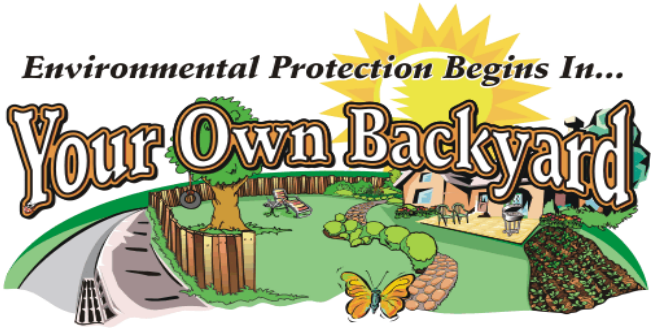

Landscaping for Water Quality

Environmental protection begins in your own backyard

What is water quality?

Water quality is the measure of the suitability of water for a particular use (drinking, recreation, irrigation, fisheries) based on selected physical, chemical and biological characteristics.

Did you know...

Only 1 percent of the world's water supply is usable fresh water. The other 99 percent is saltwater or frozen in the polar icecaps.

Rain barrel

ADEQ
ARKANSAS
Department of Environmental Quality

Fifteen things you can do to protect water quality, conserve water and prevent runoff

The water we have now is ALL we will ever have for drinking, recreation, lawns and gardens, agriculture, wildlife and pets.

The more we do to protect water quality, the more money we will save on water treatment and remediation expenses.

To protect our water, we need to protect our watersheds. A watershed is an area of land that drains into a central water system, such as a lake, river, or even the ocean. Water that the ground doesn't absorb (usually stormwater runoff but also water from hoses and other sources) washes into the nearest body of water, taking with it whatever it passes over, including soil, leaked motor fluids, fertilizers and pesticides.

Stormwater runoff is the #1 pollutant to our waterways.

We all live in a watershed, and what we do affects our water quality.

Here are some things you can do to reduce runoff:

1. Minimize impervious surfaces such as sidewalks and driveways.
2. Water the lawn, not the sidewalks, driveways, and gutters.
3. Repair faucet drips and leaks.
4. Terrace hillside gardens to help prevent erosion and unnecessary runoff while holding plants, nutrients and water in place.
5. Water deeply but infrequently.
6. Group plants according to their water needs.
7. Choose drought-avoiding plants that grow, flower and die before summer heat (irises, daffodils, poppies, pansies).
8. Choose drought-tolerant plants (cacti, some cedars, lantana, viburnum, hollies, buffalo grass, Bermuda grass).
9. Don't over-fertilize or apply fertilizer before a rainstorm.
10. Use alternative (organic or natural) pest control.
11. Use compost and mulch.
12. Install dry wells (small pits filled with gravel and/or rocks to hold storm water until it can soak into the ground).
13. Plant wildflower meadows; they attract wildlife and pollinators, require little to no maintenance and filter stormwater runoff.
14. Install rain barrels.
15. Plant a rain garden to capture runoff from your house and paved areas after a heavy rain.

ADEQ Helpline 501-682-0923

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Why are rain gardens beneficial?

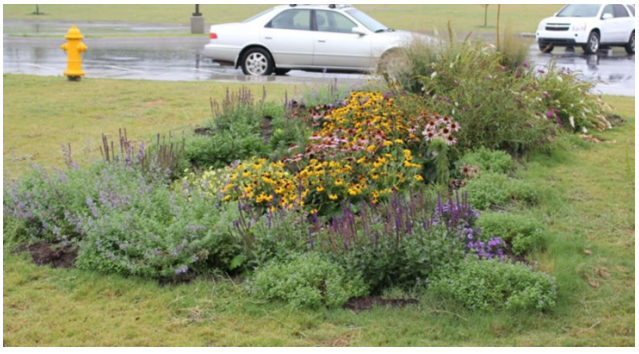
Rain gardens help slow, spread, and soak stormwater into the ground. A rain garden in your yard can retain as much as 30 percent more rainwater than conventional lawns.

Plantings should include flowers, grasses, ferns and shrubs that can survive both wet and dry weather. Native plants are especially good for rain gardens because they develop deep root systems that trap and absorb residue from pollutants as water slowly filters through the soil. Plants can be chosen to create specific types of rain gardens, such as deer-resistant gardens or butterfly gardens.

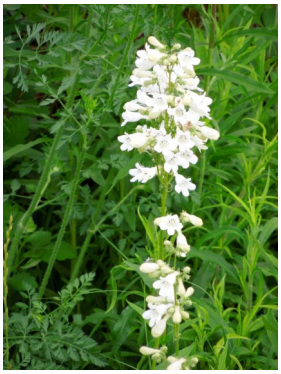
Rain gardens are cost efficient because they require little or no herbicides or fertilizers and less irrigation after establishment than high maintenance landscapes.

Some of the benefits rain gardens produce are:

- Recharged groundwater supplies
- Localized flood control
- Habitat for birds, butterflies, and other wildlife.
- Community beautification
- Healthy urban watershed environment
- Educational and volunteer opportunities



Rain garden at a school in northwest Arkansas



Foxglove beardtongue

Blue flag

Some native plants recommended for rain gardens

Muhly grass

Black-eyed Susan

Skunkbush sumac

Learn more about water quality with the U.S. Environmental Protection Agency's online booklet *What's Up with our Nation's Waters?* at http://www.epa.gov/owow/monitoring/nationswaters/waters.pdf. It includes science projects, home surveys and quizzes for students.

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