Chapter FIVE

5

How to Start Landscaping... in a Bay-Friendly Way

A conventional landscape is transitioned to a Bay-Friendly Landscape.

Conventional landscape

Lawn sheet mulched in place

One year later
San Francisco Bay Area residents are already thinking about the connection between their landscapes and the environment and they want to make a difference. Yet Bay-Friendly landscaping practices require skill and expertise. Communicate your expertise to earn new clients and strengthen your existing customer loyalty, then expand to include more practices, marketing yourself as a Bay-Friendly landscaper.

**STEP 1:** Start with what you already do...and explain the benefits to your customers

The best strategy for offering Bay-Friendly landscaping to your clients is to start by identifying those practices that you already do.

Then: train yourself and your staff on the benefits. Learn how these practices can protect your client's health or that of the environment, save landfill space, provide wildlife habitat or increase the value of their property.

Communicate your skills and the benefits of Bay-Friendly landscaping to your customers or potential new customers. Feel free to share the information in these guidelines with them. Let them know you can help them landscape in an environmentally friendly manner with these Bay-Friendly services. Emphasize that many of these services can save them money. Detail your skill in providing these benefits in periodic quality control reports mailed to your clients. Be sure to include the benefits to your customer such as lower water bills and increased property value.

Include the practices and their benefits in your contracts. You may even want to request that your clients sign an agreement on the goals of their Bay-Friendly Landscape program.

**STEP 2:** Plan to offer more “Bay-Friendly landscaping practices”

**STEP 3:** Market “Bay-Friendly Landscaping Packages”

**STEP 4:** Learn more

**STEP 4:** Start your Bay-Friendly Reference Library

“Once clients see you’re doing a good job, you can educate them about landscaping to have a low impact on the environment.”

— Katrine Benninger, Katrine Benninger Landscape Design, Oakland

Tom Del Conte explaining the benefits of grasscycling for turf health and water conservation.
STEP 2:

**Plan to offer more Bay-Friendly landscaping practices**

The ideal Bay-Friendly Landscape is designed, constructed and maintained with most, if not all, the practices listed in this guide. It is a holistic, integrated approach that yields the most benefits to your clients, your business, the environment and our community. It is more likely, though, that you will need to evolve towards that goal rather than instantly switch over.

Sit down with your staff and ask yourselves:

- Do we currently offer more practices from one principle than others? Why?
- What other Bay-Friendly practices from the checklist might our clients also value?
- What additional practices would be relatively easy to learn about and implement in the near future?

Look through the table of benefits in Chapter 4 from the perspective of the primary nature of your business (design, construction or maintenance).

But consider the practices identified for your type of business as a starting point, not the entirety of what you can offer your customers.

For example, “Choose plants that can grow to their natural size in the space allotted them” from Landscape for Less to the Landfill is identified as a primary practice for the design phase. Yet it is likely to be important in maintenance, too. Which means you can offer this Bay-Friendly practice – so selected plants do not generate waste over the long term – even if you provide only landscape maintenance services.

Consider how to adopt more of the practices over time:

- Under the principle(s) at which your company is already strong, (such as Conserve Water) what would it take to offer all or most of the practices?
- What additional practices can you offer in the next fiscal year, or the next 2 years?
- What training and equipment do you need to offer more Bay-Friendly services?

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**“An ecologically-based planting design is inherently complex. The maintenance needs to change over time. A trained maintenance presence is needed.”**

— Michael Thilgen, Landscape Architect and Contractor, Four Dimensions Landscape Company, Oakland

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**Tips for Success**

**Guide your Clients through a Transition Period**

Transitioning a landscape that has been managed with few chemical inputs and some additions of organic amendments to a Bay-Friendly landscaping maintenance program can be a relatively simple and short process. Landscapes that have been intensively treated with pesticides, over-watered and over-fertilized will require greater skill and time to transition.

