Feb 10, 2014 | ILCA SUSTAINABILITY COMMITTEE | Edition 1

ILCA CONTRACTOR'S GUIDE TO : *SMALL-SCALE RAIN GARDENS*

CONTENTS

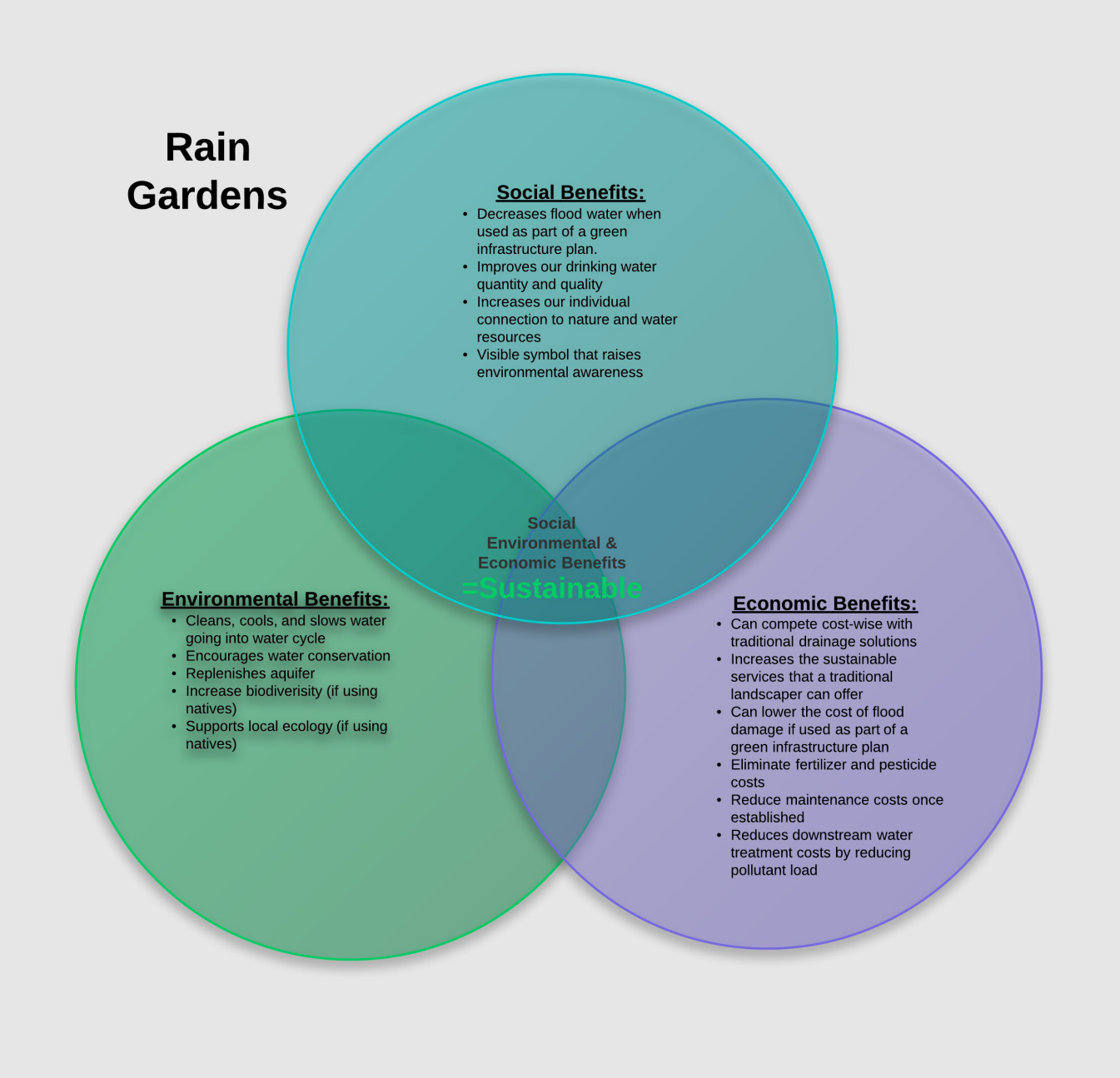
INTRODUCTION

The term “rain garden” has risen in popularity over the last decade. This catch-all term has been used to describe anything from a very expensive and highly engineered system designed to handle an exact quantity of volume, to a low-cost planting of water-tolerant species in a perennially soggy spot in the yard.

This manual will specifically cover the installation of a type of rain garden termed an “existing soil rain garden.” These are rain gardens whose original soils have been amended solely for healthy plant establishment. This is countered by the “engineered rain garden” whose existing soils have been replaced or heavily amended with a specified soil mix to a depth greater than 1’. With existing soil rain gardens landscapers look at rain gardens as “landscaping with rain.” These rain gardens work with the site conditions to design and install a garden that is primarily designed around rain.

ILCA is actively working with Chicagoland municipalities to facilitate the use of small-scale stormwater solutions in the built landscape. To that end, the ILCA Sustainable Landscape Committee presents this guide to equip our members with the information required for them to design, install, and maintain small-scale rain gardens.

BENEFITS OF A RAIN GARDEN



The Illinois Landscape Contractors Association does not use a specific definition of sustainability. Instead, ILCA examines three necessary attributes that must be in place for the system to be sustainable; social, environmental, and economic benefits. In short, the public must want the technology, it must have environmental benefits, and the contractor must be able to perform the work without subsidy. If any of these elements are missing, the system will likely not last. ILCA acknowledges that new technology may be introduced to address a deficient element over time.

RAIN GARDEN MYTHS

First: to dispel some myths an installer may encounter when dealing with a client or public official.

- A rain garden will bring mosquitos: A common concern when considering a rain garden are the presence of mosquitos in the rain garden. Mosquitos require 7-10 days in water before developing into adult mosquitos. A rain garden should not hold water beyond 2-3 days after the latest rainfall during the growing season.

- **A rain garden is a pond: A rain garden is not a pond.** An installer could potentially incorporate a pond element with a rain garden, but a rain garden is designed to drain water where a pond is made to hold water.

- **A rain garden should use only water-loving plants:** A rain garden can have all different water conditions depending on the site conditions and water supply. An installer cannot simply install water-loving plants because it is a rain garden. The installer needs to understand the conditions and select plants that prefer those water, light, and soil conditions.

- **A rain garden is a silver bullet for stormwater management:** Rain gardens are part of the overall solution to our stormwater issues, not a “cure-all.” Rain gardens play a small but important role in the larger green infrastructure approach.

- **Rain gardens require no maintenance:** A rain garden is a garden like any other. An installer or property owner will need to weed for the first couple of years and water to establish the new plantings. Weeding will be very minimal after the third year if the gardem is planted on 1’ centers.

- **Rain gardens are expensive:** A small-scale rain garden will often run between $8-$15 per square foot. It is important to note that the costs to convey the water from the source to the garden may vary and will need to be factored in. Also, the cost of additional landscape elements will need to be added in as well.

SITE EVALUATION

The first step in your rain garden installation is a thorough and thoughtful site evaluation.

To help with this evaluation, a form has been included that can be used as a flowchart to evaluate potential rain garden sites. This form will take an installer through the site evaluation process. The installer should leave with all the information they will need to complete a design and estimate. This form is explained in detail throughout the chapter. There is also an example of the form being used that begins on page 23.