

plant palette

The Plant Palette identifies shade, understory and small trees, shrubs, groundcover, perennials, ornamental grasses and annuals appropriate for the projects identified within the Urban Greening Plan and consistent with the policy direction defined by the Urban Greening objectives. Planting the right species in the right places is critical to the success and value of urban greening activities. Species must be adapted to El Cerrito's climate, suitable for planting conditions and appropriate for site use. This is especially important for trees, which require significant investments to plant and maintain. Tree planting should take the fullest advantage of a planting site by using the largest tree suitable for the location and site conditions.

The plants defined as part of this plant palette do not represent an exhaustive list of appropriate or approved plants; they were developed to identify context-sensitive plant recommendations for El Cerrito's streets, parks, and open spaces. This palette may be used to provide plant guidance to private projects interested in achieving the benefits identified by this Plan. This Palette is a living document and may be updated over time to better reflect changing environmental conditions.

If the Plant Palette and the City's current Master Tree List are in conflict, the current Master Tree List will take precedence. Feedback from the City Arborist and the Tree Committee should be solicited where public trees or trees in public open spaces are involved in any project.

LARGE TREES

Large trees (50 feet or taller) generally have more value than small ones for shade, carbon sequestration and climate change mitigation, aesthetics and property values, wildlife habitat and other environmental benefits. Tree species and size must, however, be compatible with site constraints such as overhead and underground utilities, sidewalk and pavement protection, lack of irrigation, small planting sites, and maintaining views to and from street front buildings. Shade from large trees is particularly valuable for reducing heat street to pedestrians and park users, decreasing sun damage to asphalt, providing cover for birds and other wildlife, and reducing urban heat island effects. Shade trees are generally considered to be large trees with spreading canopies, though shade values may be affected by canopy shape, branch structure and leaf density.

Scientific Name	Common Name	California Native	Drought Tolerant	Biofiltration Planter	Pollinators ³	Edible	Shade	Deciduous/ Evergreen	Water Use	Street Tree?	Biogenic Emissions	Desirable Wildlife	Root Damage	Litter Type
Acer macrophyllum	Big Leaf Maple	✓	✓	✓	✓		✓	D	М		М		High	Dry
Aesculus x carnea	Red Horsechestnut		✓				✓	D	М	✓		✓	Low	Flower, Dry, Leaves
Alnus rhombifolia	White Alder	✓					✓	D	Н			✓	High	Dry
Arbutus menziesii	Madrone	✓	✓		✓		√	D	L		L		Low	Wet Fruit, Bark
Calocedrus decurrens	Incense-cedar	✓	✓					Е	М		L		Mod	Dry
Carpinus betulus 'Fastigiata'	Fastigiate Hornbeam						✓	D	М	✓			Low	Dry
Gleditsia triacanthos var. inermis	Thornless Honey Locust	✓	✓		✓			D	L	✓		✓	Mod	Dry
Juglans hindsii	N. California Black Walnut	✓	✓			✓	✓	D	М		М		Mod	Dry
Lophostemon conferta	Brisbane Box		✓					E	М	✓	Н		Low	Dry
Nyssa sylvatica*	Tupelo		✓				✓	D	М	✓			Low	Dry
Pistachia chinensis	Chinese Pistache		✓				✓	D	L	✓	М		Low	Dry leaves, fruit
Platanus acerifolia 'Columbia'	Columbia London Plane						✓	D	М	✓				Dry, Bark
Platanus racemosa*	California Sycamore	✓		✓			✓	D	М		Н	✓	Mod	Dry, Leaves, Twigs, Bark
Pinus canariensis	Canary Island Pine		✓					Е	L		М		Mod	Dry
Quercus agrifolia	Coast Live Oak	✓	✓				✓	Е	VL	✓	Н	✓	High	Dry
Quercus garryana	Oregon Oak	✓					✓	D	L	✓	Н		Low	Dry
Quercus ilex	Holly Oak	✓	✓				✓	Е	L	✓	Н	✓	Low	Dry Fruit
Quercus rubra	Red Oak						✓	D	М	✓	Н	✓	Mod	Dry Fruit
Quercus shumardii	Shumard Oak			✓			✓	D	М	✓		✓	Mod	Dry
Quercus suber	Cork Oak		✓				✓	Е	L	✓	Н	✓	Low	Dry
Quercus virginiana	Southern Live Oak						✓	Е	М		Н	✓	Mod	Dry
Ulmus hybrids; Accolade, Frontier, Princeton	Elm hybrids						✓	D	Н	✓			Varies	Dry fruit

