

# Pervious Pavements



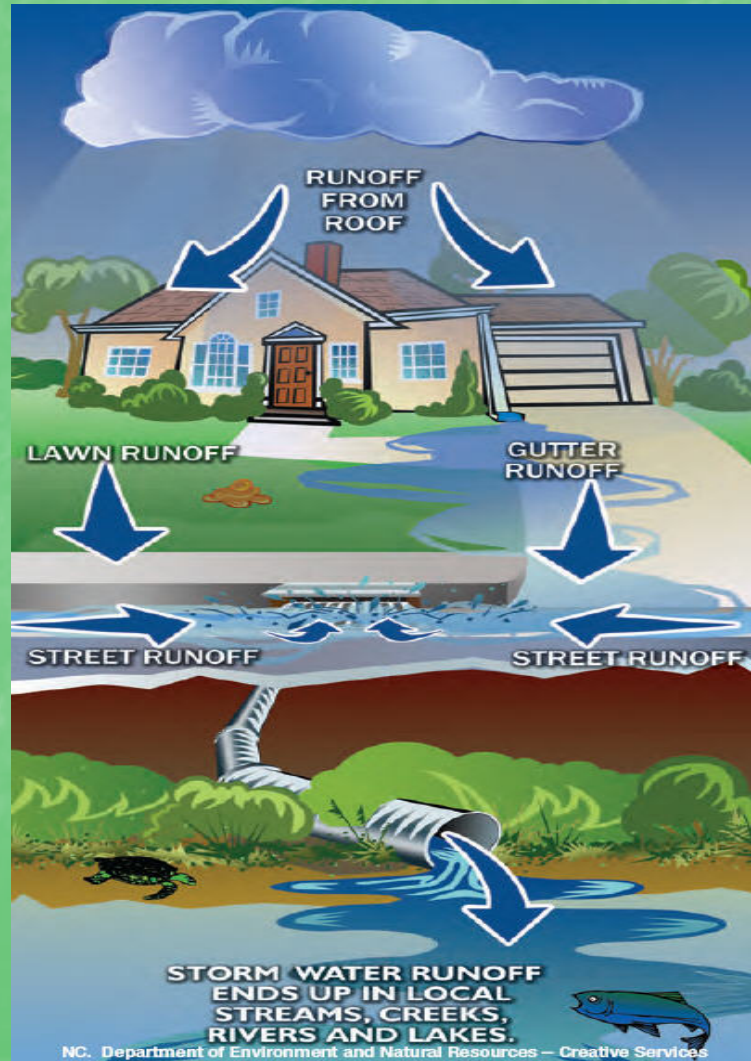
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EarthCare Landscaping 8/12

# What we are going to cover:

- The problem with water runoff
- Benefits of pervious pavements
- Types of pervious pavements
- View lots of amazing pictures