- Let your customers know that it may take 2 years or more to make the change, that it will require skill, frequent monitoring and increased communication, and that their expenses could be greater during that period.
- Agree upon an acceptable period and include this in your contract.
- Start by assessing the soil and testing drainage.
Another important question to ask yourself as you expand your Bay-Friendly services is how to market them to your clients. Here are some suggestions for Bay-Friendly Landscaping Packages that could be developed to both respond to and encourage customer demand:

“Bay-Friendly Soil Health Care Program”
Soil is the foundation of a healthy, beautiful landscape. Offer the following practices:
- Assessing the soil and testing drainage
- Removing and storing topsoil during construction
- Protecting soil from compaction and erosion
- Amending the soil with compost
- Mulching regularly
- Feeding soils naturally with compost or compost tea
- Avoiding synthetic fertilizers
- Minimizing chemicals with a goal of eliminating them altogether

“Bay-Friendly Lawn Care Program”
Lawns continue to be a part of our culture. But maybe it is time to rethink what we mean by a lawn. Bay-Friendly Landscaping emphasizes that high input lawns are not included solely for their looks. Small functional lawns - those that are used for play and relaxation - can be managed to minimize environmental impacts and provide your clients with a safer lawn by including:
- Grasscycling
- Aerating, then topdressing with compost
- Phasing out the scheduled application of synthetic fertilizers and pesticides
- Feeding with compost or other natural or slow release fertilizers after analysis or demonstrated need
- Integrated pest management that includes:
  - Hand pulling weeds
  - Use of natural herbicides
  - Use of beneficial nematodes
  - Use of compost tea for disease management and nutrient cycling.
- State of the art irrigation management to prevent over watering.

“Bay-Friendly Wildlife Gardening”
Specializing in designing, constructing or maintaining wildlife gardens is another opportunity for your business to grow and flourish. Develop expertise in the following practices and offer them to new and existing clients:
- Survey flora and fauna
- Learn about local, natural plant communities and use them as models
- Conserve or restore natural areas
- Diversify and include many California native plant species
- Provide water and shelter
- Eliminate the use of pesticides

“Ecological design has a lot to do with how we present it to the client. It’s in our hands. We need to describe our work in language that appeals to people, that they can relate to and sign on to.”
— Rebecca Coffman, Landscape Architect, Berkeley

Survey Says...
More than 50% of single-family households with yards or gardens are interested in creating habitat for birds and pollinators.
Learn more about San Francisco Bay Area natural plant communities.

Many local native species are excellent landscape plants. You can imitate natural processes by using the plant community concept to organize plantings. Blending the science of ecology with the practice of horticulture, you can create landscape projects that assume some of the beautiful natural qualities of our area.

If you choose plants in response to the site conditions, the new planting will probably become established easily. There will be no need for the special fertilizing, pest control, and heavy irrigation that have been so common in the past. The plants grow easily because they're adapted to this place - they've lived here for thousands of years! If you visit our Bay Area wildlands, you will notice that a particular species might be abundant in a given area, only occasionally present in an adjacent space, and completely absent elsewhere. You may also recognize, as you move from south facing to north facing slopes or from exposed ridges to wooded canyons that certain groups of plants tend to grow together. This is because native plants have adapted over many generations to specific environmental conditions.

Ecologists classify these groups of plants with terms like “biotic province,” “vegetation type,” “plant community,” “plant association,” and “series.” The natural distribution of plants is very complex, with much overlapping of species, and experts disagree about the fine points of grouping and nomenclature.

Here we use the term “plant community” to describe a group of plants that recurs with relative consistency, often dominated by a single species. The Bay Area consists of many different places, from the cool, moist saltwater marshes close to the water to the hot and dry eastern ridges and slopes. These places support a series of distinctive plant communities - Saltwater Marsh, Freshwater Marsh, Riparian Woodland, Coastal Strand, Coastal Prairie, Northern Coastal Scrub, Chaparral, Valley and Foothill Woodland, Valley Grassland, and Redwood Forest, to name a few.

Following is a short list of representative species and a brief description of the most common plant communities of the Bay Area.

