All gardens and tree plantings need maintenance.

When done regularly, maintenance can be enjoyable, rather than an onerous task. It is an opportunity for your students to be outdoors, to see the changes in their project, to learn lessons about caring for living things, to experience the excitement of flowers blossoming for the first time, to witness changes in the soil, to see the types of insects that pollinate our plants or condition our soil, to relate to older relatives who garden, to get ideas for research projects, to learn how to use tools, to get exercise, to help improve their school grounds.

So many wonderful benefits.

The information below and the garden maintenance chart (p. 3) describe the maintenance needed on your Score Four sustainable stormwater project. The most frequent cause of failure of such stormwater solutions is lack of maintenance, so involved principals and teachers should sign this agreement on page 4, assuring maintenance for a minimum of two years. This information will be submitted with grant applications. We also suggest that you inform your grounds maintenance staff or company of your plans and invite their input during this planning stage.

### Watering

Conservation or Bay-Wise Gardens

Watering is essential for the establishment of your perennial native plants. Allow water to seep (rather than gush) into the ground so that it penetrates the soil to the roots and does not wash away the mulch or soil. It is more important to water deeply than frequently. As watering frequency depends on soil type, sun exposure, and outdoor temperatures, observe your plants on a regular basis, particularly in the weeks and summer following their planting.

### Suggested Watering Schedule for an area with clayey soil:

Hand water at the base of each plant for 1-2 minutes

- First 2 Weeks: hand water 3 times per week
- Second 2 weeks: hand water 2 times per week
- Next 6 weeks: hand water 1 time per week

*Note* – When it rains one or more inches a week, watering may be unnecessary. Observe the plant and soil to see if watering is needed. Typically, watering is unnecessary from Nov. 30 – April 15, unless there is an extended warm dry spell in late winter or early spring.

#### Trees

Newly planted trees — those that have been in the ground less than three years — require 25 gallons of water, approximately 1.5 inches of rainfall, per week to survive. During extended periods of little or no rainfall and/or high temperatures, trees may need your help. Casey Trees (http://caseytrees.org/) lists easy tips to follow from spring through fall to keep your trees healthy and flourishing:

• Track rainfall totals. If less than 1.5 inches of rain falls in a week, it's time to water your trees. Take the Casey Tree Foundation's 25 to Stay Alive Pledge, and they will mail you a complimentary rain gauge to get your class started tracking rainfall totals. Their website also provides a daily water guide.

• Casey Tree Foundation's video shows several clever ways of watering trees, including a \$15 seepage bag to keep new trees watered during summer vacations.

#### Mulching – Spring and Fall

Mulch inhibits weeds, retails soil moisture, regulates soil temperature, and adds organic matter to the soil. *The mulch on your project will decompose over time. You will need to add mulch to the site in the fall or spring.* As school projects are not maintained as often as home gardens, we recommend a minimum of 3 inches of mulch on your project. Also *c*heck existing mulch for hardening or caking of the surface. If this has occurred, rake away the old mulch and apply a fresh layer.

Do not place mulch within 3 inches of tree trunks or shrubs. Mulches should be organic and free of dyes. Shredded hardwood mulch is preferred, but other materials can be used such as composted wood chips, pine needles, or grass clippings. If you have a compost pile, adding compost under the mulch will benefit your soil and plants greatly.

### Weeding - Spring, Summer, and Fall

It's easier – and less time consuming -- to remove weeds if you check and care for your projects weekly. At the minimum, your landscape should be weeded or have invasive plants removed every 3 weeks.

#### Invasive Removal - Year-Round

Invasive plants, such as Japanese honeysuckle vines and English ivy, will be removed before planting occurs on your project. However, many invasives will return, as they are usually prolific seed producers and/or spread by rhizomes. Some even grow during our warm winters. If invasive plants threaten your project area, also plan on tackling them during the winter months. We do not recommend the use of herbicides. Recommended methods of control, removal of plant roots by hand, mulching with layers of cardboard and mulch, regular removal of new growth.

## Fall or early spring maintenance

*Tree and Shrub Pruning:* Minor pruning will not adversely affect trees and shrubs at any time of the year. Major pruning should be done in late winter to early spring. It is unlikely that you will need to prune in the first few years.

*Plant Care:* The magic of gardens is that your native perennials will spread. Most need to be divided every 3 to 5 years. Signs to watch for include reduced flowering and weak, spindly stems. Moving plants to new a new location in the garden is one of the fun parts of gardening – you can follow your plants' leads on where to place new ones or maintain your original design. Extra plants represent opportunities for expansion or a new garden!

Dead stems and seed heads: We leave stems and seeds in our gardens throughout the winter, because they provide winter interest and wildlife habitat. In the spring, cut perennials stems 3-4 inches above the ground. Clean up the leaf litter and put it in your compost pile, if you have one.

Since you planted native plants that are appropriate for your site, and you regularly mulch, it is unlikely that fertilizer will be needed.

A handy maintenance schedule is on the following page..

Chart for Planning Maintenance of Conservation Landscapes & Bay-Wise Gardens												
Task	Month											
	January	February	March	April	Мау	June	July	August	September	October	November	December
Monitoring <sup>1</sup>												
Apply mulch <sup>2</sup>												
Cut back perennials and grasses <sup>3</sup>												
Watering <sup>4</sup>												
Weeding (as needed) <sup>5</sup>												
Replace, thin, and add plants (as needed) <sup>6</sup>												
Snow management <sup>7</sup>												

(Adapted from the District of the Department of the Environment Rain Garden and BayScape Maintenance Schedule)

- [1] Check for weeds and depth of mulch. Remove trash or other debris from garden.
- [2] Apply shredded cedar or hardwood mulch in April and November to maintain a depth of 3 inches.
- [3] Cut back perennials (not shrubs or trees) to about 4 inches.
- [4] Water to an equivalent of 1" per week until established. Once established (about a year), water from May to October when there has been no rain for 10 days or more.
- [5] Clean up winter weeds in late February/early March and then weed every two to four weeks, as necessary, from April to November.
- [6] Replace dead plants and thin plants if needed from June to October. The optimum time for adding and moving plants is April and May and September and early October.
- [7] Avoid placing snow on top or in close proximity to garden. Also, limit salt or de-icing agents within close proximity of garden.

Note: Please mow around garden and do not mow next to trees.

The undersigned agree to maintain our Score Four Sustainable Stormwater Solution installation

that if changes in our staff positions occur during the next two years that we will make new

according to the outlined maintenance description and schedule on the previous pages. We will ensure

arrangements for project maintenance, and we will inform (Grantor and/or Project Partners) of these changes. School: Principal Date Lead Teacher, Class or Club Date Participating Teacher, Class or Club Date

Date

**Ground Maintenance Representative**