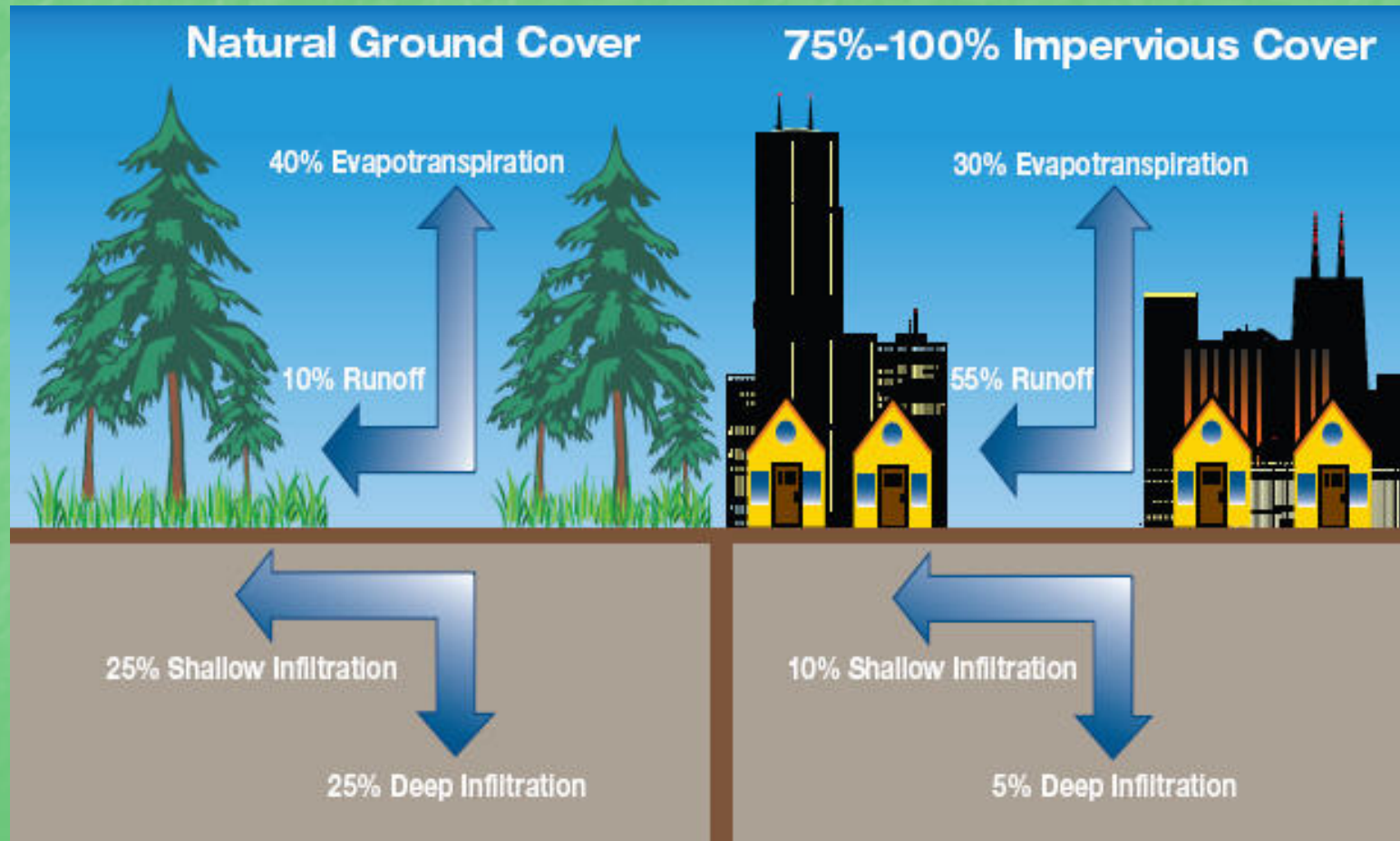
# Storm Water Runoff



# Water Pollution



# Infiltration



# Benefits of Pervious Pavements:

- Meet US EPA BMP for stormwater control
- Mimics pre-development conditions
- Can reduce 'heat island effect'
- Can benefit trees & shrubs
- Filters pollutants
- Recharges groundwater