¹Harmful to honey bees; do not plant near fruit trees

Sources: Urban Forest Ecosystems Institute, SelecTree: A Tree Selection Guide; Water Use Classification of Landscape Species IV

²Certain trees were not evaluated as part of the recent City Master Tree List planning process. They have been identified for their environmental benefits and ability to achieve Urban Greening objectives. Planting of these trees will require approval from the City Arborist

³Source: <u>Selecting Plants for Pollinators: A Regional Guide for Farmers, Land Managers, and Gardeners in the California Coastal Chaparral Forest and Shrub Province</u>, Pollinator Partnership

UNDERSTORY & SMALL TREES

Very small to medium trees are 10-50 feet tall. One of the key uses of small trees in urban foresty is for planting under utility wires. Utility friendly trees, as defined by PG&E, are 25 feet tall or less.

Scientific Name	Common Name	California Native	Drought Tolerant	Biofiltration Planter	Pollinators ³	Edible	Shade	Deciduous/ Evergreen	Water Use	Street Tree?	Biogenic Emissions	Desirable Wildlife	Root Damage	Litter Type
Acer campestre	Hedge Maple							D	М				Low	Dry
Acer circinatum	Vine Maple	✓						D	М	✓	М		Low	Dry
Aesulus californica ¹	California Buckeye	✓	~		✓		✓	D	VL	✓		✓	Low	Flowers, Dry, Leaves
Arbutus unendo 'Marina'	Strawberry Madrone							E	L	✓	L	✓	Low	Wet
Cercis occidentalis ³	Western Redbud	✓	✓		✓			D	VL		L	✓	Low	Dry
Ceanothus arboreus 'Ray Hartman'	Ray Hartman Ceanothus	✓	~		✓			Е	L	✓			Low	Dry
Cercis canadensis var texensis 'Oklahoma'	Oklahoma Redbud						√	D		✓			Low	Dry
Geijera parvifolia	Australian Willow		✓				✓	Е	М	✓	М	✓	Low	Dry
Koelreuteria bipinnata	Chinese Flame Tree						✓	D	М	✓	Н		Low	Dry
Koelreuteria paniculata	Golden Rain Tree		✓					D	М		Н		Low	Dry
Lagerstroemia indica	Muskogee Crape Myrtle		✓					D	L		L		Low	Dry
Laurus nobilis 'Saratoga'	Saratoga Laurel						✓	Е	М	✓		✓	Low	Dry Fuit
Malus x 'Robinson'	Robinson Crabapple				✓			D					Low	
Magnolia grandiflora 'Russet'	Russet Southern Magnolia						✓	D	М	✓	М		Mod	Flowers, Dry, Leaves
Olea europaea ⁴	Olive		✓		✓			Е	VL		L	~	Mod	Wet Fruit
Prunus salicina 'Satsuma' ² , ³	Satsuma Plum					✓		D	L				Low	Wet
Sambucus nigrans ssp caerulea	Mexican Elderberry	✓	✓	✓	✓			D	L		L	✓	Low	Wet
Tristaniopsis laurina	Swamp Myrtle			✓				Е	М	✓			Low	Dry

¹Plant with the pollinator 'Santa Rosa'

Sources: Urban Forest Ecosystems Institute, SelecTree: A Tree Selection Guide; Water Use Classification of Landscape Species IV

²Partially self-fertile; better yields when planted with 'Satsuma'

³Certain trees were not evaluated as part of the recent City Master Tree List planning process; they have been identified for their environmental benefits and ability to achieve Urban Greening objectives; planting of these trees will require approval from the City Arborist.

