4 Bay-Friendly Landscape Scorecard

"Conscientious landscape professionals are seeking ways to balance environmentally sound practices with business demands. Many successful companies have adopted win-win sustainable landscaping strategies for the benefit of their business, their employees and the environment.

SOURCE: SAN FRANCISCO BAY CHAPTER OF THE CALIFORNIA LANDSCAPE CONTRACOR'S ASSOCIATION,
FROM: INTRODUCTION TO, *"PRESERVING THE ENVIRONMENT AND GROWING YOUR BUSINESS"* SEMINAR, 2002.

Bay-Friendly Scorecard for Commercial & Civic Landscapes

2008 Version

This scorecard tracks Bay-Friendly features incorporated into the design and constructon of new landscapes. The minimum requirements for a Bay-Friendly Landscape are: earn a total of 60 points or more; and complete the 9 required practices indicated by the "R" in the columns labeled "Possible Points."

A. Site Planning	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
	POSSIBLE POINTS						
1. Select and evaluate the site carefully							
a. Submit the completed Bay-Friendly Site Analysis before 100% design development documents	5						
b. The site is located within an urban growth boundary and avoids environmentally sensitive sites	3						
c. The site development results in the clean up of a contaminated site (i.e. brownfield) or is in a designated redevelopment area						3	
2. Consider the potential for fire							
a. For sites adjacent to fire sensitive open space or wildlands only: Submit a Fire Mitigation Plan	5						
3. Keep plant debris on site							
a. Produce mulch from plant debris							
i. Design documents specify areas under tree & shrub canopies and at least 10 feet away from hard surfaces and storm drains, to be used as a leaf repository for mulch		1					
ii. Construction documents specify that of the trees identified for removal, some are chipped for use as mulch onsite		1					
b. Produce compost from plant debris							
i. A site for composting is included in landscape plans. Systems for composting up to and including 3 cubic yards at one time		1					
ii. Systems for composting more than 3 and up to 10 yards at one time (total 2 points)		1					
iii. Systems 10 cubic yards or larger (total 3 points)		1					
4. Reduce and recycle waste							
a. An easily accessible area is dedicated to the collection and storage of materials for recycling		2					
5. Minimize site disturbance							
a. On greenfield sites, limit site disturbance to protect topography, vegetation and hydrology (total 3 points)	1					1	1
b. On previously developed sites, restore vegetation and hydrology (total 3 points)	1					1	1
6. Provide water and/or shelter for wildlife such as birdhouse, bathouses, boulders, logs, wood piles, large native shrubs or trees							1
7. Conserve or restore natural areas & wildlife corridors							
a. The landscape is designed to preserve 80% of existing mature healthy trees and penalties for destruction of protected trees are included in construction contract							2
b. The landscape is designed to increase open space compared to its previous use and/or to connect it to other open space or wildlife corridors							2
c. Create or protect a diverse plant buffer of low maintenance vegetation along creeks, shorelines or monocultured landscaped areas							2
Site Planning Subtotal, out of possible 33 points:							

	Landscape Locally	Less to Landfill	Nurture the Soil	Conserve Water	Conserve Energy	Water and Air Quality	Create Wildlife Habitat
B. Stormwater and Site Drainage	**POSSIBLE POINTS**						
1. Minimize impervious surfaces							
a. Permeable paving, gravel or other porous surfaces are installed for							
i. 25% OR						1	
ii. 33% (total 3 ponts) OR						2	
iii. 50% of the paved area (total 5 points)						2	
b. No impervious surfaces directly connect to the storm drain						2	
2. Design a system to capture and filter storm water							
a. Capture and filter runoff from parking lots into landscape beds, vegetated swales or other landscape stormwater bmps						2	
b. Incorporate landscape measures,including vegetated swales, infiltration planters, detention basins and/or stormwater wetlands, that are designed to capture and filter 85% of average annual stormwater runoff OR						2	
c. Designed to capture and filter 100% of average annual runoff (total 4 points)						2	
d. Bioswales specify flat bottoms of at least 18 inches across and/or rock cobble at points of concentrated flow						1	
e. Turf is not specified in bioswales						1	
f. Direct rain water from all down spouts to planters, swales or landscaped areas						1	
Stormwater and Site Drainage Subtotal, out of possible 16 points:							
C. Earthwork and Soil Health							
1. Assess the soil and test drainage							
a. Submit laboratory soil analysis results and recommendations for compost and natural fertilizers (total 3 points)	2		1				
2. Remove and store topsoil before grading							
a. The removal, temporary storage, and re-spreading of topsoil is specified in the landscape design documents AND specifications include a maximum topsoil pile height of 6 feet, as well as measures to protect the stored topsoil from erosion			2				
3. Protect soil from compaction							
a. Grading specifications and construction plans call for the installation and maintenance of fencing to prohibit parking or materials staging in areas identified for protection			2				
b. Design documents specify that soil is not worked when wet			1				
4. Aerate compacted soils							
a. Design documents include specification to alleviate compacted soils to a depth of at least 8 inches, before planting, for all landscaped areas that can not be protected during construction			1				
b. Design documents include specification to alleviate compacted soils to a depth of at least 12 inches, before planting, for all landscaped areas that can not be protected during construction (total 2 points)			1				
5. Feed soils naturally & avoid synthetic fertilizers							
a. Fertilizers or soil amendment materials prohibited by Organic Materials Research Institute in its generic materials list are prohibited in construction of the project			1				
6. Mulch							
a. **Required:** Planting specifications and plans indicate that after construction, all soil on site is protected with a minimum of 3 inches of recycled mulch			**R**				