# Different types Pervious Pavements:

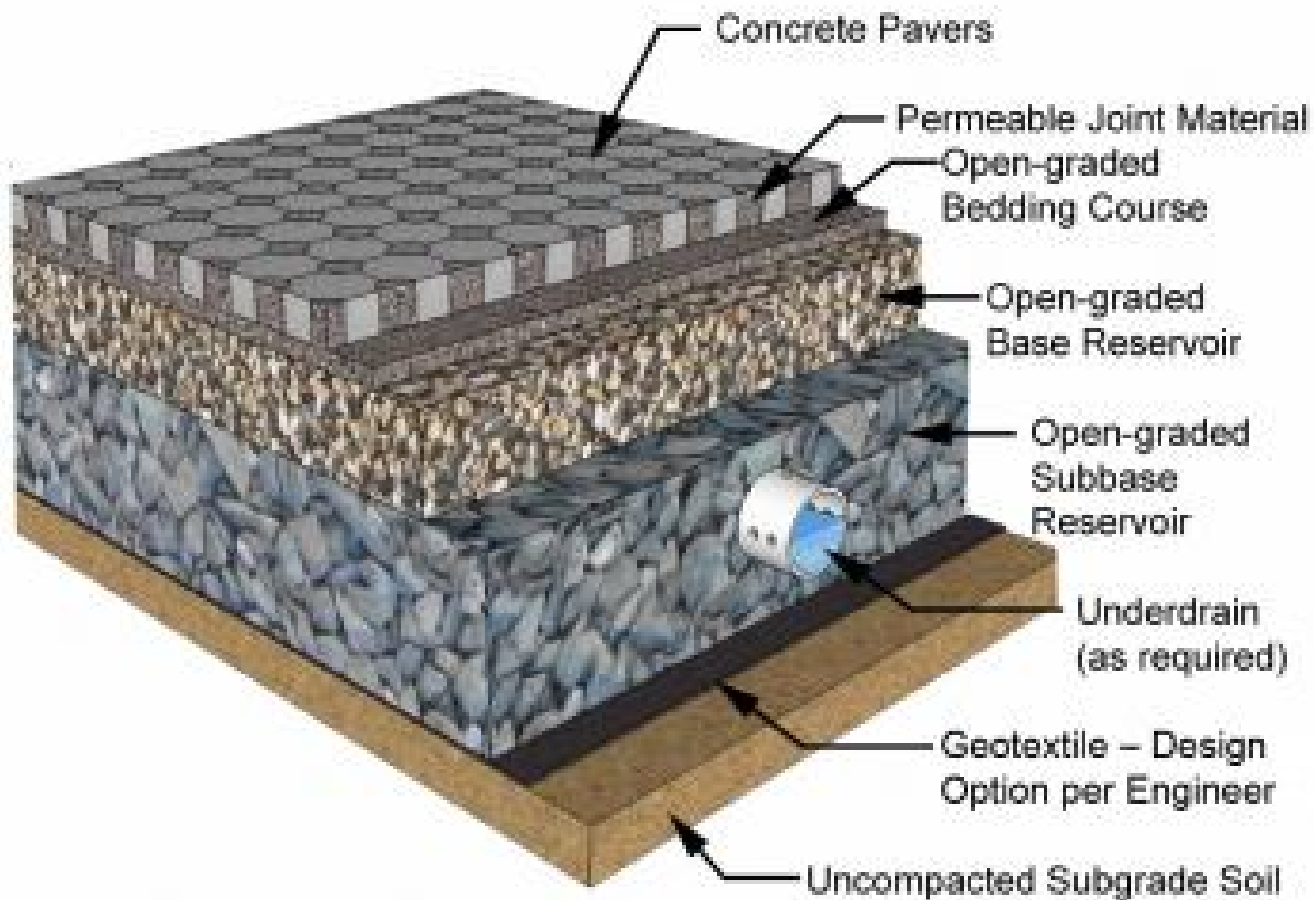
- Porous asphalt
- Permeable pavers
- Pervious concrete
- others



