



SMCWPPP IPM Training

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Bay-Friendly Landscaping, IPM and Stormwater

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EOA Inc.



BAY-FRIENDLY LANDSCAPING

**A whole systems
(watershed) approach
to the design,
construction &
maintenance of the
landscape in order to
conserve natural
resources, reduce
waste, and prevent
pollution.**

Teresa Eade & Cynthia Havstad
StopWaste.Org



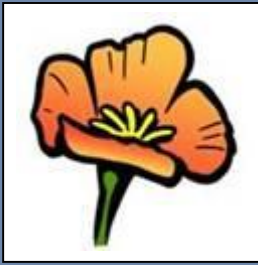
7 PRINCIPLES

A comprehensive,
sustainable and
sensible approach to
landscaping

7 Core principles

Created with input
from a broad group of
stakeholders





1. LANDSCAPE LOCALLY

Site Analysis!



- ✓ Evaluate climate, exposure, and topography
- ✓ Assess the soil and test drainage
- ✓ Survey and protect flora & fauna
- ✓ Consider the potential for fire
- ✓ Use local plant communities as models



2. LANDSCAPE FOR LESS TO THE LANDFILL

Reuse!
Repurpose!
Recycle!

- ✓ Grasscycle
- ✓ Produce compost and mulch from plant debris
- ✓ Select appropriate plants
- ✓ Use recycled content and salvaged materials





3. NURTURE THE SOIL

**Compost, compost,
compost!**
Mulch, mulch, mulch!



- ✓ Feed soil naturally
- ✓ Amend with compost
- ✓ Use mulch abundantly
- ✓ Eliminate synthetic, quick release fertilizers
- ✓ Minimize the use of chemical pesticides
- ✓ Protect soil from compaction and aerate compacted soils



4. CONSERVE WATER

Slow it!
Spread it!
Sink it!



- ✓ Create drought-resistant soils with compost & mulch
- ✓ Rain as a Resource
- ✓ Plant rain gardens
- ✓ Specify low-water use plants
- ✓ Hydrozone
- ✓ Minimize turf area
- ✓ Audit irrigation systems
- ✓ Install high efficiency irrigation



Raingardens/Bioretention



Brisbane – City Hall



5. CONSERVE ENERGY

- ✓ Plant trees to moderate building temperatures
- ✓ Reduce the heat island effect: shade paved areas
- ✓ Shade outdoor (HVAC) equipment
- ✓ Energy Efficient lighting such as LED
- ✓ Locally produced materials
- ✓ Choose & maintain equipment for fuel conservation

Reduce GHGs & Carbon Footprint!





6. PROTECT WATER & AIR QUALITY

Reduce Runoff and Pollutants!



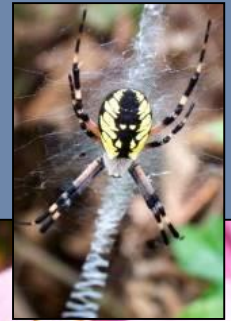
- ✓ Eliminate high input decorative lawns
- ✓ Minimize paved areas
- ✓ Capture & filter water
- ✓ Use IPM
- ✓ Keep soil where it belongs
- ✓ Choose & maintain low/no emission equipment



7. CREATE & PROTECT WILDLIFE HABITAT

- ✓ Increase diversity
- ✓ Choose CA natives first
- ✓ Don't plant exotic or invasive species
- ✓ Provide water & shelter
- ✓ Manage organically
- ✓ Conserve or restore natural areas & wildlife corridors

Promote ecosystem diversity!



BENEFITS: ECOSYSTEM SERVICES

- ☐ Local climate regulation
- ☐ Cleaning air and water
- ☐ Water storage & conservation
- ☐ Erosion and sediment control
- ☐ Reducing hazards such as flood & fire
- ☐ Recycling plant debris & nutrients
- ☐ Pollination
- ☐ Habitat functions (biodiversity)
- ☐ Increase pollinator populations
- ☐ Enhance human health





Bay-Friendly Landscaping Connection to Stormwater



Issue	Turf Bioretention	Bay-Friendly Bioretention
Municipal Regional Permit	No Discussion	Recommended
Underdrain Discharge	Can Discharge Chemicals	Chemicals Minimized
Maintenance Cost	Standard Cost	50% Less Cost on Average
Surface Run-off	Can Discharge Chemicals	Chemicals Minimized
Habitat	None Provided	Provided
Air Pollution	Mowing Can Generate	No Mowing
Energy Conservation	High Energy Use	Low Energy Use

You Make A Difference



Bay-Friendly Tools

- Publications
 - Model Policies & Ordinances
 - Model Specifications
 - Case Studies
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- The image shows the cover of a publication titled "BAY-FRIENDLY LANDSCAPE GUIDELINES". The subtitle is "Sustainable Practices for the Landscape Professional". The cover features a collage of four photographs: a modern house with a green roof, a close-up of a tree branch, a close-up of pink flowers, and a close-up of a bird's head. The background of the cover is a blue silhouette of a city skyline and a body of water.
- Landscape Training & Qualification Programs
 - Rated Landscapes Training
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- Landscape Scorecards
 - Rated Landscapes Program
 - Garden Tours
 - Nursery Partnerships

Bay-Friendly Rated Landscapes

Bay-Friendly Rated Landscapes are certified using a rating system that recognizes excellence in sustainable landscape design, construction and maintenance practices. It provides property owners and landscape professionals with a flexible, systematic framework for creating healthy, drought-tolerant and environmentally sound landscapes.



Seven Principles & Practices

- 50% water savings
- 30–70% maintenance labor savings
- 85–95% weed suppression without toxic chemicals
- 70–80% reduced runoff
- 53 tons/acre greenhouse gas reduction
- Comply with the California Water Efficient Landscape Ordinance (WELO)



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