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**STEP 4:**

Amending the soil with compost may be one of the easiest selling points for your customers:

It may cost more to purchase and apply compost in the short term, but it pays for itself over the longer term as you and your clients benefit from:

- **Bringing life to the soil**
  - Reduces the need for fertilizers
  - Improves plant resistance to disease
  - Reduces need for pesticides
  - Degrades pollutants
- **Healthier plants with an improved appearance**
  - Increased customer satisfaction
- **Faster planting in amended soils**
- **Reducing plant loss**
  - Fewer callbacks
  - Improved profits
- **Increasing water holding capacity**
  - Irrigation costs are cut by as much as 50%
  - Reduced water bills for customer
  - Decreased stormwater runoff
- **Paying back the cost of amending soil in 5-7 years**
- **Protecting the environment and the health of their families.**


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Valley Grassland
Once common in interior valleys, Valley Grassland has suffered from agricultural development, introduction of invasive weeds, and urbanization. It now survives only in scattered remnants.

Coastal Prairie
Occupying slopes close to the bay, this community is dominated by grasses and low herbs. Once consisting primarily of native perennial bunchgrasses and annual wildflowers, it now includes many weedy annual species brought here by successive waves of European immigration. Large portions of the Oakland and Berkeley hills were once Coastal Prairie, but have been converted to woodland in the course of urbanization.

Valley and Foothill Woodland
Covering a large area of East Bay open space from near the coast to far inland, this community includes open Oak Savannah with grassy understory, dense Oak groves crowded with shrubs and herbs, and shady Bay Laurel woods. Valley and Foothill Woodland is particularly rich in ecological diversity.
Redwood Forest

Considered by most ecologists as a subset of the North Coastal Forest, Redwood Forest exists in a shallow band across the Oakland and Berkeley hills. Redwoods are adapted to snag moisture from the summer fog with their leaves, which adds to precipitation and soil moisture. A distinctive group of understory species is adapted to the deep shade of the redwood groves.

Riparian Woodland

Occurring as narrow bands in the steep mountainous ravines, broadly meandering in the flatter lands, these wet stream corridors stand in strong contrast to the surrounding summer dry hills and ridges. A specially adapted set of water loving plants lines our local creeks and rivers.

Northern Coastal Scrub

(also known as “Soft Chaparral”) Often found close to Coastal Prairie on west facing slopes of thin soil, Northern Coastal Scrub is also influenced by marine exposure, but is dominated by low shrubs.

**Coastal Prairie**

**Herbaceous Perennials**
- Achillea millefolium (White Yarrow)
- Calamagrostis nutkaensis (Reed Grass)
- Calochortus luteus (Golden Mariposa)
- Carex tumulicola (Dwarf Sedge)
- Danthonia californica (Wild Oat Grass)
- Deschampsia caespitosa holciformis (Hair Grass)
- Festuca idahoensis (Fescue Bunchgrass)
- Iris douglasiana (Douglas Iris)
- Pteridium aquilinum pubescens (Bracken Fern)
- Sisyrinchium bellum (Blue-eyed Grass)

**Northern Coastal Scrub**

**Shrubs**
- Arctostaphylos uva-ursi 'Pt. Reyes' (Manzanita)
- Artemisia californica (Coast Sagebrush)
- Baccharis pilularis var. consanguinea (Coyote Brush)
- Baccharis pilularis ssp. pilularis (Dwarf Coyote Brush)
- Ceanothus gloriosus (Ceanothus)
- Ceanothus cuneatus (Buckbrush)
- Cercocarpus betuloides (Mountain Mahogany)
- Diplacus aurantiacus (Monkey Flower)
- Genista pilosa (Cowla)
- Heteromeles arbutifolia (Toyon)
- Lupinus albifrons (Bush Lupine)
- Mimulus aurantiacus (Sticky Monkeyflower)
- Rhamnus californica (Coffee Berry)
- Salvia melifera (Black Sage)
- Stachys capillaris (Hedge Nettle)