 $^{^3}$ Olea europea 'Swan Hill' may be used as a street tree since this cultivar is fruitless.

FRUIT TREES

Fruit trees are not listed on the current City's Approved Street Tree List. Planting of fruit trees in the public right-of-way will require City Arborist approval and a maintenance and clean-up plan. Trees should be carefully selected for El Cerrito's climate, choosing disease resistant species whenever possible.

Scientific Name	Common Name	California Native	Drought Tolerant	Biofiltration Planter	Pollinators ³	Edible	Shade	Deciduous/ Evergreen	Water Use	Street Tree?	Biogenic Emissions	Desirable Wildlife	Root Damage	Litter Type
Citrus	Lemon: Eureka, Meyer					✓		Е	М		М	✓	Low	Wet
Citrus	Orange (Washington), Mandarin Satsuma					✓		Е	М		М	✓	Low	Wet
Diospyros kaki	Persimmon: Hachiya, Fuyu, Chocolate					✓		D	L			✓	Low	Fruit, Leaves
Ficus carica 'Brown Turkey'	Brown Turkey Fig					✓		D	М		Н	✓	Low	Wet
Malus domestica	Ashmead's Kernel					✓		D	М			✓	Low	Wet
Malus domestica	Dorsett Golden					✓		D	М			✓	Low	Wet
Prunus armeniaca 'Blenheim'	Blenheim Apricot					✓		D	L		L		Low	Wet
Prunus armeniaca 'Tilton'	Tilton Apricot					✓		D	L		L		Low	Wet
Prunus salicina 'Santa Rosa' ¹	Santa Rosa Plum					✓		D	L				Low	Wet
Punica granatum	Pomegranate Tree		✓		✓	✓		D	L			✓	Low	Wet

¹Plant with the pollinator 'Santa Rosa'

Sources: Urban Forest Ecosystems Institute, SelecTree: A Tree Selection Guide; Water Use Classification of Landscape Species IV

SHRUBS, GROUNDCOVER, PERENNIALS, & ORNAMENTAL GRASSES

		Native	Drought Tolerant	Biofiltration Planter	Pollinators ¹	Edible	Deciduous Evergreen
Scientific Name	Common Name						
SHRUBS & GROUNDCOVER							
Arbutus unedo 'Elfin King'	Elfin King Strawberry Tree		✓			✓	Е
Arctostaphylos sp.	Manzanita sp.	✓	✓		✓		Е
Arctostaphylos d. 'Howard McMinn'	Howard McMinn Manzanita	✓	✓	✓			Е
Baccharis pillularis	Coyote Bush	✓	✓	✓			E
Calycanthus occidentalis	Spice Bush	✓	✓	✓			D
Ceanothus spp.	California Wild Lilac	✓	✓	✓	✓		Е
Cornus sericea	Red-Twig Dogwood	✓		✓			D
Corylus cornuta californica	Western Hazelnut	✓					D
Eriogonum fasciculatum	California Buckwheat	✓	✓	✓	✓		Е
Eriogonum giganteum	St. Catherine's Lace	✓	✓				E
Eriogonum grande rubescens	Red Buckwheat	✓	✓		✓		Е
Eriogonum latifolium	Coast Buckwheat	✓			✓		Е
Frangula californica	Coffeeberry	✓	✓				
Heteromeles arbutifolia	Toyon	✓	✓		✓		
Holodiscus discolor	Cream Bush	✓	✓	✓			D
Mahonia spp.	Mahonia sp.	✓	✓		✓		Е
Prunus illicifolia	Hollyleaf Cherry	✓			✓		Е
Punica granatum 'nana'	Dwarf Pomegranite		✓			✓	D
Rhamnus californica 'Eve Case'	Eve Case Coffeeberry	✓	✓	✓			Е
Rhamnus crocea	Redberry	✓	✓				Е
Ribes aureum	Golden Current	✓	✓				D
Ribes sanguineum	Red Flowering Current	✓	✓	✓			D
Rosa californica	California Wild Rose	✓	✓	✓			D
Rosa sp.	Rose (rose hips)		✓			✓	D
Rosmarinus sp.	Rosemary				✓	✓	Е
Rhus integrifolia	Lemonade berry	✓	✓				E
Rubus ursinus	California blackberry	✓	✓	✓		✓	
Spiraea douglasii	Western Spirea	✓	✓	✓			D
Symphoricarpos albus	Snowberry	✓	✓	✓			D
Vaccinium 'Sunshine Blue'	Sunshine Blue Blueberry					✓	Е
Vaccinium vitus-idaea'	Lingonberry					✓	Е
Zauschneria californica	California fuchsia	✓	✓	✓			