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	POSSIBLE POINTS						
7. Amend the soil with compost before planting							
a. Quality compost is specified as the soil amendment, at the rates indicated by a soil analysis, to bring the soil organic matter content to a minimum of:							
i. **Required:** 3.5% by dry weight OR 1 inch of quality compost OR				**R**			
ii. 5% by dry weight OR (total 2 points)				1	1		
iii. Specify the use of compost from processors that participate in the US Composting Council's Standard Testing Assurance program				1			
8. Use IPM design and construction practices to prevent pest problems							
a. Sheet mulch is specified for weed control (total 3 points)			1			2	
b. Synthetic chemical pre-emergents are prohibited						2	
9. Keep soil & organic matter where it belongs							
a. Compost berms or blankets or socks are specified for controlling erosion (total 2 points)			1			1	
Earthwork and Soil Health Subtotal, out of possible 21 points:							
D. Materials							
1. Use salvaged items & recycled content materials							
a. Non-plant landscape materials are salvaged or made from recycled content materials or FSC certified wood:							
i. Decking (100% of non structural materials)		1					
ii. Fencing (100% of non structural materials)		2					
iii. Outdoor furniture such as bike racks, benches, tables and chairs (50% minimum)		2					
iv. Planters or retaining walls (100% of either or both)		1					
v. Parking stops or lighting/sign posts (100% of either or both)		1					
vi. Play structures or surfaces (100% of either or both)		2					
vii. Edging or decorative glass mulch (100% of either or both)		1					
b. A minimum 25% of recycled aggregate (crushed concrete) is specified for walkway, driveway, roadway base and other uses		2					
c. Replace Portland cement in concrete with flyash or slag							
i. 20%		1					
ii. 25% (total 2 points)		1					
d. Purchased compost and/or mulch is recycled from local, organic materials such as plant or wood waste							
i. 100% of compost OR 100% of mulch		1					
ii. 100% of both (total 2 points)		1					
2. Reduce and recycle landscape construction waste							
a. **Required:** Divert 50% of landscape construction and demolition waste.		**R**					
b. Divert 100% of asphalt and concrete and 65% of remaining materials OR		2					
c. Divert 100% of asphalt and concrete and 80% of remaining materials (total 4 points)		2					
d. Donate unused materials		1					
3. Reduce the heat island effect with cool site techniques							
a. at least 50% of the paved site area includes cool site techniques					2		