**Valley Grassland**

**Herbaceous Perennials**
- Calochortus luteus (Golden Mariposa)
- Dichanthelium acutiforme (Bluestar)
- Eschscholzia californica (California Fuchsia)
- Euchiorhiza menziesii (Menzies Mariposa)
- Festuca californica (California Fescue)
- Helianthemum fasciculatum (Moenkhausia)
- Hypericum perforatum (St. John's Wort)
- Iris douglasiana (Douglas Iris)
- Juncus effusus (Green Rush)
- Silene involucrata (Rocky Mountain Catchfly)
- Vicia americana (Rock Vetch)

**Redwood Forest**

**Trees**
- Acer macrophyllum (Bigleaf Maple)
- Alnus rubra (Red Alder)
- Platanus racemosa (Western Sycamore)

**Shrubs**
- Cornus species (Creek Dogwood)
- Rosa californica (California Rose)
- Salix species (Red Willow)

**Herbaceous Perennials**
- Adiantum jordanii (Five-finger Fern)
- Asarum caudatum (Wild Ginger)
- Athyrium filix-femina (Lady Fern)
- Oxalis oregana (Redwood Sorrel)
- Polystichum munitum (Western Sword Fern)
- Rubus ursinus (California Blackberry)
- Smilacina racemosa (False Solomon Seal)
- Tiarella cordifolia (Foam Flower)
- Woodwardia fimbriata (Giant Chain Fern)

**Valley and Foothill Woodland**

**Trees**
- Aesculus californica (California Buckeye)
- Arbutus menziesii (Madrone)
- Quercus agrifolia (Coast Live Oak)
- Quercus chrysolepis (Canyon Live Oak)
- Quercus kelloggii (Black Oak)
- Quercus lobata (Valley Oak)
- Quercus wislizenii (Interior Live Oak)

**Shrubs**
- Arnica montana (Wild Arnica)
- Betonica officinalis (French Broom)
- Campanulastrum americanum (American Bellflower)
- Ceanothus thyrsiflorus (Blue Blossom)
- Corylus cornuta var. californica (Western Hazelnut)
- Fraxinus velutina (Black Alder)
- Vaccinium ovatum (Huckleberry)
- Viburnum ursinum (Black Highbush Viburnum)

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- Woodwardia fimbriata (Giant Chain Fern)

**Vines**
- Aristolochia californica (Dutchman's pipe)
- Clematis ligusticifolia (Clematis)
- Vitis californica (California Grape)
Learn more about Legislation

More and more legislation at the local, state and national level encourages resource conservation and pollution prevention. Many of these regulations directly impact the design, construction and management of landscape. Be proactive, be ahead of legislation.

CA Healthy Schools Act of 2000, AB2260: Requires schools to notify parents, guardians and employees about pesticide use and promotes the voluntary adoption of IPM in schools.

CA Integrated Waste Management Act, AB939: Waste reduction law that prioritizes recycling or landfilling and sets statewide recycling goal of 50%.

CA Urban Water Management Plan, AB797: Best Management Practices for Water Use to address limited water supply.

CA Water Conservation in Landscaping Act, AB325: Requires adoption of a water efficient landscape ordinance by each local agency unless the agency adopts findings that one ordinance is unnecessary. AB325 is currently being reviewed, as per AB2717.

Federal Clean Water Act: (1972) Section 402 of the Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) permit program, setting nationwide permitting requirements for discharging pollutants into waterways. The 1987 amendments to the CWA required that municipal stormwater discharges obtain NPDES permit coverage. These amendments required municipalities to effectively prohibit non-stormwater discharges to their storm drain systems and to implement controls to reduce pollutants in stormwater to the maximum extent practical.

Green Building

The US Green Building Council has developed a rating system that specifies ‘green’ building standards for commercial, multi-family and institutional construction. The Leadership in Energy and Environmental Design (LEED™) is a voluntary, self-assessing program for rating the environmental impacts and sustainability of both new and existing building projects. Certification is awarded at different levels, based on the number of points earned in the following categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources and Indoor Environmental Quality. For additional details on the Green Building Rating system, visit www.usgbc.org.