¹ <u>Selecting Plants for Pollinators: A Regional Guide for Farmers, Land Managers, and Gardeners in the California Coastal Chaparral Forest and Shrub Province, Pollinator Partnership;</u>

		Native	Drought Tolerant	Biofiltration Planter	Pollinators	Wildlife Habitat	Edible
Scientific Name	Common Name						
PERENNIALS & ORNAMENTAL G	RASSES						
Achillea millefolium	Common Yarrow	✓	✓	✓	✓		
Acmispon glaber	Deer Weed	✓	✓	✓			
Asclepias speciosa	Showy Milkweed	✓					
Asclepias fascicularis	Narrowleaf Milkweed	✓			✓		
Carex buchananii	Leatherleaf Sedge			✓			
Carex tumulicola	Berkeley Sedge	✓		✓			
Carex pansa	Dune Sedge	✓		✓			
Carex praegracilis	California Field Sedge		✓	✓			
Carex testacea	Orange Sedge		✓	✓			
Chamaemelum nobile	Chamomile		✓				✓
Chondropetalum tectorum	Small Cape Rush		✓	✓			
Danthonia californica	California Oatgrass	✓				✓	
Deschampsia cespitosa	Tufted Hair Grass	✓	✓	✓			
Dietes bicolor	Fortnight Lilly		✓	✓			
Dietes iridioles	African Iris		✓	✓			
Epilobium canum	California Fuschia	✓	✓	✓			
Erigeron glaucus	Seaside Daisy	✓					
Eschscholzia californica maritima	Coastal California Poppy	✓	✓		✓		
Festuca californica	California Fescue	✓	✓	✓			
Festuca Idahoensis 'Siskiyou Blue'	Siskiyou Blue' Blue Grass			✓			
Festuca rubra	Red Fescue		✓	✓			
Helictotrichon sempervirens	Blue Oat Grass						
Juncus effusus	Soft Rush			✓			
Juncus patens	California Gray Rush	✓	✓	✓			
Lantana cultivars	Lantana						
Lavandula x intermedia 'Provence'	Provence English Lavender		✓		✓		✓
Lavandula sp.	Lavender		✓		✓		✓
Lessingia filaginifolia 'Silver Carpet'	California Aster 'Silver Carpet'	✓					
Leymus condensatus 'Canyon Prince'	Canyon Prince Wild Rye		✓	✓			
Leymus triticoides	Creeping Wild Rye	✓	✓	✓			
Lupinus albifrons	Silver Bush Lupine	✓	✓	✓	✓		
Lupinus formosus	Summer Lupine	✓	✓				
Melica californica	California Melic Grass	✓	✓				
Mimulus aurantiacus	Monkey Flower	✓	✓	✓	✓		
Monardella villosa	Coyote Mint	✓	✓		✓		