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	POSSIBLE POINTS						
4. Design lighting carefully							
a. Low energy fixtures are specified for all site lighting					2		
b. Photovoltaic is specified for site lighting							
i. all path lighting is solar powered					1		
ii. 50% of all other site lighting is solar powered					2		
iii. 100% of all other site lighting is solar powered (total 4 points)					2		
c. Reduce light pollution and trespass: exterior luminaries emit no light above horizontal or are Dark Sky certified					1		
d. The site and exterior building lighting does not cast direct beam illumination onto adjacent properties or right of ways					1		
5. Choose and maintain equipment for fuel conservation							
a. Specify solar powered pump(s) for water features					1		
6. Specify low embodied energy products							
a. 100% of any stone and non-concrete hardscapes materials are produced within 500 miles of the project site					2		
7. Use integrated pest management							
a. Design documents include construction specifications that require integrated pest management						2	
8. Use organic pest management							
a. Design documents include construction specifications that prohibit the use of pesticides that are not allowed by Organic Materials Research Institute in its generic materials (total 4 points)							2
Materials Subtotal, out of possible 39 points:							
E. Planting							
1. Select appropriate plants: choose & locate plants to grow to natural size and avoid shearing							
a. **Required:** No species will require shearing		**R**					
b. Plants specified can grow to mature size within space allotted them		1					
2. Select appropriate plants: do not plant invasive species							
a. **Required:** None of the species listed by Cal-IPC as invasive in the San Francisco Bay Area are included in the planting plan		**R**					
3. Grow drought tolerant CA native, Mediterranean or climate adapted plants							
a. **Required:** Specify California native, Mediterranean or other climate adapted plants that require occasional, little or no summer water for 75% of all non-turf plants				**R**			
b. Specify California native or Mediterranean or other climate adapted plants that require occasional, little or no summer water for 100% of all non-turf plants				2			
c. 100% of the non-turf plant palette need no irrigation once established (total 5 points)				3			
4. Minimize the lawn							
a. Turf is not specified in areas less than 8 feet wide or in medians, unless irrigated with subsurface or low volume irrigation				2			
b. Turf shall not be installed on slopes exceeding 10%				2			
c. **Required:** A maximum of 25% of total irrigated area is specified as turf, with sports or multiple use fields exempted				**R**			
d. A maximum of 15% of total landscaped area is specified as turf, with sports or multiple use fields exempted				2			
e. No turf is specified (total 5 points)				3			

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	POSSIBLE POINTS						
5. Implement hydrozoning							
a. Group plants by water requirements and sun exposure and select plant species that are appropriate for the water use within each zone and identify hydrozones on the irrigation plan (with separate irrigation valves for differing water needs, if irrigation is required)				2			
6. Provide shade to moderate building temperatures							
a. Protect existing trees and/or specify new trees such that 50% or more of west facing glazing and walls will be shaded (at 4 pm in September) by the trees at their mature size AND trees must be deciduous					2		
7. Plant trees							
a. At least 50% of the paved site area is shaded by trees or other vegetation					2		
b. At least one tree species is a large stature species (total 2 points)					1		1
8. Diversify							
a. Landscapes less than 20,000 square feet shall have a minimum of:							
ii. 20 distinct species OR							1
iii. 30 distinct plant species (total 3 points)							2
c. Landscapes with 20,000 to 43,560 square feet (1 acre) shall include a minimum of:							
i. 30 distinct plant species OR							1
ii. 40 distinct species OR (total 2 points)							1
iii. 50 distinct plant species (total 4 points)							2
d. Landscapes of greater than 1 acre shall include a minimum of 40 distinct plant species AND							
i. one additional species per acre over 1 acre OR							2
ii. two additional species per acre over 1 acre (total 4 points)							2
9. Choose California natives first							
a. CA natives are specified for 50% of non-turf plants							2
Planting Subtotal, out of possible 36 points:							
F. Irrigation							
1. Design for on-site rainwater collection, recycled water and/or graywater use							
a. Irrigation systems and/or all ornamental uses of water (ponds, fountains, etc) are plumbed for recycled water where it is available from a municipal source				3			
b. Design a system that can store and use rainwater and/or graywater to satisfy a percentage of the landscape irrigation requirements:							
i. 10% OR				3			
ii. 50% OR (total 4 points)				1			
iii. 100% of dry season landscape water requirements satisfied with harvested rainwater (total 5 points)				1			