STEP 5:

Start Your Bay-Friendly Reference Library with these Titles:


Lowry, Judith Larner, Gardening With a Wild Heart, Restoring California’s Native Landscapes at Home, University of California Press, 1999.


“Landscapes need to become ‘sustainable’ or the industry will suffer economically. We need to move the industry, the public and public policy to improve our environments.”

Resources

Introduction

- Soils for Salmon has an excellent guide titled The Relationship Between Soil & Water available at http://compostwashington.org
- The EPA GreenScapes Alliance, unites government and industry into a powerful force for the reduction, reuse, and recycling of waste materials in large landscapes. Learn more about GreenScapes, or become a participant in the GreenScapes Alliance at: www.epa.gov/epaoswer/non-hw/green

Landscape Locally

- Soil surveys can be found at your local library or by contacting the USDA Natural Resource Conservation Service. Look for contact information at www.baysavers.org
- Contact soil and compost testing laboratories:
  - ABC Organics at www.aborganics.com
  - A&L Western Agricultural Labs at www.al-labs-west.com
  - Peaceful Valley Farm Supply: www.groworganic.com
  - Soil Control Lab at www.controllabs.com
  - Soil Foodweb at www.soilfoodweb.com
  - Soil & Plant Lab at www.soilandplantlaboratory.com
- The City of Oakland offers Recommendations for Ecologically Sensitive Fire Abatement at www.oaklandpw.com/creeks/docs/fire.doc

Landscape for Less to the Landfill

- For more information on using goats for controlling weeds and creating firebreaks, contact: www.goatrus.com or www.qpatsunlimited.com
- To find or offer salvaged materials visit California Integrated Waste Management Board’s CalMAX website at www.ciwmrb.ca.gov/CalMAX/
- For local materials exchange visit MarinMax Materials Exchange: www.marinmax.org
- To purchase salvaged materials contact or visit:
  - Black’s Farmwood: www.blacksfarmwood.com/
  - Building Resources: www.buildingresources.org
  - East Bay Habitat for Humanity’s ReStore: www.eastbayhabitat.org/restore
  - Ohmega Salvage: www.ohmegasalvage.com
  - Terra Mai Reclaimed Wood Products: www.terramai.com
  - Urban Ore: http://urbanore.citysearch.com
- Recycle municipal trees: www.greenwasterecyclingyard.com

Nurture the Soil

- Guidelines on creating and implementing a Soil Management Plan can be downloaded from Western Washington at www.puyallup.wsu.edu
- For listings of compost and mulch producers and publications on how to choose appropriate composites visit the California Integrated Waste Management Board website, at www.ciwmrb.ca.gov/organics
- Notes on compost tea can be downloaded from: www.attra.org or www.composttea.com
- For a copy of the Compost Tea Brewing Manual, contact www.soilfoodweb.com

Conserve Water

- The California Department of Water Resources projects water supply and demand, information that is available at www.waterplan.water.ca.gov
- California Urban Water Agencies offer information on water conservation, including costs at: www.cuwaw.org
- The California Urban Water Conservation Council offers a variety of services and information, including product news and technical resources at www.cuwcc.org
- The Irrigation Training & Research Center at California Polytechnic State University, San Luis Obispo offers Irrigation Auditor and Landscape Water Budget classes. Go to www.itrc.org for more information.
- Local water districts often offer information on water conservation or landscape audits or audit/water budget training. Contact your water supplier or check the following websites for some SF Bay Area water districts:
  - Alameda County Water District: www.acwd.org
  - Cal W ater Service: www.calwater.com
  - Contra Costa County Water District: www.ccswater.com
  - Dublin-San Ramon Water District: www.dsr.com
  - EBMUD: www.ebmud.com
  - North Coast County Water District: www.ncwd.org
  - San Mateo County: www.midpeninsulawaste.org or www.coastsidewater.org
  - Santa Clara Valley Water District: www.valleywater.org
  - Zone 7 Water Agency: www.zone7water.com
Conserve Energy

