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Slow, Spread, Sink and Store

Five Great Permeable Hardscapes



1



2



3



4



5

- 1 Sand set pavers
- 2 Porous concrete paving
- 3 Interlocking pavers
- 4 Gravel
- 5 Cut 4"-6" gaps into brick path

photos 1,3,5: © Pamela Berstler, 2018

Slow It! Replace downspouts with rainchains to slow down the water, so it is more easily absorbed when it reaches landscaped areas. Add a rain barrel or cistern at the bottom of the downspout or rainchain and direct it to overflow into the garden.

Don't Have Gutters? Cover areas under eaves with permeable groundcover such as pea gravel, mulch, or rock to reduce the compacting force of water falling on bare soil. Spreading fresh leaf and wood chip mulch throughout the garden will slow down water. Healthy soil, bound together by the structures its life creates, can withstand even the strongest rains.

Spread It! Water needs to be spread around to spend some time in your landscape. For new construction, always specify permeable hardscape. Consider breaking or cutting up impervious surfaces like patios and walkways and rearranging the concrete with gaps between the concrete or puncturing it to create planting areas. Paved area drains also can be redirected from storm drains into the garden.

Sink It! Trust the soil sponge to do its job. Existing impermeable surfaces that cannot be transformed should be treated as water capture areas, where water is collected before it is guided to the garden. If you are not able to capture and hold the water on site, then concentrate on making sure that it passes through as much of the natural landscape as possible before it moves off your yard and becomes runoff.

Store It! Rainwater also can be directly harvested and stored. Storage vessels include rain barrels and cisterns directly connected to downspouts. Stored water gradually can be released into the landscape between winter rains. Properly sited trees are an excellent landscape feature for holding rain temporarily and allowing it to be released slowly over time.

Contours capture rain

Contour Your Garden In Six Easy Steps

Native Plants OK With Wet Feet (Basin Swale Plants)



1 *Anemopsis californica*
Yerba Mansa



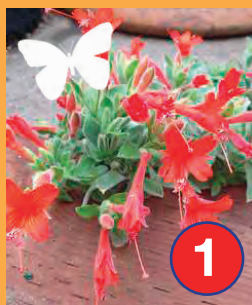
2 *Juncus patens*
California Wiregrass



3 *Clinopodium douglasii*
Yerba Buena

Swale Plants Are Special. These basin plants like wet feet and can be completely submerged in rain water and still survive Marin's hot dry summers without extra water. They're sort of plant Super Heroes that way! Look to the Riparian and Mixed Evergreen Forest plant communities for these selections (see p. 27).

Native Plants That Prefer Dry Feet (Berm Plants)



1 *Epilobium canum*
'Everett's Choice'
Everett's California Fuchsia



2 *Salvia leucophylla*
'Point Sal Spreader'
Point Sal Purple Sage



3 *Bouteloua gracilis*
'Blonde Ambition'
Blonde Ambition Blue Grama

Berm Plants Like It Dry. On the mounded side berms, choose plants that like their feet drier. Plants from the Inland Chaparral community are great choices here (see p. 27). Throughout the entire landscape, make sure to mulch at least 2-4" deep around all the plants (though not right up against the trunks), including those in the bottom of the swale.

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1. Make Your Site Plan and note where rain falls and flows. Look for an open, mostly flat low spot to direct water towards in the front yard, or anywhere with the center at least 10' away from the house foundation and 3' away from the sidewalk and neighbors (see p. 43).

2. Lay Out Your Low Spots. Spread out a garden hose to outline the shape. The area must be basically flat or slightly bowl-like, and not sloping back toward the house. Be careful around trees. Don't put your contours under a mature tree or disturb any big roots. Remove all plants (including grass) from the area and start digging.

Do not dig without calling USA NORTH 8-1-1!

3. Do A Percolation Test. If you have compaction, try to break through it with a shovel or a pitchfork (see p. 33).

4. Dig A Basin that is between 6" and 12" deep at the center. Slope the sides gently to make a sloping bowl, not a cylinder. Mound extra soil around the bowl to increase capacity. At the bottom of the basin, put down at least an inch of high quality compost or worm castings to activate your soil.

5. Direct Downspouts Into The Basin area, moving the rainwater through gravel lined ditches or above-ground drainage pipes. Also, make an overflow path so extra water has a direct channel away from your house.

6. Plan For Overflow that isn't directed onto your neighbor's property; overflow always should be directed from your property into the street.

7. The Basin Will Fill Up when it rains, creating a temporary pond until the water soaks into your soil. All the water should be gone in 24 hours.

TAKE ACTION if your basin is slow draining!

If water in your basin is not gone within 48 to 72 hours maximum, then auger the basin to eliminate compaction (see p. 37). Add worm castings when it has drained. Whenever you disturb the soil, be sure to replace compost.