



SNaPP Native Plant Demonstration Garden: Creating a Rain Garden in Your Santa Fe Landscape

Erosion control management
= Storm water management
= Rainwater harvesting

Mantra:

- Slow it down
- Spread it out
- Soak it in

Major principles:

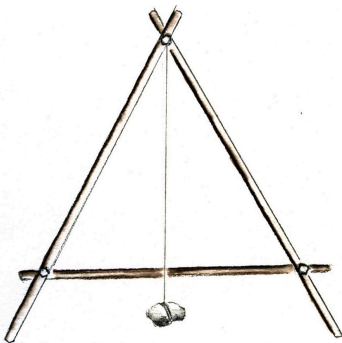
- Observe during and after rain events.
- Always start at top of slope and work your way down.
- Think like water!
- Keep the rainwater as close to where it falls as possible.
- Monitor and rework structures as needed.

Active rainwater harvesting:

Gutters, canals, rain barrels, cisterns (above ground or buried)

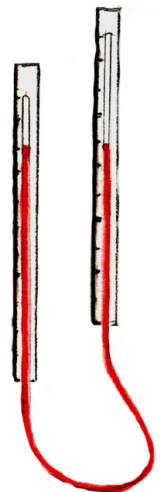
Passive rainwater harvesting:

- Mulch (no bare soil!)
- Permeable hardscaping where possible
- Depressions around trees
- Berms (hills) & swales (basins)
- Rain gardens
- One rock dam
- Rock mulch rundown
- Zuni bowl
- Media luna (tips down or tips up)

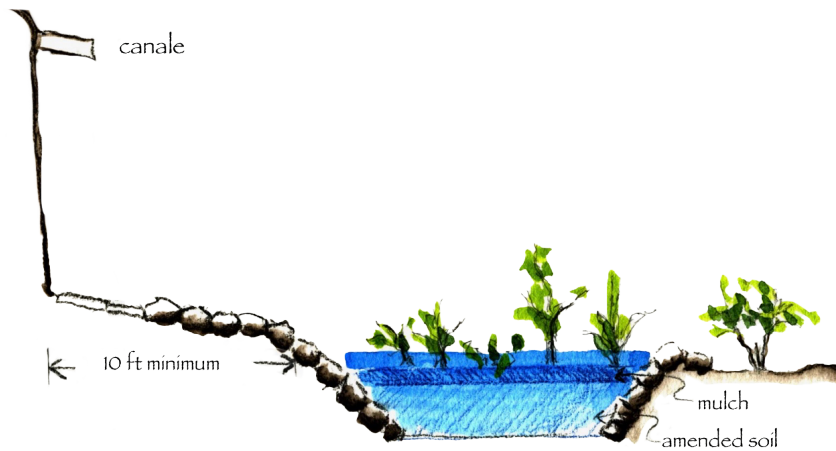


A-frame level = A simple tool used to find contours on a hillside or slope. Can be constructed of scrap materials. Instructions at www.youtube.com/watch?v=c90LEjR4Y3E.

Water level = A simple device used to find the difference in elevation between two points. Easily constructed using clear tube and two stakes. For instructions, see <https://www.wikihow.com/Use-a-Water-Level>.



Rain garden = A depressed area in the landscape that collects rainwater from a roof, driveway, or slope and allows it to slowly soak into the ground. Can be planted with grasses, perennials, and shrubs to provide food and shelter for pollinators and wildlife. Sometimes called a **bioretention basin**.



Steps to create a rain garden:

1. **Find the right location.** Often this is near downspouts or canales or just downhill from the driveway.
2. **Test the permeability of the soil.** This will determine the ideal depth of the rain garden.
3. **Calculate the size and shape of your rain garden.** You may prefer to have two smaller rain gardens rather than one large one.
4. **Construct the rain garden.**
 - Dig out area to desired depth (often 6"-8") making sure that the bottom is as flat as possible.
 - Slope the sides and level the top.
 - Build a berm on the downhill side and the two sides if desired.
 - Loosen at least 3" of soil in bottom of rain garden and mix in compost.
 - Direct rainwater runoff to rain garden — e.g., via a dry creek bed.
5. **Select and install plants.**
 - For the bottom of the rain garden choose plants that can tolerate wet as well as drought conditions — such as white yarrow or golden columbine. Trees and shrubs can be added as well. Apply mulch to bottom of rain garden.
 - For the sides and/or berm of the garden, choose drought tolerant plants such as buckwheat, coneflowers, blanket flower.
6. **Monitor and maintain your rain garden.**
 - Water regularly until plants are established.
 - Observe the rain garden during and after rain. Adjust as needed.

Online resources:

- City of Austin Earth-Wise Guide to Rain Gardens — www.austintexas.gov/sites/default/files/files/Watershed/growgreen/factsheets/raingarden_factsheet.pdf
- CSU Building a Rain Garden in Colorado — stormwatercenter.colostate.edu/wp-content/uploads/2020/04/Colorado-Rain-Garden-Guide-2017-8-8.pdf

Books (Available at SF Library):

- *Rainwater Harvesting for Drylands and Beyond, Volumes 1 & 2* — Brad Lancaster
- *Harvest the Rain* — Nate Downey