- PG&E website, which includes information on planting trees to reduce energy consumption: www.pge.com
- The Center for Urban Forest Research of the USDA Forest Service offers fact sheets on maximizing the benefits of the urban forest, as well as many reports on their costs and benefits. Visit http://wcufre.ucdavis.edu

Protect Water & Air Quality

- Alameda Countywide Clean Water Program provides landscaping tips and resources for preventing runoff stormwater runoff and pollution. Visit their website: www.cleanwaterprogram.com
- You can learn more about the EPA Pesticide Environmental Stewardship Program by visiting: www.pepsi.org
- Bio-Integral Resource Center (BIRC) offers the IPM Practitioner and Common Sense Pest Control Quarterly. Visit www.birc.org
- Integrated pest management information can be downloaded from the UC IPM website: www.ipm.ucdavis.edu
- Seattle Green Gardening program offers free Pro IPM Fact Sheets on its website: www.ci.seattle.wa.us/util/proipm/default.htm
- Porous Pavement information Fact Sheet is available from www.epa.gov/owm/mtnb/porouspa.pdf or the Concrete Promotion Council of Northern California at www.cpcnc.org
- Washington Toxics Coalition, Local Hazardous Waste Management Program in King County has published: Grow smart, grow safe - A Consumer Guide to Lawn and Garden Products - 450 products reviewed, pest controls and fertilizers, where to buy least-hazardous products by Philip Dickey. Contact www.watoxics.org
- For information on pesticides, water quality, and less toxic alternatives, visit www.ourwaterourworld.org
- Lawn Fact Sheet for least toxic approaches to lawn care visit www.ourwaterourworld.org/factsheets.cfm
- To look up impacts of active ingredients in pesticides visit www.pesticideinfo.org

Create Wildlife Habitat

- California native plants are described at www.calflora.org
- East Bay Native Plant Society (www.ebcnps.org) is a good resource for information on local native plant species.
- Information on California Oaks is available from the California Oak Foundation at www.californiaoaks.org
- California Native Grasslands Association (www.cnga.org) is an excellent resource for designing and planting native grasses.
- Wildlife Habitat Council (www.wildlifehc.org) provides information on how private and corporate landscapes can provide habitat.
- To foster wildlife habitat for pest control visit www.hungryowl.com and www.californiabats.com

Training Opportunities

- Alameda County Master Composter Program has been expanded to cover the integrated concepts of Bay Friendly Landscaping. For more information call (510) 444-5015 or visit www.BayFriendly.org.
- Contra Costa County: Free composting and vermifluorescent workshops, instructional composting video loan and reduced price compost bins are offered in most areas of the County. For more information, including current workshop schedules, call the Contra Costa County Recycling Hotline at 1-800-750-4096 or visit www.cccrecycle.com. For additional programs and assistance offered in Central and South County, call the Central Contra Costa Solid Waste Authority at (925) 906-1806 or visit www.wastediversion.org, and in West Contra Costa, call the West Contra Costa Integrated Waste Management Authority at (510) 215-3021 or visit www.recyclemore.com.
- Santa Clara Valley Water District hosts the Landscape Water Auditing and Water Budget Training Class for landscape professionals. Irrigation Training Workshops for Professionals in both English and Spanish are also available. For information call the Water Conservation Hotline at (408) 265-2607 ext. 2554.
- Santa Clara County Home Composting Education Program: for more information call (408) 918-4640 or visit www.reducewaste.org.
- San Mateo County: For a complete list of composting workshops in San Mateo County go to www.recycleworks.org and look at the “In the Garden” section or call 888-444. The San Mateo Countywide Stormwater Pollution Prevention Program (STAPP) offers annual training for educators. Go to www.flowstobay.org for a complete list of trainings or call (650) 599-1514.
- Gardening for Wildlife Workshops, The Watershed Project. For additional programs and information call (510) 495-5213 or visit The Watershed Project. Contact www.thewatershedproject.org.