce runoff and potential flooding by collecting stormwater underground and allowing it to slowly infiltrate into the surrounding soil. Drywells can be located in retention basins, parking lots, loading docks, and streets.

Drywells should
DRAIN WITHIN 36 HOURS after rainstorms, to inhibit growth of mosquito larvae and prevent odors from stagnant water.

Leaves, dirt, trash, and other debris can clog drywells, so property owners should
CHECK FILTER GRATES AFTER BIG STORMS.

HIRE A PROFESSIONAL
to inspect drywells annually.

Stormwater Outfall Maintenance

Stormwater outfalls are locations where stormwater is discharged from the storm drain system to surface waters.

Outfalls can become **CLOGGED** by sediment, trash, and other debris, resulting in possible **FLOODING AND EROSION.**

VEGETATION should not be overgrown near outfalls.

Outfalls should be regularly inspected to ensure proper **WATER FLOW.**

NO Illegal Dumping!

It's illegal to throw trash in washes, drainage canals, and storm drains.

Illegal dumping can cause stormwater **POLLUTION** and clog storm drains, which can result in **FLOODING.**

It can be **HARMFUL** to people, pets, and wildlife.

IF YOU SEE ILLEGAL DUMPING,

take a picture and inform your local municipality.

Help stop illegal dumping by watching this short video!

e3learn.org/bmp5

BMP MAINTENANCE CHECKLIST

	LAWN, GARDEN, AND POOL CARE	*How often?*
☐	Check that drip irrigation emitters and sprinklers are watering only plants, not sidewalks or streets.	as needed
☐	Remove debris and repair erosion damage in and near berms and swales.	as needed
☐	Adjust irrigation timers.	seasonally
☐	Use lawn and garden fertilizers, pesticides, and herbicides sparingly and follow manufacturer's application instructions.	seasonally
☐	Check the weather forecast before applying lawn and garden products to avoid rain or wind.	as needed
☐	Clean up spills immediately.	as needed
☐	Sweep up yard waste, like leaves and grass, instead of using a hose or blower out to the street. Dispose of properly in your trash can or compost bin.	as needed
☐	Clean up loose dirt and gravel that has been washed or blown off your property onto the sidewalk or street.	after rain or wind events
☐	Unload landscaping and construction materials onto your property, not on the sidewalk or in the street.	as needed
☐	Keep poolwater on site when backwashing or draining your pool. Check with your local municipality for disposal methods.	as needed

	TRASH DISPOSAL	*How often?*
☐	Bag and tie your trash.	always
☐	Be sure your trash and recycle bin lids are closed.	always
☐	Avoid placing trash outside of the trash bin, where it can be washed or blown away.	always
☐	Clean up after picnics in the park by using nearby trash and recycling bins or taking the waste home with you.	always

	PET WASTE	How often?
☐	Pick up pet waste, both in your yard and while on walks.	always
☐	Dispose of pet waste in a sealed plastic bag in a trash bin.	always

	RETENTION BASINS	How often?
☐	Verify that retention basins drain completely, to prevent mosquito larvae from hatching.	within 36 hours after rainstorms
☐	Mow grass and remove overgrown vegetation.	monthly
☐	Repair erosion damage, and remove sediment, litter, and debris.	monthly
☐	Remove sediment and resurface and aerate retention basins to allow the water to better drain and infiltrate underground.	annually or as needed

	DRYWELLS	How often?
☐	Verify that drywells drain completely, to inhibit growth of mosquito larvae and prevent odors from stagnant water.	within 36 hours after rainstorms
☐	Remove leaves, dirt, trash, and other debris from filter grates.	after rainstorms
☐	Hire a professional to inspect drywells.	annually

	STORMWATER OUTFALLS	How often?
☐	Remove sediment, trash, and other debris from outfalls.	after rainstorms
☐	Remove overgrown vegetation near outfalls.	annually or as needed
☐	Inspect outfalls to ensure proper water flow.	annually or as needed

	ILLEGAL DUMPING	How often?
☐	If you see illegal dumping, take a picture and inform your local municipality.	as needed

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