

BMP: Parking Lot Design

PLD



APPLICATIONS

- Manufacturing
- Material Handling
- Vehicle Maintenance
- Construction
- Commercial Activities
- Roadways
- Waste Containment
- Housekeeping Practices

DESCRIPTION:

Consider available design options to reduce the quantity and improve the quality of storm water runoff from parking lots. Related practices include filter strips, biofilters, grassed swales, and sediment traps.

CONSIDERATIONS:

- Shared parking reduces the total number of parking spaces needed for businesses adjacent to each other. Businesses having parking demand during the day on weekdays (such as office buildings) can often share parking spaces with businesses having weekend or evening parking demand (such as restaurants or movie theaters).
- The use of landscaped islands in parking lots reduces to the total impervious area of the parking lot, reducing the quantity of storm water runoff.
- Some parking lots can be designed such that storm water runoff flows across a landscaped area prior to being collected. This can both reduce the quantity of runoff and improve the quality of runoff.
- Include structural practices in parking lot design to reduce storm water runoff contamination. Examples include sediment traps in inlet boxes, oil/water separators, water quality inlets, and passing storm water over vegetation.
- Parking lots should not be larger than is necessary—they should provide adequate, but not excessive, parking.
- Technologies are available that allow for a natural turf surface on parking lots. Such surfaces support traffic loads and can be plowed of snow in the winter. They are generally used for overflow parking but can be used for primary parking as well. Grass pavement can both reduce storm water runoff and improve storm water runoff quality.

LIMITATIONS:

- Parking lot design is specific to each development site; some considerations may not apply on some sites.
- Shared parking is only viable where complimentary businesses are located adjacent to one another.



TARGETED POLLUTANTS

- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Floatable Materials
- Bacteria & Viruses

- High Impact
- Medium Impact
- Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- Capital Costs
- O&M Costs
- Maintenance
- Training

- High
- Medium
- Low