		Native	Drought Tolerant	Biofiltration Planter	Pollinators	Wildlife Habitat	Edible
Scientific Name	Common Name		Tolerant	rianter		Habitat	
PERENNIALS & ORNAMENTAL G	RASSES (cont'd)						
Muhlenbergia rigens	Deer Grass	✓	✓	✓			
Nasella pulchra	Purple Needlegrass	✓	✓				
Nepeta faassenii	Catmint		✓		✓		
Oriaganum vulgare	Oregano						✓
Phacelia bolanderi	Bolander's Phacelia	✓					
Phacelia californica	California Phacelia	✓			✓		
Nasella lepida	Foothill Needle Grass	✓	✓	✓			
Polystichum munitum	Western Sword Fern	✓	✓				
Salvia spp.	Sage	some	✓		✓		✓
Salvia gregii	Evergreen Sage		✓				
Salvia 'Margarita BOP'	Margarita BOP Sage		✓				
Salvia mellifera	Black Sage	✓	✓		✓		
Salvia officinalis	Sage		✓				✓
Salvia sonomensis	Sonoma Sage	✓					
Salvia spathacea	Hummingbird Sage	✓	✓				
Sisyrinchium californicum	California Golden-eyed Grass	✓					
Sisyrinchium bellum	Western Blue-eyed Grass	✓	✓	✓			
Stipa arundinacea	New Zealand Wind Grass		✓	✓			
Symphyotrichum chilense	Pacific Aster	✓				✓	

Scientific Name	Common Name	Native	Drought Tolerant	Biofiltration Planter	Pollinators	Edible	Deciduous/ Evergreen
VINES							
Aristolochia california	California pipevine	✓					
Climatis ligusticifolia	Western white clematis	✓					D
Lonicera hispidula	California Honeysuckle	✓					
Myoporum parvifolium	Creeping Myoporum				✓		E
Fallopia baldschuanica	Silver Lace Vine				✓		E
Vitis californica	Native California grape	✓	✓			✓	

ANNUALS

Annuals are plants that complete their life cycles in shorter periods than perennials. While these plants generally require more regular re-planting and maintenance, when planted appropriately, they provide seasonal diversity, pollen and habitat. In El Cerrito's climate, hardy annuals can withstand several frosts and may last many planting cycless. Depending on the planting environment, annuals are also good self-seeding plants that can reproduce without additional plantings. Below is a short list of native annuals that provide pollination to birds, bees and butterflies. There are many other widely-available species of annuals that range in size, shape and color. Certain annuals are edible and require significant less water use.

		Native	Drought Tolerant	Biofiltration	Pollinators	Edible
Scientific Name	Common Name		roierant	Planter		
ANNUALS						
Clarkia unguiculata	Mountain Garland	✓			✓	
Hemizonia congesta ssp. 'Luzulifolia'	Hayfield Tarweed	✓			✓	
Layia platyglossa	Tidy Tips	✓	✓		✓	
Lupinus microcarpus	Chick Lupine	✓			✓	
Lupinus succulentus	Arroyo Lupine	✓	✓		✓	
Nemophilia meziesii	Baby Blue Eyes	✓			✓	
Phacelia campanularia	California Bluebells	✓	✓		✓	
Phacelia tanacetifolia	Tansy Leaf Phacelia	✓			✓	

COMMERCIAL STREETS

Landscaping along streets in commercial areas should complement commercial uses and provide shade and a pleasant sidewalk environment for pedestrians. Tree species in median strips should be large with spreading canopies to shade road surfaces, provided they have adequate planting space and their roots will not damage pavement. Trees on sidewalks should also be large and densely canopied enough to shade pedestrians while not blocking storefronts and not so dense that upper story interiors become excessively dark during daylight hours.

Scientific Name	Common Name
SHADE TREES	
Nissa sylvatica	Tupelo
Platanus acerifolia 'Columbia'	Columbia Sycamore (SPA)
Quercus agrifolia	Coast Live Oak
Quercus engelmannii	Engelman Oak
Quercus shumardii	Shumard Oak
Quercus suber	Cork Oak
Quercus virginiana	Southern Live Oak
UNDERSTORY & SMALL TREES	
Cercis occidentalis	Western Redbud
Lagerstroemia indica 'Muskogee'	Muskogee Crape Myrtle
Malus x 'Robinson'	Robinson Crabapple



Figure 01. Western Redbud



Figure 02. Coast Live Oak



Figure 03. Crape Myrtle



Figure 04. South. Live Oak

CREEK RESTORATION AND NATURAL AREAS

These projects make use of distinctive vegetation to highlight underground creek channels and green infrastructure projects, including creek restoration and daylighting. Creeks are an essential and rare natural resource whose structure and function cannot be reproduced. These riparian trees, shrubs and groundcover were identified for their look and feel, as they are often used in close proximity to creek banks. Any projects involving creeks or riparian areas (as identified in the City's Creek Protection Overlay District) should only use plants native to local creeks, unless recommended by a qualified restoration professional, including experts in stream and watershed restoration, engineering, plant and wildlife ecology. Any alternations to riparian vegetation should provide equal or better habitat as compared to current conditions.

