

Rain Garden Basics



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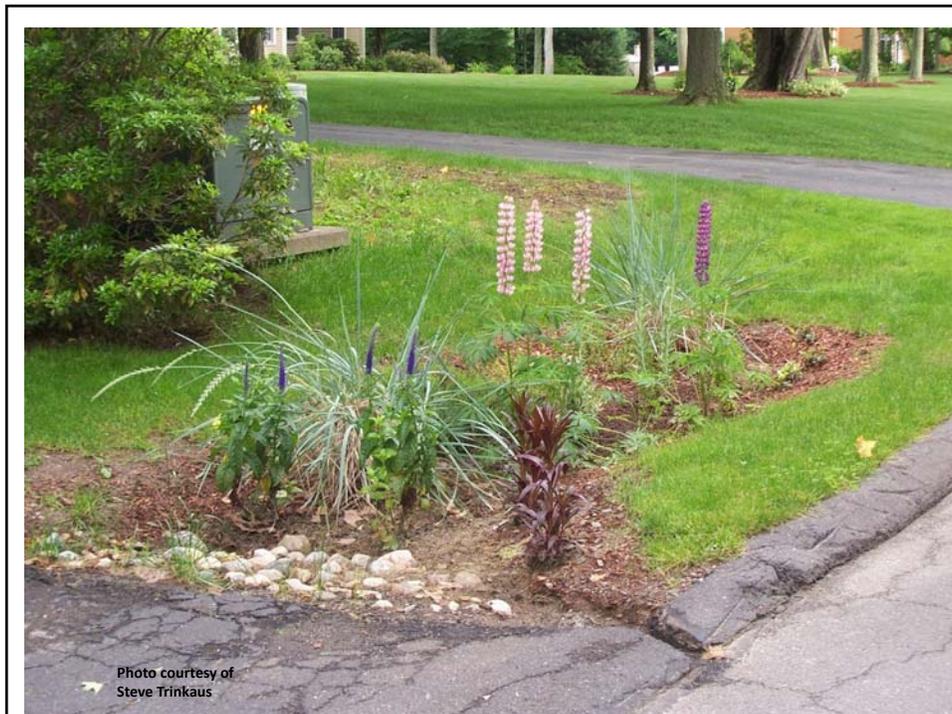


Water Pollution

Stormwater is one of the top sources of water pollution in the U.S. (US EPA)

Rain gardens

- Depression in the landscape designed to collect and infiltrate stormwater
- Besides performing this function, they also look really nice!





Bioretention at UConn

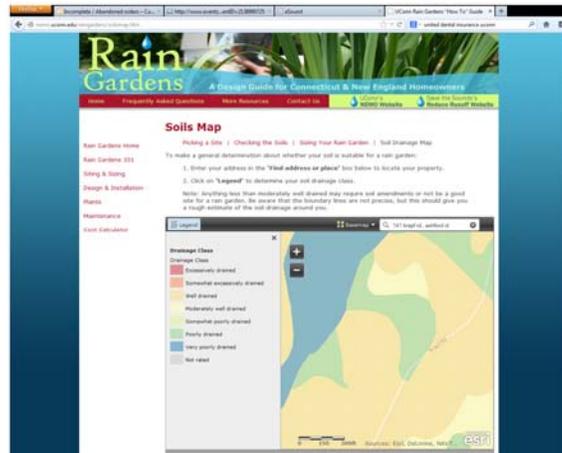


Important site considerations for rain gardens

- Avoid areas with:
 - Shallow (<3 feet) depth to bedrock
 - Seasonal high water table (<2ft from bottom)
 - Chronically wet soils (a rain garden is not a wetland!)

Evaluate your soils

- Check soils map at NEMO rain garden site
 - <http://nemo.uconn.edu/raingardens/soilsmap.htm>



Simple sizing method





Methods to get drainage area

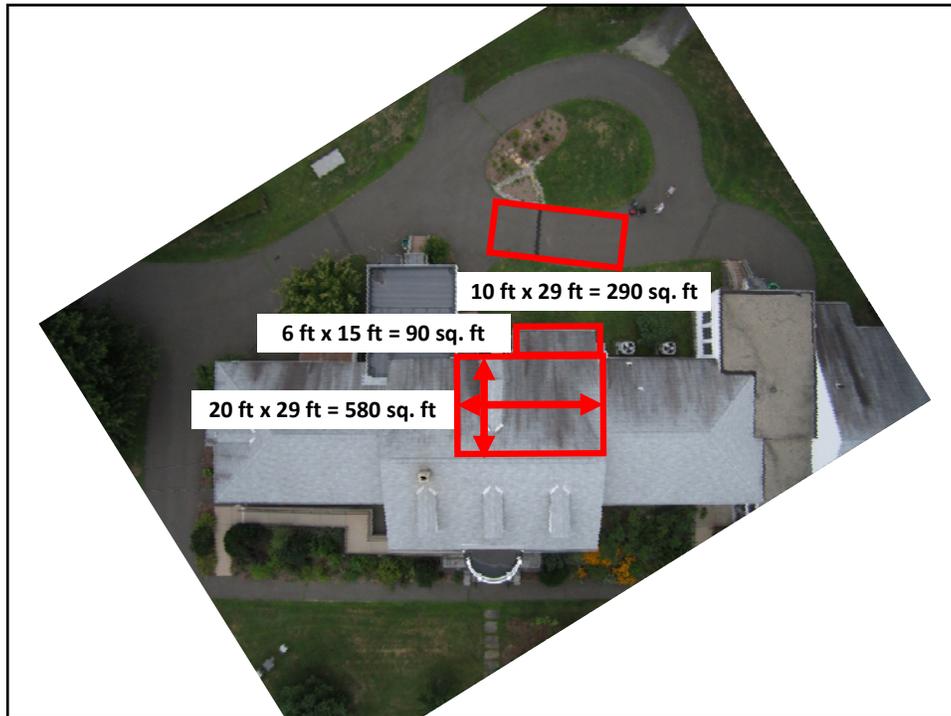
- Luddite

- Measure footprint of drainage area



- NEMO Rain Garden website (Google imagery): <http://nemo.uconn.edu/raingardens>

- Rain garden app



2. Add up the area:

$$290 + 90 + 580 = 960 \text{ square feet}$$

Rain gardens typically sized to contain 1 inch of rainfall in a depression 6 inches deep

3. Calculate best rain garden size:

$$960/6 = 160 \text{ square feet}$$

Rain garden plants

- Plants that can tolerate wet feet AND prolonged dry periods



General characteristics

- NOT wetland plants!
- Native to the area (or cultivars of native species)
- Non-invasive

<http://nemo.uconn.edu/raingardens>



Design

- It is really up to YOU!
- Try to cluster a large number of the same species for a good visual effect
- Watch for heights of different plants
 - Shading, viewing

Time lapse installation