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	POSSIBLE POINTS						
2. Design and install high efficiency irrigation systems							
a. **Required:** Specify weather based (automatic, self adjusting) irrigation controller(s) that includes a moisture and/or rain sensor shutoff				**R**			
b. **Required:** Sprinkler and spray heads are not specified for areas less than 8 feet wide				**R**			
c. For 75% or greater of non-turf irrigated areas: Specify and install irrigation equipment with an operational distribution uniformity of 80% or greater, such as drip or bubblers				2			
d. For 100% of non-turf irrigated areas: Specify and install irrigation equipment with an operational distribution uniformity of 80% or greater, such as drip or bubblers (total 5 points)				3			
e. For all turf areas: Specifiy and install equipment with a precipitation rate of 1 inch or less per hour and an operational distribution uniformity of 70% or greater				2			
f. Design and install irrigation system that will be operated at 70% of reference ET				3			
3 Install a dedicated meter for landscape water use or install a submeter							
a. A dedicated irrigation meter or submeter is specified to track irrigation water				2			
Irrigation Subtotal, out of possible 20 points:							
G. Maintenance							
1. Keep plant debris on site							
a. Grasscycle							
i. Maintenance specifications and/or task list includes grasscycling (grass clippings left on the lawn after mowing) for all lawns from April through October, or longer. Sports turf may be excluded "in season" when clippings will interfere with play		2					
b. Produce mulch from plant debris							
i. Maintenance specifications and/or task list requires that leaves and/or seed free vegetative debris less than 4 inches (including cut or chipped woody prunings) be re-incorporated into the mulch layer of landscaped areas away from storm drain		2					
c. Produce compost from plant debris							
i. Composting plant debris on site is included in maintenance specifications or task list		3					
2. Separate plant debris for clean green discounts							
a. Maintenance specifications and/or task list require all exported plant debris be separated from other refuse and taken to a facility where it will be used to produce compost or mulch		3					
3. Protect soil from compaction							
a. maintenance task list specifies that soil is not worked when wet, generally between October and April			1				
4. Feed soils naturally & avoid synthetic fertilizers							
a. Maintenance manual include specifications to topdress turf with finely screened quality compost after aeration and/or 1-4 times per year			1				
b. Plant and soil amendments for maintenance are specified as compost, compost tea or other naturally occuring, non-synthetic fertilizers for all landscape areas			1				
c. Fertilizers prohibited by Organic Materials Research Institute are prohibited in the project			1				
5. Mulch Regularly							
a. Regular reapplication of organic mulch, to a minimum depth of 3 inches is included in the maintenance specifications or task list (total 2 points)			1	1			

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	POSSIBLE POINTS						
6. Manage and maintain irrigation system so every drop counts							
a. Maintenance task list includes a schedule for reading the dedicated meter or submeter and reporting water use				1			
b. At completion of the installation, the contractor shall provide the property owner with 1. precipitation rate for each valve zone, 2. area calculations for each irrigation zone and the irrigation plans which include the location of irrigation supply shut off, 3. internet address for watering index information				2			
c. Maintenance task list includes regular checking of irrigation equipment, and/or checking soil moisture content before watering AND/OR immediate replacement of broken equipment with equal or superior materials				1			
7. Use IPM as part of maintenance practices							
a. Maintenance task list includes integrated pest management specifications						2	
b. At least one landscaping staff member or contractor is trained in the use of IPM or is a Bay-Friendly Qualified Professional						2	
8. Choose and maintain your materials, equipment & vehicles carefully							
a. Maintenance task list specifies that all oil leaks are repaired immediately and that repairs are not done at the landscape site						1	
b. Equipment that uses biobased lubricants and/or alternative fuels is specified in the maintenance task list						2	
9. Use organic pest management							
a. Maintenance task list prohibits the use of pesticides that are not allowed by Organic Materials Research Institute in its generic materials list							2
Maintenance Subtotal, out of possible 29 points:							
H. Innovation							
1. Bay-Friendly Landscape Guidelines and Principles are defined and referenced in the construction bid documents	3						
2. Design & install educational signage							
a. Provide instructional signs and other educational materials to describe the landscapes Bay-Friendly design, construction and maintenance practices	4						
3. Create a Bay-Friendly Maintenance task list							
a. Provide a detailed Bay-Friendly maintenance task list and/or use the BF Maintenance Specification Guidelines as an official reference docoument in the the landscape maintenance contract and/or with on site landscape staff (total 7 points)	1	1	1	1	1	1	1
4. Employ a holistic approach							
a. Site analysis is submitted AND 65% of landscape construction waste is diverted AND planting plan includes a diverse pallette AND 50% of non-turf plants are California native species AND none of the landscape area is in turf AND compost is specified for amending the soil during installation AND natural fertilizers are specified as the exclusive source of nutrients AND integrated OR organic pest management is specified (total 7 points)	1	1	1	1	1	1	1
5. Innovation: Design your own Bay-Friendly innovation							
a. Enter the description of the innovation here, and enter up to 4 points to the right. Points will be evaluated by the Bay-Friendly rater	0	0	0	0	0	0	0
Innovation Subtotal, out of possible 25 points:							
Summary							
Total Possible Points:	25	41	18	45	22	36	28
Total Points Achieved:	0	0	0	0	0	0	0