Scientific Name	Common Name
SHADE TREES	
Aesculus californica	California Buckeye
Alnus rhombifolia*	White Alder
Alnus rubra*	Red Alder
Arbutus menziesii	Madrone
Calocedrus decurrens	Incense Cedar
Platanus racemosa*	California Sycamore
Quercus agrifolia	Coast Live Oak
Quercus shumardii*	Shumard Oak
Salix spp.	Willow
UNDERSTORY & SMALL TREES	
Acer circinatum	Vine Maple
Cercis occidentalis*	Western Redbud
Prunus illicifolia	Hollyleaf Cherry
Sambucus mexicana	Mexican Elderberry
SHRUBS & GROUNDCOVER	
Calycanthus occidentalis	Spice Bush
Ceanothus spp.*	California Wild Lilac
Cornus sericea	Red-Twig Dogwood
Corylus cornuta californica	Western Hazelnut
Holodiscus discolor	Cream Bush
Mahonia spp.*	Mahonia
Ribes aureum	Golden Current
Ribes sanguineum	Red Flowering Currant
Rosa californica	California Wild Rose
Rubus ursinus	California Blackberry
Spiraea douglasii	Western Spirea
Zauschneria californica*	California Fuchsia
VINES	
Lonicero hispidula	California Honeysuckle
Vitis californica	Native California Grape



Figure 05. White Alder are an excellent native riparian tree



Figure 06. Red-twig dogwood is a colorful addition to any landscape



Figure 07. Sticky Monkey Flower



Figure 08. Tufted Hair Grass



Figure 09. W. Sword Fern



Figure 10. Mexican Elderberry

Scientific Name	Common Name
PERENNIALS & ORNAMENTAL GR	ASSES
Achillea millefolium	Common Yarrow
Carex tumulicola	Berkeley Sedge
Carex pansa	Dune Sedge
Deschampsia cespitosa	Tufted Hair Grass
Juncus patens	California Gray Rush
Leymus triticoides	Creeping Wild Rye
Mimulus aurantiacus	Monkey Flower
Monardella vilosa	Coyote Mint
Nasella pulchra	Purple Needlegrass
Polystichum munitum	Western Sword Fern
Wyethia angustifolia	Narrowleaf Mules Ears
ANNUALS	
Layia platyglossa	Tidy Tips

^{*}These species may also be appropriate depending on the location and width of the planting area.

BIOFILTRATION PLANTS

Biofiltration plants are commonly used in green infrastructure projects to filter stormwater runoff and improve water quality; they can help spread, sink and store water to reduce erosion and water demand. Biofiltration plants are generally drought tolerant and provide additional environmental benefits, such as pollination services or wildlife habitat. The Contra Costa County Clean Water Program C.3 Guidebook 6th Edition (or current) provides guidance in selecting the appropriate plant species for various site conditions.



Figure 14. Fortnight lily in the rain gardens on San Pablo Avenue



Figure 11. Rain gardens at City Hall



Figure 12. Rain gardens on San Pablo Avenue



Figure 13. Ohlone Greenway Natural Area

POLLINATORS

Urban environments are reducing the quality and quantity of pollinating plants, making it difficult for wildlife species, such as birds, bees and butterflies, to find food and habitat. Creating contiguous pollinator-friendly landscaped areas can begin to address this issue, bringing these species back into our urban environments. A suitable plant palette to attract pollinators and best practices for installing and managing these plant species is currently being developed.



Figure 15. A butterfly drinks from a Milkweed plant



Figure 16. A bee feeds from the flower of a Coyote Mint plant