Permeable Pavers



# Permeable Paver cross-section





Our first Pervious Concrete driveway  
2005

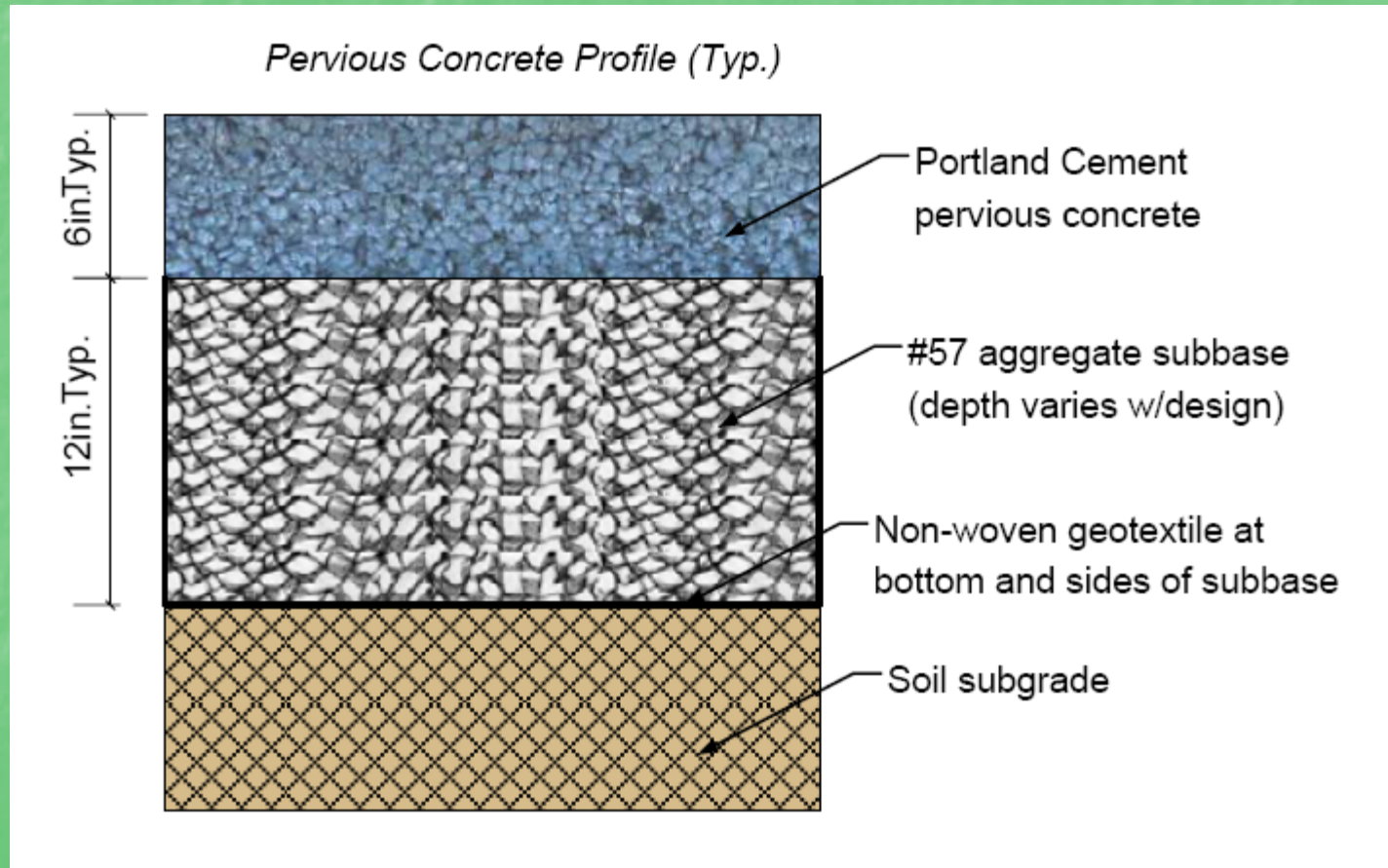
# What is Pervious Concrete?

Generally consists of rock(coarse aggregate), cement and water.

Has about 20% voids so water flows right through it, up to about 600"/hr

Poured on a bed of a gravel, often  $\frac{3}{4}$ " crushed drain rock over a geotextile

# Pervious Concrete cross-section



# Pervious Concrete installation



# “PrettyPervious”

- More attractive
- Finer texture
- More color and design options
- More consistent

# “PrettyPervious”



# What is “PrettyPervious”?

- Very fine aggregate (like coarse sand), cement, admix, color and water.
- Pre-weighed precisely prior to the job, then mixed onsite, the aggregate and cement with the liquid and color
- Applied ¼" to ½" thick over standard pervious concrete as it is being placed
- Can also be used as an overlay to repair failed standard pervious concrete



# “PrettyPervious” offers many design options



Any color or banding. . .



# Any pattern



# With stone, cobbles or urbanite



From a child's drawing. . .



# To a backyard patio



# Costs

■ Regular Concrete	\$11.50/sft
■ Regular Concrete w/color	\$12.50/sft
■ Standard Pervious Concrete	\$12.00/sft
■ Pervious Concrete w/color	\$13.00/sft
■ PrettyPervious Concrete	\$14.00/sft
■ 'Pervious' Pavers	\$16-\$21/sft

\* all costs include a minor amount of site prep

# Failed flagstone and goldfines path





# Solution: PrettyPervious between flagstones



# PrettyPervious between “Urbanite”



# Regular concrete with gravel



# Maintenance of Pervious Concrete

- On average vacuum once or twice a year and pressure wash every 5 years
- Studies in 13+ year old pervious in Florida show even with no maintenance still acceptable percolation rates



**THE END** (of run-off!)

## Additional Resources

- [www.ICPI.org](http://www.ICPI.org) for permeable pavers
- [www.perviouspavement.org](http://www.perviouspavement.org)
- [www.concretenetwork.com/pervious/](http://www.concretenetwork.com/pervious/)
- 'Porous Pavements' Bruce K. Ferguson
- 'Sustainable Landscape Construction'  
Thompson & Sorvig